The Project Gutenberg eBook of Encyclopaedia Britannica, 11th Edition, "Coucy-le-Château" to "Crocodile"

This eBook is for the use of anyone anywhere in the United States and most other parts of the world at no cost and with almost no restrictions whatsoever. You may copy it, give it away or re-use it under the terms of the Project Gutenberg License included with this eBook or online at www.gutenberg.org. If you are not located in the United States, you will have to check the laws of the country where you are located before using this eBook.

Title: Encyclopaedia Britannica, 11th Edition, "Coucy-le-Château" to "Crocodile"

Author: Various

Release date: May 19, 2010 [eBook #32423]

Language: English

Other information and formats: www.gutenberg.org/ebooks/32423

Credits: Produced by Marius Masi, Don Kretz, Marius Masi, Juliet Sutherland and the Online Distributed Proofreading Team at http://www.pgdp.net

*** START OF THE PROJECT GUTENBERG EBOOK ENCYCLOPAEDIA BRITANNICA, 11TH EDITION, "COUCY-LE-CHÂTEAU" TO "CROCODILE" ***

Transcriber's note: A few typographical errors have been corrected. They appear in the text like this, and the explanation will appear when the mouse pointer is moved over the marked passage. Sections in Greek will yield a transliteration when the pointer is moved over them, and words using diacritic characters in the Latin Extended Additional block, which may not display in some fonts or browsers, will display an unaccented version.

Links to other EB articles: Links to articles residing in other EB volumes will be made available when the respective volumes are introduced online.

THE ENCYCLOPÆDIA BRITANNICA

A DICTIONARY OF ARTS, SCIENCES, LITERATURE AND GENERAL INFORMATION

ELEVENTH EDITION

VOLUME VII SLICE VI

Coucy-le-Château to Crocodile

Articles in This Slice

COUCY-LE-CHÂTEAU	CRANK
COUES, ELLIOTT	CRANMER, THOMAS
COULISSE	CRANNOG
COULOMB, CHARLES AUGUSTIN	CRANSAC
COULOMMIERS	CRANSTON
COUMARIN	CRANTOR
COUMARONES	CRANWORTH, ROBERT MONSEY ROLFE
COUNCIL	CRAPE
COUNCIL BLUFFS	CRASH
COUNSEL AND COUNSELLOR	CRASHAW, RICHARD

COUNT
COUNTER
COUNTERFEITING
COUNTERFORT
COUNTERPOINT
COUNTERSCARP
COUNTERSIGN
COUNTRY
COUNTY
COUNTY COURT
COUPÉ
COUPLET
COUPON
COURANTE
COURAYER, PIERRE FRANÇOIS LE
COURBET, GUSTAVE
COURBEVOIE
COURCELLE-SENEUIL, JEAN GUSTAVE
COURCI, JOHN DE
COURIER, PAUL LOUIS
COURIER
COURLAND
COURNOT, ANTOINE AUGUSTIN
COURSING
COURT, ANTOINE
COURT
COURT BARON
COURT DE GEBELIN, ANTOINE
COURTENAY
COURTENAY, RICHARD
COURTENAY, WILLIAM
COURTESY
COURTHOPE, WILLIAM JOHN
COURT LEET
COURT-MARTIAL
COURTNEY, LEONARD HENRY COURTNEY
COURTOIS, JACQUES and GUILLAUME
COURTRAI
COURVOISIER, JEAN JOSEPH ANTOINE
COUSCOUS
CRASSULACEAE
CRASSUS
CRATER
CRATES (Athenian actor)
CRATES (Greek philosophers)
CRATES (of Mallus)
CRATINUS
CRATIPPUS (Greek historian)
CRATIPPUS (of Mitylene)
CRAU
CRAUCK, GUSTAVE
CRAUFURD, QUINTIN
CRAUFURD, ROBERT
CRAVAT
CRAVEN, PAULINE AGLAÉ
CRAVEN, WILLIAM CRAVEN
CRAWFORD, EARLS OF
CRAWFORD, FRANCIS MARION
CRAWFORD, THOMAS
CRAWFORD, WILLIAM HARRIS
CRAWFORDSVILLE
CRAWFURD, JOHN
CRAYER, GASPARD DE
CRAYFISH
CRAYON
CREASY, SIR EDWARD SHEPHERD
CREATIANISM AND TRADUCIANISM
CRÉBILLON, PROSPER JOLYOT DE
CRÈCHE
CRÉCY
CREDENCE
CREDENTIALS
CREDI, LORENZO DI
CREDIT
CRÉDIT FONCIER
CRÉDIT MOBILIER OF AMERICA
CREDITON
CREDNER, CARL FRIEDRICH HEINRICH
CREE
CREECH, THOMAS

COUSIN, JEAN
COUSIN, VICTOR
COUSIN
COUSINS, SAMUEL
COUSTOU
COUTANCES, WALTER OF
COUTANCES
COUTHON, GEORGES
COUTTS, THOMAS
COUTURE, THOMAS
COUVADE
COVE
COVELLITE
COVENANT (mutual agreement)
COVENANT (law term)
COVENANTERS
COVENT GARDEN
COVENTRY, SIR JOHN
COVENTRY, THOMAS COVENTRY
COVENTRY, SIR WILLIAM
COVENTRY
COVER
COVERDALE, MILES
COVERTURE
COVILHÃ
COVILHAM PERO
COVIN
COVINGTON
COWARD
COWBRIDGE
COWDENBEATH
COWELL, JOHN
COWEN, FREDERIC HYMEN
COWEN, JOSEPH
COWES
COWL
COWLEY, ABRAHAM
COWLEY, HANNAH
COWLEY, CHARLES WELLESLEY
COWLEY FATHERS
COWPENS
COWPER, WILLIAM COWPER
COWPER, WILLIAM
COWRY
COW-TREE
CREEDS
CREEK
CREEK or MUSKOGEE INDIANS
CREETOWN
CREEVEY, THOMAS
CREFELD
CREIGHTON, MANDEL
CREIL
CRELL NICHOLAS
CREMA
CREMATION
CREMER, JAKOBUS JAN
CREMERA
CRÉMIEUX, ISAAC MOÏSE
CREMONA, LUIGI
CREMONA
CREMORNE GARDENS
CRENELLE
CREODONTA
CREOLE
CREON (king of Corinth)
CREON (king of Thebes)
CREOPHYLUS
CREOSOTE
CREPUSCULAR
CRÉQUY
CRÉQUY, RENÉE DE FROULLAY
CRESCAS, HASDAI BEN ABRAHAM
CRESCENT
CRESCIMBENI, GIOVANNI MARIO
CRESILAS
CRESOLS
CRESPI, DANIELE
CRESPI, GIOVANNI BATTISTA
CRESPI, GIUSEPPE MARIA
CRESS
CRESSENT, CHARLES
CRESSWELL, SIR CRESSWELL
CRESSY, HUGH PAULINUS DE
CREST (town of France)
CREST (plume or tuft)
CRESTON
CRESWICK, THOMAS
CRESWICK
CRETACEOUS SYSTEM

COX, DAVID
COX, SIR GEORGE WILLIAM
COX, JACOB DOLSON
COX, KENYON
COX, RICHARD
COX, SAMUEL
COX, SAMUEL HANSON
COXCIE, MICHAEL
COXE, HENRY OCTAVIUS
COXE, WILLIAM
COXSWAIN
COXWELL, HENRY TRACEY
COYOTE
COYPEL
COYPU
COYSEVOX, CHARLES ANTOINE
CRAB
CRABBE, GEORGE
CRACKER
CRACOW
CRADDOCK, CHARLES EGBERT
CRADLE
CRADOCK
CRAFT
CRAG
CRAGGS, JAMES
CRAIG, JOHN
CRAIG, SIR THOMAS
CRAIGIE, PEARL MARY TERESA
CRAIK, DINAH MARIA
CRAIK, GEORGE LILLIE
CRAIL
CRAILSHEIM
CRAIOVA
CRAMBO
CRAMER, JOHANN BAPTIST
CRAMER, JOHN ANTONY
CRÄMER, KARL VON
CRAMP, CHARLES HENRY
CRAMP
CRAMP-RINGS
CRANACH, LUCAS
CRANBERRY
CRANBROOK, GATHORNE-HARDY
CRANBROOK
CRETE
CRETINISM
CRETONNE
CREUSE
CREUTZ, GUSTAF FILIP
CREUZER, GEORG FRIEDRICH
CREVASSE
CREVIER, JEAN BAPTISTE LOUIS
CREVILLENTE
CREW, NATHANIEL CREW
CREW
CREWE, ROBERT CREWE-MILNES
CREWE
CREWKERNE
CRIB
CRIBBAGE
CRICCIETH
CRICHTON, JAMES
CRICKET (insect)
CRICKET (game)
CRICKHOWELL
CRICKLADE
CRIEFF
CRIME
CRIMEA
CRIMEAN WAR
CRIMINAL LAW
CRIMINOLOGY
CRIMMITZSCHAU
CRIMP
CRIMSON
CRINAGORAS
CRINOLINE
CRINUM
CRIOBOLIUM
CRIPPLE CREEK
CRISA
CRISPI, FRANCESCO
CRISPIN and CRISPINIAN
CRITIAS
CRITICISM
CRITIUS and NESIOTES
CRITOLAUS
CRITTENDEN, JOHN JORDAN
CRIVELLI, CARLO

CRANDALL, PRUDENCE
CRANE, STEPHEN
CRANE, WALTER
CRANE, WILLIAM HENRY
CRANE
CRANES
CRANIOMETRY
CROATIA-SLAVONIA
CROCIDOLITE
CROCKET
CROCKETT, DAVID
CROCKETT, SAMUEL RUTHERFORD
CROCKFORD, WILLIAM
CROCODILE

COUCY-LE-CHÂTEAU, a village of northern France, in the department of Aisne, 18 m. W.S.W. of Laon on a branch of the Northern railway. Pop. (1906) 663. It has extensive remains of fortifications of the 13th century, the most remarkable feature of which is the Porte de Laon, a gateway flanked by massive towers and surmounted by a fine apartment. Coucy also has a church of the 15th century, preserving a façade in the Romanesque style. The importance of the place is due, however, to the magnificent ruins of a feudal fortress (see CASTLE) crowning the eminence on the slope of which the village is built. The remains, which embrace an area of more than 10,000 sq. yds., form an irregular quadrilateral built round a court-yard and flanked by four huge towers. The nucleus of the stronghold is a donjon over 200 ft. high and over 100 ft. in diameter, standing on the south side of the court. Three large vaulted apartments, one above the other, occupy its interior. The court-yard was surrounded on the ground-floor by storehouses, kitchens, &c., above which on the west and north sides were the great halls known as the *Salle des preux* and the *Salle des preuses*. A chapel projected from the west wing. The bailey or base-

court containing other buildings and covering three times the area of the château extended between it and the village. The architectural unity of the fortress is due to the rapidity of its construction, which took place between 1230 and 1242, under Enguerrand III., lord of Coucy. A large part of the buildings was restored or enlarged at the end of the 14th century by Louis d'Orléans, brother of Charles VI., by whom it had been purchased. The place was dismantled in 1652 by order of Cardinal Mazarin. It is now state property. In 1856 researches were carried on upon the spot by Viollet-le-Duc, and measures for the preservation of the ruins were subsequently undertaken.

Sires de Coucy.—Coucy gave its name to the sires de Coucy, a feudal house famous in the history of France. The founder of the family was Enguerrand de Boves, a warlike lord, who, at the end of the 11th century seized the castle of Coucy by force. Towards the close of his life, he had to fight against his own son, Thomas de Marle, who in 1115 succeeded him, subsequently becoming notorious for his deeds of violence in the struggles between the communes of Laon and Amiens. He was subdued by King Louis VI. in 1117, but his son Enguerrand II. continued the struggle against the king. Enguerrand III., the Great, fought at Bouvines under Philip Augustus (1214), but later he was accused of aiming at the crown of France, and he took part in the disturbances which arose during the regency of Blanche of Castile. These early lords of Coucy remained till the 14th century in possession of the land from which they took their name. Enguerrand IV., sire de Coucy, died in 1320 without issue and was succeeded by his nephew Enguerrand, son of Arnold, count of Guines, and Alix de Coucy, from whom is descended the second line of the house of Coucy. Enguerrand VI. had his lands ravaged by the English in 1339 and died at Crécy in 1346. Enguerrand VII., sire de Coucy, count of Soissons and Marle, and chief butler of France, was sent as a hostage to England, where he married Isabel, the eldest daughter of King Edward III. Wishing to

remain neutral in the struggle between England and France, he went to fight in Italy. Having made claims upon the domains of the house of Austria, from which he was descended through his mother, he was defeated in battle (1375-1376). He was entrusted with various diplomatic negotiations, and took part in the crusade of Hungary against the Sultan Bayezid, during which he was taken prisoner, and died shortly after the battle of Nicopolis (1397). His daughter Marie sold the fief of Coucy to Louis, duke of Orleans, in 1400. The Châtelain de Coucy (see above) did not belong to the house of the lords of Coucy, but was castellan of the castle of that name.

COUES, ELLIOTT (1842-1899), American naturalist, was born at Portsmouth, New Hampshire, on the 9th of September 1842. He graduated at Columbian (now George Washington) University, Washington, D.C., in 1861, and at the Medical school of that institution in 1863. He served as a medical cadet at Washington in 1862-1863, and in 1864 was appointed assistant-surgeon in the regular army. In 1872 he published his *Key to North American Birds*, which, revised and rewritten in 1884 and 1901, has done much to promote the systematic study of ornithology in America. In 1873-1876 Coues was attached as surgeon and naturalist to the United States Northern Boundary Commission, and in 1876-1880 was secretary and naturalist to the United States Geological and Geographical Survey of the Territories, the publications of which he edited. He was lecturer on anatomy in the medical school of the Columbian University in 1877-1882, and professor of anatomy there in 1882-1887. He resigned from the army in 1881 to devote himself entirely to scientific research. He was a founder of

the American Ornithologists' Union, and edited its organ, *The Auk*, and several other ornithological periodicals. He died at Baltimore, Maryland, on the 25th of December 1899. In addition to ornithology he did valuable work in mammalogy; his book *Fur-Bearing Animals* (1877) being distinguished by the accuracy and completeness of its description of species, several of which are already becoming rare. In 1887 he became president of the Esoteric Theosophical Society of America. Among the most important of his publications, in several of which he had collaboration, are *A Field Ornithology* (1874); *Birds of the North-west* (1874); *Monographs on North American Rodentia*, with J. A. Allen (1877); *Birds of the Colorado Valley* (1878); *A Bibliography of Ornithology* (1878-1880, incomplete); *New England Bird Life* (1881); *A Dictionary and Check List of North American Birds* (1882); *Biogen, A Speculation on the Origin and Motive of Life* (1884); *The Daemon of Darwin* (1884); *Can Matter Think?* (1886); and *Neuro-Myology* (1887). He also contributed numerous articles to the Century Dictionary, wrote for various encyclopaedias, and edited the *Journals of Lewis and Clark* (1893), and *The Travels of Zebulon M. Pike* (1895).

COULISSE (French for "groove," from *couler*, to slide), a term for a groove in which a gate of a sluice, or the side-scenes in a theatre, slide up and down, hence applied to the space on the stage between the wings, and generally to that part of the theatre "behind the scenes" and out of view of the public. It is also a term of the Paris Bourse, derived from a *coulisse*, or passage in which transactions were carried on without the authorized *agents*

de change. The name *coulissier* was thus given to unauthorized *agents de change*, or "outside brokers" who, after many attempts at suppression, were finally given a recognized status in 1901. They bring business to the *agents de change*, and act as intermediaries between them and other parties. (See STOCK EXCHANGE: *Paris*.)

COULOMB, CHARLES AUGUSTIN (1736-1806), French natural philosopher, was born at Angoulême on the 14th of June 1736. He chose the profession of military engineer, spent three years, to the decided injury of his health, at Fort Bourbon, Martinique, and was employed on his return at Rochelle, the Isle of Aix and Cherbourg. In 1781 he was stationed permanently at Paris, but on the outbreak of the Revolution in 1789 he resigned his appointment as *intendant des eaux et fontaines*, and retired to a small estate which he possessed at Blois. He was recalled to Paris for a time in order to take part in the new determination of weights and measures, which had been decreed by the Revolutionary government. Of the National Institute he was one of the first members; and he was appointed inspector of public instruction in 1802. But his health was already very feeble, and four years later he died at Paris on the 23rd of August 1806. Coulomb is distinguished in the history alike of mechanics and of electricity and magnetism. In 1779 he published an important investigation of the laws of friction (*Théorie des machines simples, en ayant regard au frottement de leurs parties et à la roideur des cordages*), which was followed twenty years later by a memoir on fluid resistance. In 1785 appeared his *Recherches théoriques et expérimentales sur la force de torsion et sur*

l'élasticité des fils de métal, &c. This memoir contained a description of different forms of his torsion balance, an instrument used by him with great success for the experimental investigation of the distribution of electricity on surfaces and of the laws of electrical and magnetic action, of the mathematical theory of which he may also be regarded as the founder. The practical unit of quantity of electricity, the *coulomb*, is named after him.

COULOMMIERS, a town of northern France, capital of an arrondissement in the department of Seine-et-Marne, 45 m. E. of Paris by rail. Pop. (1906) 5217. It is situated in the fertile district of Brie, in a valley watered by the Grand-Morin. The church of St Denis (13th and 16th centuries), and the ruins of a castle built by Catherine of Gonzaga, duchess of Longueville, in the early 17th century, are of little importance. There is a statue to Commandant Beaurepaire, who, in 1792, killed himself rather than surrender Verdun to the Prussians. Coulommiers is the seat of a subprefect, and has a tribunal of first instance and a communal college. Printing is the chief industry, tanning, flour-milling and sugar-making being also carried on. Trade is in agricultural products, and especially in cheeses named after the town.

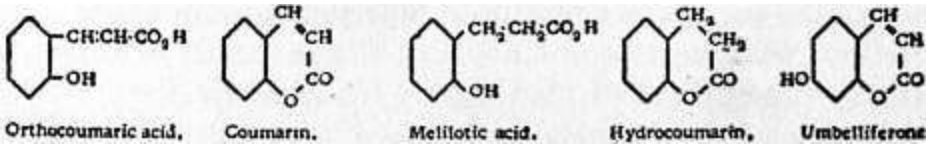
COUMARIN, $C_9H_6O_2$, a substance which occurs naturally in sweet woodruff (*Asperula odorata*), in the tonka bean and in yellow melilot (*Melilotus officinalis*). It can be obtained from the tonka bean by extraction with alcohol. It is prepared artificially by heating aceto-ortho-coumaric acid (which is formed from sodium salicyl aldehyde) or from the action of acetic anhydride and sodium acetate on salicyl aldehyde (Sir W. H. Perkin, *Berichte*, 1875, 8, p. 1599). It can also be prepared by heating a mixture of phenol and malic acid with sulphuric acid, or by passing bromine vapour at 107° C. over the anhydride of melilotic acid. It forms rhombic crystals (from ether) melting at 67° C. and boiling at 290° C., which are readily soluble in alcohol, and moderately soluble in hot water. It is applied in perfumery for the preparation of the *Asperula* essence. On boiling with concentrated caustic potash it yields the potassium salt of coumaric acid, whilst when fused with potash it is completely decomposed into salicylic and acetic acids. Sodium amalgam reduces it, in aqueous solution, to melilotic acid. It forms addition products with bromine and hydrobromic acid. By the action of phosphorus pentasulphide it is converted into thiocoumarin, which melts at 101° C.; and in alcoholic solution, on the addition of hydroxylamine hydrochloride and soda, it yields coumarin oxime.

Ortho-coumaric acid (o-oxycinnamic acid) is obtained from coumarin as shown above, or by boiling coumarin for some time with sodium ethylate. It melts at 208° C. and is easily soluble in hot water and in alcohol. It cannot be converted into coumarin by heating alone, but it is readily transformed on heating with acetic anhydride or acetyl chloride. By the action of sodium amalgam it is readily converted into *melilotic acid*, which melts at 81° C., and on distillation furnishes its lactone, *hydrocoumarin*, melting at 25° C. For the relations of coumaric and coumarinic acid see *Annalen*, 254, p. 181. The homologues of coumarin may be obtained by the action of sulphuric acid on phenol and the higher fatty acids (propionic, butyric and isovaleric

anhydrides), substitution taking place at the carbon atom in the α position to the -CO- group, whilst by the condensation of acetoacetic ester and phenols with sulphuric acid the β substituted coumarins are obtained.

Umbelliferone or 4-oxycoumarin, occurs in the bark of *Daphne mezereum* and may be obtained by distilling such resins as galbanum or asafoetida. It may be synthesized from resorcin and malic anhydride or from β resorcyl aldehyde, acetic anhydride and sodium acetate. *Daphnetin* and *Aesculetin* are dioxycoumarins.

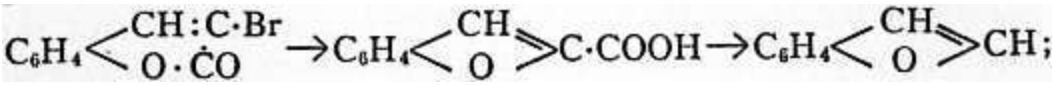
The structural formulae of coumarin and the related substances are:



Orthocoumaric acid. Coumarin. Melilotic acid. Hydrocoumarin. Umbelliferone

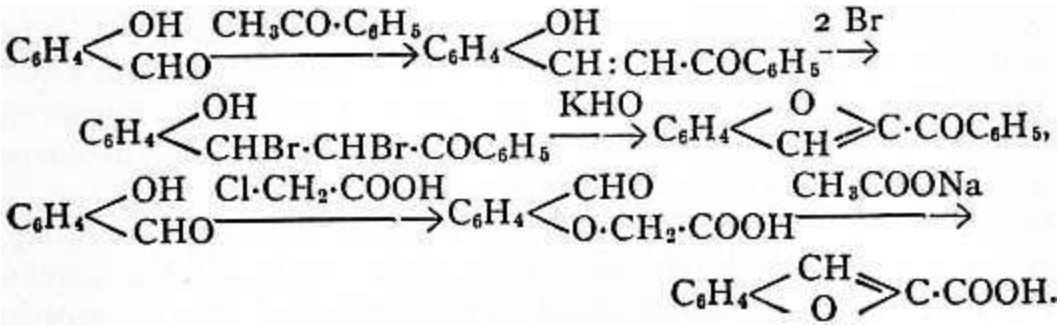
---

COUMARONES or BENZOFURFURANES, organic compounds containing the ring system $C_6H_4<\begin{matrix}CH\\O\end{matrix}>CH.$ This ring system may be synthesized in many different ways, the chief methods employed being as follows: by the action of hot alcoholic potash on α-bromcoumarin (R. Fittig, *Ann.*, 1883, 216, p. 162),

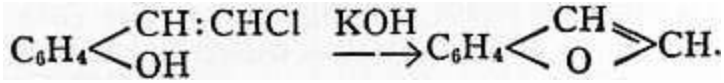


from sodium salts of phenols and α-chloracetoacetic ester (A. Hantzsch, *Ber.*, 1886, 19, p. 1292),

or from ortho-oxyaldehydes by condensation with ketones (S. Kostanecki and J. Tambor, *Ber.*, 1896, 29, p. 237), or with chloracetic acid (A. Rossing, *Ber.*, 1884, 17, p. 3000),



The parent substance coumarone, C_8H_6O, is also obtained by heating ω-chlor-ortho-oxystyrol with concentrated potash solution (G. Komppa, *Ber.*, 1893, 26. p. 2971),



It is a colourless liquid which boils at 171-172° C. and is readily volatile in steam, but is insoluble in water and in potash solution. Concentrated acids convert it into a resin. When heated with sodium and absolute alcohol, it is converted into *hydrocoumarone*, C_8H_8O, and ethyl phenol.

COUNCIL (Lat. *concilium*, from *cum*, together, and the root cal, to call), the general word for a convocation, meeting, assembly. The Latin word was frequently confused with *consilium* (from *consulere*, to deliberate, cf. *consul*), advice, *i.e.* counsel, and thus specifically an advisory assembly. Du Cange (*Gloss. Med. Infim. Latin.*) quotes the Greek words σύνοδος, συνέδριον, συμβούλιον as the equivalent of *concilium*. In French the distinction between *conseil* (from *consilium*), advice, and *concile*, council (*i.e.* ecclesiastical—its only meaning) has survived, but the two English derivatives are much confused. In the New Testament, "council" is the rendering of the Hebrew Sanhedrin, Gr. συνέδριον. The word is generally used in English for all kinds of congregations or convocations assembled for administrative and deliberative purposes.[1]

The present article is confined to a history of the development of the ecclesiastical council, summoned to adjust matters in dispute with the civil authority or for the settlement of doctrinal and other internal disputes. For details see under separate headings, NICAEA, &c.

From a very early period in the history of the Church, councils or synods have been held to decide on matters of doctrine and discipline. They may be traced back to the second half of the 2nd century A.D., when sundry

churches in Asia Minor held consultations about the rise of Montanism. Their precise origin is disputed. The common Roman Catholic view is that they are apostolic though not prescribed by divine law, and the apostolic precedent usually cited is the "council" of Jerusalem (Acts xv.; Galatians ii.). Waiving the consideration of vital critical questions and accepting Acts xv. at its face value, the assembly at Jerusalem would scarcely seem to have been a council in the technical sense of the word; it was in essence a meeting of the Jerusalem church at which delegates from Antioch were heard but apparently had no vote, the decision resting solely with the mother church. R. Sohm argues that synods grew from the custom of certain local churches which, when confronted with a serious problem of their own, augmented their numbers by receiving delegates from the churches of the neighbourhood. Hauck, however, holds that these augmented church meetings, which dealt with the affairs of but a single church, are to be distinguished from the synods, which took cognizance of matters of general interest. Older Protestant writers have contented themselves with saying either that synods were of apostolic origin, or that they were the inevitable outcome of the need of the leaders of churches to take counsel together, and that they were perhaps modelled on the secular provincial assemblies (*concilia provincialia*).

Every important alteration in the constitution of the Church has affected the composition and function of synods; but the changes were neither simultaneous nor precisely alike throughout the Roman empire. The synods of the 2nd century were extraordinary assemblies which met to deliberate upon pressing problems. They had no fixed geographical limits for membership, no *ex-officio* members, nor did they possess an authority which did away with the independence of the local church. In the course of the 3rd century came the decisive change, which increased the prestige of the councils: the right to vote was limited to bishops. This was the logical outgrowth of the belief that each local church ought to have but one bishop

(monarchical episcopate), and that these bishops were the sole legitimate successors of the apostles (apostolic succession), and therefore official organs of the Holy Spirit. Although as late as 250 the consensus of the priests, the deacons and the people was still considered essential to the validity of a conciliar decision at Rome and in certain parts of the East, the development had already run its course in northern Africa. It was a further step in advance when synods began to meet at regular intervals. They were held annually in Cappadocia by the middle of the 3rd century, and the council of Nicaea commanded in 325 that semiannual synods be held in every province, an arrangement which was not systematically enforced, and was altered in 692, when the Trullan Council reduced the number to one a year.

With the multiplication of synods came naturally a differentiation of type. In text-books we find clear lines drawn between diocesan, provincial, national, patriarchal and oecumenical synods; but the first thousand years of church history do not justify the sharpness of the traditional distinction. The *provincial* synods, presided over by the metropolitan (archbishop), were usually held at the capital of the province, and attempted to legislate on all sorts of questions. The state had nothing to do with calling them, nor did their decrees require governmental sanction. Various abortive attempts were made to set up synods of *patriarchal* or at least of more than provincial rank. In North Africa eighteen such synods were held between 393 and 424; during part of the 5th and 6th centuries *primatial* councils assembled at Arles; and the patriarchs of Constantinople were accustomed to invite to their "*endemic* synods" (σύνοδοι ἐνδημοῦσαι) all bishops who happened to be sojourning at the capital. *Papal* synods from the 5th and especially from the 9th century onward included members such as the archbishops of Ravenna, Milan, Aquileia and Grado, who resided outside the Roman archdiocese; but the territorial limits from which the membership was drawn do not appear to have been precisely defined.

Before the form of the provincial synod had become absolutely fixed, there arose in the 4th century the *oecumenical* council. The Greek term σύνοδος οἰκουμενική[2] (1) (used by Eusebius, *Vita Constantini*, iii. 6) is preferable to the Latin *concilium universale* or *generale*, which has been applied loosely to national and even to provincial synods. The oecumenical synods were not the logical outgrowth of the network of provincial synods; they were creations of the imperial power. Constantine, who had not even been baptized, laid the foundations when, in response to a petition of the Donatists, he referred their case to a committee of bishops that convened at Rome, which meeting Eusebius calls a synod. After that the emperor summoned the council of Arles to settle the matter. For both of these assemblies it was the emperor that decided who should be summoned, paid the travelling expenses of the bishops, determined where the council should be held and what topics should be discussed. He regarded them as temporary advisory bodies, to whose recommendations the imperial authority might give the force of law. In the same manner he appointed the time and place for the council of Nicaea, summoned the episcopate, paid part of the expenses out of the public purse, nominated the committee in charge of the order of business, used his influence to bring about the adoption of the creed, and punished those who refused to subscribe. To be sure, the council of Nicaea commanded great veneration, for it was the first attempt to assemble the entire episcopate; but no more than the synods of Rome and of Arles was it an organ of ecclesiastical self-government—it was rather a means whereby the Church was ruled by the secular power. The subsequent oecumenical synods of the undivided Church were patterned on that of Nicaea. Most Protestant scholars maintain that the secular authorities decided whether or not they should be convened, and issued the summons; that imperial commissioners were always present, even if they did not always preside; that on occasion emperors have confirmed or refused to confirm synodal decrees; and that the papal

confirmation was neither customary nor requisite. Roman Catholic scholars to-day tend to recede from the high ground very generally taken several centuries ago, and Funk even admits that the right to convoke oecumenical synods was vested in the emperor regardless of the wishes of the pope, and that it cannot be proved that the Roman see ever actually had a share in calling the oecumenical councils of antiquity. Others, however, while acknowledging the futility of seeking historical proofs that the popes *formally* called, directed and confirmed these synods, yet assert that the emperor performed these functions not of his own right but in his quality as protector of the Church, that this involved his acting at the request or at least with the permission and approval of the Church, and in particular of the pope, and that a special though not a stereotyped papal confirmation of conciliar decrees was necessary to their validity.

In the Germanic states which arose on the ruins of the Western Empire we find *national* and *diocesan* synods; provincial synods were unusual. National synods were summoned by the king or with his consent to meet special needs; and they were frequently *concilia mixta*, at which lay dignitaries appeared. Although the Frankish monarchs were not absolute rulers, nevertheless they exercised the right of changing or rejecting synodal decrees which ran counter to the interests of the state. Clovis held the first French national synod at Orleans in 511; Reccared, the first in Spain in 589 at Toledo. Under Charlemagne they were occasionally so representative that they might almost be ranked as general synods of the West (Regensburg, 792, Frankfort, 794). Contemporaneous with the evolution of the national synod was the development of a new type of diocesan synod, which included the priests of separate and mutually independent parishes and also the leaders of the monastic clergy.

The papal synods came into the foreground with the success of the Cluniac reform of the Church, especially from the Lateran synod of 1059

on. They grew in importance until at length Calixtus II. summoned to the Lateran the synod of 1123 as "*generale concilium*." The powers which the pope as bishop of the church in Rome had exercised over its synods he now extended to the oecumenical councils. They were more completely under his control than the ancient ones had been under the sway of the emperor. The Pseudo-Isidorean principle that all major synods need papal authorization was insisted on, and the decrees were formulated as papal edicts.

The absolutist principles cherished by the papal court in the 12th and 13th centuries did not pass unchallenged; but the protests of Marsilius of Padua and the less radical William of Occam remained barren until the Great Schism of 1378. As neither the pope in Rome nor his rival in Avignon would give way, recourse was had to the idea that the supreme power was vested not in the pope but in the oecumenical council. This "conciliar theory," propounded by Conrad of Gelnhausen and championed by the great Parisian teachers Pierre d'Ailly and Gerson, proceeded from the nominalistic axiom that the whole is greater than its part. The decisive revolutionary step was taken when the cardinals independently of both popes ventured to hold the council of Pisa (1409). The council of Constance asserted the supremacy of oecumenical synods, and ordered that these be convened at regular intervals. The last of the Reform councils, that of Basel, approved these principles, and at length passed a sentence of deposition against Pope Eugenius IV. Eugenius, however, succeeded in maintaining his power, and at the council of Florence (1439) secured the condemnation of the conciliar theory; and this was reiterated still more emphatically, on the eve of the Reformation, by the fifth Lateran council (1516). Thenceforward the absolutist theories of the 13th and 14th centuries increasingly dominated the Roman Church. The popes so distrusted oecumenical councils that between 1517 and 1869 they called but one; at this (Trent, 1545-1563), however, all treatment of the question of papal versus conciliar authority

was purposely avoided. Although the Declaration of the French clergy of 1682 reaffirmed the conciliar doctrines of Constance, since the French Revolution this "Gallicanism" has shown itself to be but a passing phase of constitutional theory; and in the 19th century the ascendancy of Ultramontanism became so secure that Pius IX. could confidently summon to the Vatican a synod which set its seal on the doctrine of papal infallibility. Yet it would be a misconception to suppose that the Vatican decrees mean the surrender of the ancient belief in the infallibility of oecumenical synods; their decisions may still be regarded as more solemn and more impressive than those of the pope alone; their authority is fuller, though not higher. At present it is agreed that the pope has the sole right of summoning oecumenical councils, of presiding or appointing presidents and of determining the order of business and the topics which shall come up. The papal confirmation is indispensable; it is conceived of as the stamp without which the expression of conciliar opinion lacks legal validity. In other words, the oecumenical council is now practically in the position of the senate of an absolute monarch. It is in fact an open question whether a council is to be ranked as really oecumenical until after its decrees have been approved by the pope. (See VATICAN COUNCIL, ULTRAMONTANISM, INFALLIBILITY.)

The earlier oecumenical councils have well been called "the pitched battles of church history." Summoned to combat heresy and schism, in spite of degrading pressure from without and tumultuous disorder within, they ultimately brought about a modicum of doctrinal agreement. On the one side as time went on they bound scholarship hand and foot in the winding-sheet of tradition, and also fanned the flames of intolerance; yet on the other side they fostered the sense of the Church's corporate oneness. The diocesan and provincial synods have formed a valuable system of regularly recurring assemblies for disposing of ecclesiastical business. They have been held most frequently, however, in times of stress and of reform, for

instance in the 11th, 16th and 19th centuries; at other periods they have lapsed into disuse: it is significant that to-day the prelate who neglects to convene them suffers no penalty. At present the main function of both provincial and oecumenical synods seems to be to facilitate obedience to the wishes of the central government of the Church.

The *right to vote* (*votum definitivum*) has been distinguished from early times from the right to be heard (*votum consultativum*). The Reform Synods of the 15th century gave a decisive vote to doctors and licentiates of theology and of laws, some of them sitting as individuals, some as representatives of universities. Roman Catholic canonists now confine the right to vote at oecumenical councils to bishops, cardinal deacons, generals or vicars general of monastic orders and the *praelati nullius* (exempt abbots, &c.); all other persons, lay or clerical, who are admitted or invited, have merely the *votum consultativum*—they are chiefly procurators of absent bishops, or very learned priests. It was but a clumsy and temporary expedient, designed to offset the preponderance of Italian bishops dependent on the pope when the council of Constance subdivided itself into several groups or "nations," each of which had a single vote. In voting, the simple majority decides; yet such is the importance attached to a unanimous verdict that an irreconcilable minority may absent itself from the final vote, as was the case at the Vatican Council.

The numbering of oecumenical synods is not fixed; the list most used in the Roman Church to-day is that of Hefele (*Conciliengeschichte*, 2nd ed., I. 59 f.):

		A.D.
1.	Nicaea I.	325
2.	Constantinople I.	381
3.	Ephesus	431
4.	Chalcedon	451

5.	Constantinople II.	553
6.	Constantinople III.	680
7.	Nicaea II.	787
8.	Constantinople IV.	869
9.	Lateran I.	1123
10.	Lateran II.	1139
11.	Lateran III.	1179
12.	Lateran IV.	1215
13.	Lyons I.	1245
14.	Lyons II.	1274
15.	Vienne	1311
16.	Constance (in part)	1414-1418
17a.	Basel (in part)	1431 ff.
17b.	Ferrara-Florence (a continuation of Basel)	1438-1442
18.	Lateran V.	1512-1517
19.	Trent	1545-1563
20.	Vatican	1869-1870

(Each of these and certain other important synods are treated in separate articles.)

By including Pisa (1409) and by treating Florence as a separate synod, certain writers have brought the number of oecumenical councils up to twenty-two. These standard lists are of the type which became established through the authority of Cardinal R. F. Bellarmine (1542-1621), who criticized Constance and Basel, while defending Florence and the fifth Lateran council against the Gallicans. As late as the 16th century, however, "the majority did not regard those councils in which the Greek Church did not take part as oecumenical at all" (Harnack, *History of Dogma*, vi. 17). The Greek Church accepts only the first seven synods as oecumenical; and it reckons the Trullan synod of 692 (the Quinisextum) as a continuation of the sixth oecumenical synod of 680. But concerning the first seven councils it should be remarked that Constantinople I. was but a general synod of the

East; its claim to oecumenicity rests upon its reception by the West about two centuries later. Similarly the only representatives of the West present at Constantinople II. were certain Africans; the pope did not accept the decrees till afterwards and they made their way in the West but gradually. Just as there have been synods which have come to be considered oecumenical though not convoked as such, so there have been synods which though summoned as oecumenical, failed of recognition: for instance Sardica (343), Ephesus (449), Constantinople (754). The last two received the imperial confirmation and from the legal point of view were no whit inferior to the others; their decrees, however, were overthrown by subsequent synods. As the Protestant leaders of the 16th century held fast the traditional christology, they regarded with veneration the dogmatic decisions of Nicaea I., Constantinople I., Ephesus and Chalcedon. These four councils had enjoyed a more or less fortuitous pre-eminence both in Roman and in canon law, and by many Catholics at the time of the Reformation were regarded, along with the three great creeds (Apostles', Nicene, Athanasian), as a sort of irreducible minimum of orthodoxy. In the 17th century the liberal Lutheran George Calixtus based his attempts at reuniting Christendom on this *consensus quinquesaecularis*. Many other Protestants have accepted Constantinople II. and III. as supporting the first four councils; and still others, notably many Anglican high churchmen, have felt bound by all the oecumenical synods of the undivided Church. The common Protestant attitude toward synods is, however, that they may err and have erred, and that the Scriptures and not conciliar decisions are the sole infallible standard of faith, morals and worship.

Protestant Councils.—The churches of the Reformation have all had a certain measure of synodal life. The Church of England has maintained its ancient provincial synods or convocations, though for the greater part of the 18th and the first part of the 19th centuries they transacted no business. In the Lutheran churches of Germany there was no strong agitation in favour

of introducing synods until the 19th century, when a movement, designed to render the churches less dependent on the governmental consistories, won its way, until at length Prussia itself fell into line (1873 and 1876). As the powers granted to the German synods are very limited, many of their advocates have been disillusioned; but the Lutheran churches of America, being independent of the state, have developed synods both numerous and potent. In the Reformed churches outside Germany synodal life is vigorous; its forms were developed by the Huguenots in days of persecution, and passed thence to Scotland and other presbyterian countries. Even many of the churches of congregational polity have organized national councils (see CONGREGATIONALISM); but here the principle of the independence of the local church prevents the decisions from binding those congregations which do not approve of the decrees. Moreover, in the last decade of the 19th century a growing desire for a rapprochement between the Free Churches in the United Kingdom as a whole led to the annual assembly of the Free Church Council for the consideration of all matters affecting the dissenting bodies. This body has no executive or doctrinal authority and is rather a conference than a council. In general it may be said that synods are becoming more and more powerful in Protestant lands, and that they are destined to still greater prominence because of the growing sentiment for Christian unity.

AUTHORITIES.—GENERAL COLLECTIONS: *Collectio regia* (Paris, 1644, 37 vols.) (the first very extensive work); P. Labbe (not Labbé) and G. Cossart, *Sacrosancta concilia* (Paris, 1672, 17 vols.), with supplement by Étienne Baluze (Baluzius), 1683 (based on above); J. Hardouin (Harduinus), *Conciliorum collectio regia maxima* (Paris, 1715), 11 tomi in 12 vols, (to 1714; more exact; indexed; serious omissions); enlarged edition by N. Coletus (Venice, 1728-1732), supplemented by J. D. Mansi, *Sanctorum conciliorum et decretorum nova collectio* (Lucca, 1748, 6 tomi). Convenient but fallible is Mansi's

Sacrorum conciliorum et decretorum nova et amplissima collectio (Florence, 1759-1767; completed Venice, 1769-1798, 31 vols.); facsimile reproduction by Welter (Paris, 1901 ff.), adding (tom. O) *Introductio seu apparatus ad sacrosancta concilia*, and (tom. 17B and 18B) Baluze, *Capitularia regum Francorum*, and continuing to date by reproducing parts of Coletus and of Mansi's supplement to Coletus, and furnishing (tom. 37 ff.) a new edition of the councils from 1720 on by J. B. Martin and L. Petit. A careful text of Roman Catholic synods from 1682 to 1870 is *Collectio Lacensis* (*Acta et decreta sacrorum conciliorum recentiorum*, Friburgi, 1870 ff.), 7 vols.

Special Collections: Great Britain: *Concilia Magnae Britanniae et Hiberniae*, ed. D. Wilkins (London, 1737, 4 vols.); *Councils and Ecclesiastical Documents relating to Great Britain and Ireland*, ed. by A. W. Haddan and W. Stubbs (Oxford, 1869 ff., 4 vols.); J. W. Joyce, *Handbook of the Convocations or Provincial Synods of the Church of England* (London, 1887); *Concilia Scotiae* (1225-1559), ed. Joseph Robertson (Edinburgh, Bannatyne Club, 1866, 2 tom.).

United States: *Collectio Lacensis* (Roman Catholic synods); *The American Church History Series* (New York, 1893 ff. 13 vols.) gives information on the various Protestant synods.

France.—*Concilia aevi Merovingici*, rec. F. Maassen (Hanover, 1893) (*Monumenta Germaniae historica, Legum sectio* iii., *Concilia*, tom. i.); *Concilia antiqua Galliae*, cur. J. Sirmond (Paris, 1629, 3 vols.); supplement by P. de la Lande (Paris, 1666); L. Odespun, *Concilia novissima Galliae* (Paris, 1646); *Conciliorum Galliae tam editorum quam ineditorum, stud. congreg. S. Mauri*, tom. i. (Paris, 1789). Synods of the Reformed Churches of France are contained in J. Quick, *Synodicon in Gallia reformata* (London, 1692, 2 vols.); J. Aymon, *Tous les synodes nationaux des églises réformées de France*

(La Haye, 1710, 2 vols.); E. Hugues, *Les Synodes du désert* (Paris, 1885 f., 3 vols.). For the synods of other countries see Herzog-Hauck, 3rd ed., 19,262 f., and Wetzer and Welte, 2nd ed., 3809 f.

Less Elaborate Texts: *Canones apostolorum et conciliorum saeculorum*, iv.-vii., rec. H. T. Bruns (Berlin, 1839, 2 vols.) (still useful); J. Fulton, *Index Canonum* (3rd ed., New York, 1892) (3rd and 4th centuries); W. Bright, *Notes on the Canons of the First Four General Councils* (2nd ed., Oxford, 1892); *Die Kanones der wichtigsten altkirchlichen Conzilien nebst den apostolischen Kanones*, ed. F. Lauchert (Freiburg i. B., 1896); *Enchiridion symbolorum et definitionum, quae de rebus fidei et morum a conciliis oecumenicis et summis pontificibus emanarunt*, ed. H. Denzinger (7th ed., Würzburg, 1895); *Bibliothek der Symbole und Glaubensregeln der alten Kirche*, ed. by A. Hahn (3rd edition, revised and enlarged, Breslau, 1897), with variant readings; C. Mirbt, *Quellen zur Geschichte des Papsttums und des römischen Katholizismus* (2nd much enlarged ed., Tübingen, 1901); E. F. Karl Müller, Die Bekenntnisschriften der reformierten Kirche (Leipzig, 1903) (for all countries). These last five are elaborately indexed.

Translations: John Johnson, *A Collection of the Laws and Canons of the Church of England* [601-1519], 2 parts (London, 1720; reprinted Oxford, 1850 f., in the *Library of Anglo-Catholic Theology*); P. Schaff, *The Creeds of Christendom* (New York, 1877, 3 vols.) (texts and translations parallel); *Canons and Creeds of the First Four Councils*, ed. by E. K. Mitchell, in *Translations and Reprints from the Original Sources of European History, published by the Department of History of the University of Pennsylvania*, vol. iv. 2 (1897); H. R. Percival, *The Ecumenical Councils* (New York, 1900) (*Nicene and Post-Nicene*

Fathers, second series, vol. xiv.; translates canons and compiles notes; bibliography in Introduction).

General Histories of Councils: C. J. von Hefele, *Conciliengeschichte* (Freiburg i. B., 1855); English translation of the earlier volumes to A.D. 787, from A.D. 326 on, based on the second German edition (Edinburgh, 1871 ff.); French, by Delarc (Paris, 1869-1874, 10 vols.). This first edition not entirely superseded by the second, made after the Vatican council, and continued by Knöpfler and by Hergenröther (Freiburg, 1873-1890, 9 vols.); a French translation, with continuation and critical and bibliographical notes, *par un religieux bénédictin de Farnborough*, tome i. 1re partie (Paris, Létouzey, 1907); Paul Viollet, *Examen de l'histoire des conciles de Mgr Hefele* (Paris, 1876) (*Extrait de la Revue historique*); W. P. du Bose, *The Ecumenical Councils* (New York, 1896) (popular); P. Guérin, *Les Conciles généraux et particuliers* (Paris, 1868, 3rd impression, 1897, 3 tom.); see also A. Harnack, *History of Dogma* (Boston, 1895-1900, 7 vols.); F. Loofs, *Leitfaden der Dogmengeschichte* (4th ed., enlarged, Halle, 1906).

Literature: *Dictionnaire universel et complet des conciles*, rédigé par A. C. Peltier, publié par Migne (Paris, 1847, 2 vols.) (Migne, *Encyclopédie théologique*, vol. 13 f.); Z. Zitelli-Natali, *Epitome historico-canonica conciliorum generalium* (Rome, 1881); F. X. Kraus, *Realencyklopädie der christlichen Altertümer*, vol. i. (Freiburg-i.-B., 1882) (art. "Concilien" by Funk); William Smith and S. Cheetham, *Dictionary of Christian Antiquities* (London, 1876-1880, 2 vols.) (erudite detail); Wetzer und Welte's *Kirchenlexikon*, 2nd ed. by Hergenröther and Kaulen (Freiburg i. B., 1882-1903, 13 vols.) (art. "Concil" by Scheeben); *La Grande Encyclopédie* (Paris, s.d., 31 vols.) (numerous articles); P. Hinschius, *Das Kirchenrecht der Katholiken*

und Protestanten in Deutschland, vol. 3 (Berlin, 1883) (fundamental and masterly); R. von Scherer, *Handbuch des Kirchenrechtes*, vol. i. (Graz, 1886) (excellent notes and references); E. H. Landon, *A Manual of Councils of the Holy Catholic Church*, (revised ed., London, [1893], 2 vols.) (paraphrases chief canons; needs revision); Martigny, *Dictionnaire des antiquités chrétiennes* (3rd ed., Paris, 1889) (for ceremonial); R. Sohm, *Kirchenrecht*, vol. i. (Leipzig, 1892) (brilliant); A. Kneer, *Die Entstehung der konziliaren Theorie* (Rome, 1893); *Realencyklopädie für protestantische Theologie und Kirche*, begründet von J. J. Herzog, 3rd revised ed. by A. Hauck (Leipzig, 1896 ff.) (in vol. 19 Hauck's excellent *Synoden*, 1907); F. X. Funk, *Kirchengeschichtliche Abhandlungen und Untersuchungen* (Paderborn, 1897); A. V. G. Allen, *Christian Institutions* (New York, 1897), chap. xi.; C. A. Kneller, "Papst und Konzil im ersten Jahrtausend" (*Zeitschrift für katholische Theologie*, vols. 27 and 28, Innsbruck, 1893 f.); F. Bliemetzrieder, *Das Generalkonzil im grossen abendländischen Schisma* (Paderborn, 1904); Wilhelm and Scannell, *Manual of Catholic Theology* (3rd ed., London, 1906, sect. 32); J. Forget, "Conciles," in A. Vacant and E. Mangeot, *Dictionnaire de théologie catholique*, tome 3, 636-676 (Paris, 1906 ff.), with elaborate bibliography; *The Catholic Encyclopedia* (New York, 1907 ff.).

(W. W. R.*)

---

1 For the Greek Council see BOULE; for the Hebdomadal Council see OXFORD; see also ENGLAND: *Local Government*.

2 From ἡ οἰκουμένη (γῆ). the inhabited world; Latin *oecumenicus* or *universalis*. The English forms "oecumenical" and "ecumenical" are both used.

COUNCIL BLUFFS, a city and the county-seat of Pottawattamie county, Iowa, U.S.A., about 2½ m. E. of the Missouri river opposite Omaha, Nebraska, with which it is connected by a road bridge and two railway bridges. Pop. (1890) 21,474; (1900) 25,802, of whom 3723 were foreign-born; (1910) 29,292. It is pre-eminently a railway centre, being served by the Union Pacific, of which it is the principal eastern terminus, the Chicago, Burlington & Quincy, the Chicago, Milwaukee & Saint Paul, the Chicago & Northwestern, the Chicago, Rock Island & Pacific, the Chicago Great-Western, the Illinois Central, and the Wabash, which together have given it considerable commercial importance. It is built for the most part on level ground at the foot of high bluffs; and has several parks, the most attractive of which, commanding fine views, is Fairmount Park. With the exception of bricks and tiles, carriages and wagons, agricultural implements, and the products of its railway shops, its manufactures are relatively unimportant, the factory product in 1905 being valued at only $1,924,109. Council Bluffs is the seat of the Western Iowa Business College, and of the Iowa school for the deaf. On or near the site of Council Bluffs, in 1804, Lewis and Clark held a council with the Indians, whence the city's name. In 1838 the Federal government made this the headquarters of the Pottawattamie Indians, removed from Missouri. They remained until 1846-1847, when the Mormons came, built many cabins, and named the place Kanesville. The Mormons remained only about five years, but on their departure for Utah their places were speedily taken by new immigrants. During 1849-1850 Council Bluffs became an important outfitting point for California gold seekers—the goods being brought by boat from Saint Louis—and in 1853 it was incorporated as a city.

COUNSEL AND COUNSELLOR, one who gives advice, more particularly in legal matters. The term "counsel" is employed in England as a synonym for a barrister-at-law, and may refer either to a single person who pleads a cause, or collectively, to the body of barristers engaged in a case. Counsellor or, more fully, counsellor-at-law, is practically an obsolete term in England, but is still in use locally in Ireland as an equivalent to barrister. In the United States, a counsellor-at-law is, specifically, an attorney admitted to practice in all the courts; but as there is no formal distinction of the legal profession into two classes, as in England, the term is more often used loosely in the same sense as "lawyer," *i.e.* one who is versed in, or practises law.

COUNT (Lat. *comes*, gen. *comitis*, Fr. *comte*, Ital. *conte*, Span. *conde*), the English translation of foreign titles equivalent generally to the English "earl."[1] In Anglo-French documents the word *counte* was at all times used as the equivalent of earl, but, unlike the feminine form "countess," it did not find its way into the English language until the 16th century, and then only in the sense defined above. The title of earl, applied by the English to the foreign counts established in England by William the Conqueror, is dealt with elsewhere (see EARL). The present article deals with (1) the office of count in the Roman empire and the Frankish kingdom, (2) the development of the feudal count in France and under the Holy Roman Empire, (3) modern counts.

1. The Latin *comes* meant literally a companion or follower. In the early Roman empire the word was used to designate the companions of the

emperor (*comites principis*) and so became a title of honour. The emperor Hadrian chose senators as companions on his travels and to help him in public business. They formed a permanent council, and Hadrian's successors entrusted these *comites* with the administration of justice and finance, or placed them in military commands. The designation *comes* thus developed into a formal official title of high officers of state, some qualification being added to indicate the special duties attached to the office in each case. Thus in the 5th century, among the *comites* attached to the emperor's establishment, we find, *e.g.*, the *comes sacrarum largitionum* and the *comes rei privatae*; while others, forming the council, were styled *comites consistorii*. Others were sent into the provinces as governors, *comites per provincias constituti*; thus in the *Notitia dignitatum* we find a *comes Aegypti*, a *comes Africae*, a *comes Belgicae*, a *comes Lugdunensis* and others. Two of the generals of the Roman province of Britain were styled the *comes Britanniae* and the *comes littoris Saxonici* (count of the Saxon shore).

At Constantinople in the latter Roman empire the Latin word *comes* assumed a Greek garb as κόμης and was declined as a Greek noun (gen. κόμητος); the *comes sacrarum largitionum* (count of the sacred bounties) was called at Constantinople ὁ κόμης τῶν σακρῶν λαργιτιώνων and the *comes rerum privatarum* (count of the private estates) was called κόμης τῶν πριβάτων. The count of the sacred bounties was the lord treasurer or chancellor of the exchequer, for the public treasury and the imperial fisc had come to be identical; while the count of the private estates managed the imperial demesnes and the privy purse. In the 5th century the "sacred bounties" corresponded to the *aerarium* of the early Empire, while the *res privatae* represented the fisc. The officers connected with the palace and the emperor's person included the count of the wardrobe (*comes sacrae vestis*), the count of the residence (*comes domorum*), and, most important of all, the *comes domesticorum et sacri stabuli* (graecized as κόμης τοῦ

στάβλου). The count of the stable, originally the imperial master of the horse, developed into the "illustrious" commander-in-chief of the imperial army (Stilicho, *e.g.*, bore the full title as given above), and became the prototype of the medieval constable (*q.v.*).

An important official of the second rank (*spectabilis*, "respectable" as contrasted with those of highest rank who were "illustrious") was the count of the East, who appears to have had the control of a department in which 600 officials were engaged. His power was reduced in the 6th century, when he was deprived of his authority over the Orient diocese, and became civil governor of Syria Prima, retaining his "respectable" rank. Another important officer of the later Roman court was the *comes sacri patrimonii*, who was instituted by the emperor Anastasius. In this connexion it should be observed that the word *patrimonium* gradually changed in meaning. In the beginning of the 3rd century *patrimonium* meant crown property, and *res privata* meant personal property: at the beginning of the 6th century *patrimonium* meant personal property, and *res privata* meant crown property. It is difficult to give briefly a clear idea of the functions of the three important officials *comes sacrarum largitionum*, *comes rei privatae* and *comes sacri patrimonii*; but the terms have been well translated by a German author as *Finanzminister des Reichsschatzes* (finance minister of the treasury of the Empire), *F. des Kronschatzes* (of the crown treasury), and *F. des kaiserlichen Privatvermögens* (of the emperor's private property).

The Frankish kings of the Merovingian dynasty retained the Roman system of administration, and under them the word *comes* preserved its original meaning; the *comes* was a companion of the king, a royal servant of high rank. Under the early Frankish kings some *comites* did not exercise any definite functions; they were merely attached to the king's person and executed his orders. Others filled the highest offices, *e.g.* the *comes palatii*

and *comes stabuli* (see CONSTABLE). The kingdom was divided for administrative purposes into small areas called *pagi* (*pays*, Ger. *Gau*), corresponding generally to the Roman *civitates* (see CITY).[2] At the head of the *pagus* was the *comes*, corresponding to the German *Graf* (*Gaugraf*, cf. Anglo-Saxon *scire-gerefa*,[3] sheriff). The *comes* was appointed by the king and removable at his pleasure, and was chosen originally from all classes, sometimes from enfranchised slaves. His essential functions were judicial and executive, and in documents he is often described as the king's agent (*agens publicus*) or royal judge (*judex publicus* or *fiscalis*). As the delegate of the executive power he had the right to military command in the king's name, and to take all the measures necessary for the preservation of the peace, *i.e.* to exercise the royal "ban" (*bannus regis*). He was at once public prosecutor and judge, was responsible for the execution of the sentences of the courts, and as the king's representative exercised the royal right of protection (*mundium regis*) over churches, widows, orphans and the like. He enjoyed a triple wergeld, but had no definite salary, being remunerated by the receipt of certain revenues, a system which contained the germs of discord, on account of the confusion of his public and private estates. He also retained a third of the fines which he imposed in his judicial capacity.

Under the early Carolings the title count did not indicate noble birth. A *comes* was generally raised from childhood in the king's palace, and rose to be a count through successive stages. The count's office was not yet a dignity, nor hereditary; he was not independent nor appointed for life, but exercised the royal power by delegation, as under the Merovingians. While, however, he was theoretically paid by the king, he seems to have been himself one of the sources of the royal revenue. The counties were, it appears, farmed out; but in the 7th century the royal choice became restricted to the larger landed proprietors, who gradually emancipated themselves from royal control, and in the 8th century the term *comitatus* begins to denote a geographical area, though there was little difference in its

extent under the Merovingian kings and the early Carolings. The count was about to pass into the feudatory stage. Throughout the middle ages, however, the original official and personal connotation of the title was never wholly lost; or perhaps it would be truer to say, with Selden, that it was early revived with the study of the Roman civil law in the 12th century. The unique dignity of count of the Lateran palace,[4] bestowed in 1328 by the emperor Louis IV. the Bavarian on Castrucio de' Antelminelli, duke of Lucca, and his heirs male, was official as well as honorary, being charged with the attendance and service to be performed at the palace at the emperor's coronation at Rome (Du Cange, s.v. *Comites Palatii Lateranensis*; Selden, op. cit. p. 321). This instance, indeed, remained isolated; but the personal title of "count palatine," though honorary rather than official, was conferred on officials—especially by the popes on those of the Curia—had no territorial significance, and was to the last reminiscent of those early comites palatii whose relations to the sovereign had been purely personal and official (see PALATINE). A relic of the old official meaning of "count" still survives in Transylvania, where the head of the political administration of the Saxon districts is styled count (*comes*, *Graf*) of the Saxon Nation.

2. *Feudal Counts.*—The process by which the official counts were transformed into feudal vassals almost independent is described in the article FEUDALISM. In the confusion of the period of transition, when the title to possession was usually the power to hold, designations which had once possessed a definite meaning were preserved with no defined association. In France, by the 10th century, the process of decomposition of the old organization had gone far, and in the 11th century titles of nobility were still very loosely applied. That of "count" was, as Luchaire points out, "equivocal" even as late as the 12th century; any castellan of moderate rank could style himself *comte* who in the next century would have been called *seigneur* (*dominus*). Even when, in the 13th century, the ranks of the feudal

hierarchy in France came to be more definitely fixed, the style of "count" might imply much, or comparatively little. In the oldest register of Philip Augustus counts are reckoned with dukes in the first of the five orders into which the nobles are divided, but the list includes, besides such almost sovereign rulers as the counts of Flanders and Champagne, immediate vassals of much less importance—such as the counts of Soissons and Dammartin—and even one mediate vassal, the count of Bar-sur-Seine. The title was still in fact "equivocal," and so it remained throughout French history. In the official lists it was early placed second to that of duke (Luchaire, *Manuel*, p. 181, note 1), but in practice at least the great *comtes-pairs* (*e.g.* of Champagne) were the equals of any duke and the superiors of many. Thus, too, in modern times royal princes have been given the title of count (Paris, Flanders, Caserta), the heir of Charles X. actually changing his style, without sense of loss, from that of duc de Bordeaux to that of comte de Chambord. From the 16th century onwards the equivocal nature of the title in France was increased by the royal practice of selling it, either to viscounts or barons in respect of their fiefs, or to rich *roturiers*.

In Germany the change from the official to the territorial and hereditary counts followed at the outset much the same course as in France, though the later development of the title and its meaning was different. In the 10th century the counts were permitted by the kings to divide their benefices and rights among their sons, the rule being established that countships (*Grafschaften*) were hereditary, that they might be held by boys, that they were heritable by females and might even be administered by females. The *Grafschaft* became thus merely a bundle of rights inherent in the soil; and, the count's office having become his property, the old counties or *Gauen* rapidly disappeared as administrative units, being either amalgamated or subdivided. By the second half of the 12th century the official character of the count had quite disappeared; he had become a territorial noble, and the foundation had been laid of territorial sovereignty (*Landeshoheit*). The first

step towards this was the concession to the counts of the military prerogatives of dukes, a right enjoyed from the first by the counts of the marches (see MARGRAVE), then given to counts palatine (see PALATINE) and, finally, to other counts, who assumed by reason of it the style of landgrave (*Landgraf*, *i.e.* count of a province). At first all counts were reckoned as princes of the Empire (*Reichsfürsten*); but since the end of the 12th century this rank was restricted to those who were immediate tenants of the crown,[5] the other counts of the Empire (*Reichsgrafen*) being placed among the free lords (*barones*, *liberi domini*). Counts of princely rank (*gefürstete Grafen*) voted among the princes in the imperial diet; the others (*Reichsgrafen*) were grouped in the *Grafenbänke*—originally two, to which two more were added in the 17th century—each of which had one vote. In 1806, on the formation of the Confederation of the Rhine, the sovereign counts were all mediatized (see MEDIATIZATION). Even before the end of the Empire (1806) the right of bestowing the title of count was freely exercised by the various German territorial sovereigns.

3. *Modern Counts.*—Any political significance which the feudal title of count retained in the 18th century vanished with the changes produced by the Revolution. It is now simply a title of honour and one, moreover, the social value of which differs enormously, not only in the different European countries, but within the limits of the same country. In Germany, for instance, there are several categories of counts: (1) the mediatized princely counts (*gefürstete Grafen*), who are reckoned the equals in blood of the European sovereign houses, an equality symbolized by the "closed crown" surmounting their armorial bearings. The heads of these countly families of the "high nobility" are entitled (by a decree of the federal diet, 1829) to the style of *Erlaucht* (illustrious, most honourable); (2) Counts of the Empire[6] (*Reichsgrafen*), descendants of those counts who, before the end of the Holy Roman Empire (1806), were *Reichsständisch i.e.* sat in one of the *Grafenbänke* in the imperial diet, and entitled to a ducal coronet; (3) Counts

(a) descended from the lower nobility of the old Empire, titular since the 15th century, (b) created since; their coronet is nine-pointed (cf. the nine points and strawberry leaves of the English earl). The difficulty of determining in any case the exact significance of the title of a German count, illustrated by the above, is increased by the fact that the title is generally heritable by all male descendants, the only exception being in Prussia, where, since 1840, the rule of primogeniture has prevailed and the bestowal of the title is dependent on a rent-roll of £3000 a year. The result is that the title is very widespread and in itself little significant. A German or Austrian count may be a wealthy noble of princely rank, a member of the Prussian or Austrian Upper House, or he may be the penniless cadet of a family of no great rank or antiquity. Nevertheless the title, which has long been very sparingly bestowed, always implies a good social position. The style *Altgraf* (old count), occasionally found, is of some antiquity, and means that the title of count has been borne by the family from time immemorial.

In medieval France the significance of the title of count varied with the power of those who bore it; in modern France it varies with its historical associations. It is not so common as in Germany or Italy; because it does not by custom pass to all male descendants. The title was, however, cheapened by its revival under Napoleon. By the decree of the 1st of March 1808, reviving titles of nobility, that of count was assigned *ex officio* to ministers, senators and life councillors of state, to the president of the Corps Législatif and to archbishops. The title was made heritable in order of primogeniture, and in the case of archbishops through their nephews. These Napoleonic countships, increased under subsequent reigns, have produced a plentiful crop of titles of little social significance, and have tended to lower the status of the counts deriving from the *ancien régime*. The title of marquis, which Napoleon did not revive, has risen proportionately in the estimation of the Faubourg St Germain. As for that of count, it is safe to say

that in France its social value is solely dependent on its historical associations.

Of all European countries Italy has been most prolific of counts. Every petty Italian prince, from the pope downwards, created them for love or money; and, in the absence of any regulating authority, the title was also widely and loosely assumed, while often the feudal title passed with the sale of the estate to which it was attached. Casanova remarked that in some Italian cities all the nobles were *baroni*, in others all were *conti*. An Italian *conte* may or may not be a gentleman; he has long ceased, *qua* count, to have any social prestige, and his rank is not recognized by the Italian government. As in France, however, there are some Italian *conti* whose titles are respectable, and even illustrious, from their historic associations. The prestige belongs, however, not to the title but to the name. As for the papal countships, which are still freely bestowed on those of all nations whom the Holy See wishes to reward, their prestige naturally varies with the religious complexion of the country in which the titles are borne. They are esteemed by the faithful, but have small significance for those outside. In Spain, on the other hand, the title of *conde*, the earlier history of which follows much the same development as in France, is still of much social value, mainly owing to the fact that the rule of primogeniture exists, and that, a large fee being payable to the state on succession to a title, it is necessarily associated with some degree of wealth. The Spanish counts of old creation, some of whom are grandees and members of the Upper House, naturally take the highest rank; but the title, still bestowed for eminent public services or other reasons, is of value. The title, like others in Spain, can pass through an heiress to her husband. In Russia the title of count (*graf*, fem. *grafinya*), a foreign importation, has little social prestige attached to it, being given to officials of a certain rank. In the British empire the only recognized counts are those of Malta, who are given precedence with baronets of the United Kingdom.

See Selden, *Titles of Honor* (London, 1672); Du Cange, *Glossarium Med. Lat.* (ed. Niort, 1883) s.v. "Comes"; *La Grande Encyclopédie*, s.v. "Comte"; A. Luchaire, *Manuel des institutions françaises* (Paris, 1892); P. Guilhiermoz, *Essai sur l'origine de la noblesse en France au moyen âge* (Paris, 1902); Brunner, *Deutsche Rechtsgeschichte*, Band ii. (Leipzig, 1892).

---

1 The exact significance of a title is difficult to reproduce in a foreign language. Actually, only some foreign counts could be said to be equivalent to English earls; but "earl" is always translated by foreigners by words (*comte*, *Graf*) which in English are represented by "count," itself never used as the synonym of "earl." Conversely old English writers had no hesitation in translating as "earl" foreign titles which we now render "count."

2 The changing language of this epoch speaks of *civitates*, subsequently of *pagi*, and later of *comitatus* (counties).

3 The A.S. *gerefa*, however, meaning "illustrious," "chief," has apparently, according to philologists, no connexion with the German *Graf*, which originally meant "servant" (cf. "knight," "valet," &c.). It is the more curious that the *gerefa* should end as a servant ("reeve"), the *Graf* as a noble (count).

4 "Count of the Lateran Palace" (*Comes Sacri Lateranensis Palatii*) was later the title usually bestowed by the popes in creating counts palatine. The emperors, too, continued to make counts palatine under this title long after the Lateran had ceased to be an imperial palace.

5 Of these there were four who, as counts of the Empire *par excellence*, were sometimes styled "simple counts" (*Schlechtgrafen*), *i.e.* the counts of Cleves, Schwarzburg, Cilli and Savoy; they were entitled to the ducal coronet. Three of these had become dukes by the 17th century, but the count (now prince) of Schwarzburg still styled himself "Of the four counts of the Holy Roman Empire, count of Schwarzburg" (see Selden, ed. 1672, p. 312).

6 This title is borne by certain English families, *e.g.* by Lord Arundell of Wardour. In other cases it has been assumed without due warrant. See J. H. Round, "English Counts of the Empire," in *The Ancestor*, vii. 15 (Westminster, October 1903).

COUNTER. (1) (Through the O. Fr. *conteoir*, modern *comptoir*, from Lat. *computare*, to reckon), a round piece of metal, wood or other material used anciently in making calculations, and now for reckoning points in games of cards, &c., or as tokens representing actual coins or sums of money in gambling games such as roulette. The word is thus used, figuratively, of something of no real value, a sham. In the original sense of "a means of counting money, or keeping accounts," "counter" is used of the table or flat-topped barrier in a bank, merchant's office or shop, on which money is counted and goods handed to a customer. The term was also applied, usually in the form "compter," to the debtors' prisons attached to the mayor's or sheriff's courts in London and some other boroughs in England. The "compters" of the sheriff's courts of the city of London were, at various times, in the Poultry, Bread St., Wood St. and Giltspur St.; the Giltspur St. compter was the last to be closed, in 1854. (2) (From Lat. *contra*, opposite, against), a circular parry in fencing, and in boxing, a blow given as a parry to a lead of an opponent. The word is also used of the stiff piece of leather at the back of a boot or shoe, of the rounded angle at the stern of a ship, and, in a horse, of the part lying between the shoulder and the under part of the neck. In composition, counter is used to express contrary action, as in "countermand," "counterfeit," &c.

COUNTERFEITING (from Lat. *contra-facere*, to make in opposition or contrast), making an imitation without authority and for the purpose of defrauding. The word is more particularly used in connexion with the

making of imitations of money, whether paper or coin. (See COINAGE OFFENCES; FORGERY.)

COUNTERFORT (Fr. *contrefort*), in architecture, a buttress or pier built up against the wall of a building or terrace to strengthen it, or to resist the thrust of an arch or other constructional feature inside.

COUNTERPOINT (Lat. *contrapunctus*, "point counter point," "note against note"), in music, the art happily defined by Sir Frederick Gore Ouseley as that "of combining" melodies: this should imply that good counterpoint is the production of beautiful harmony by a combination of well-characterized melodies. The individual audibility of the melodies is a matter of which current criticism enormously overrates the importance. What is always important is the peculiar life breathed into harmony by contrapuntal organization. Both historically and aesthetically "counterpoint" and "harmony" are inextricably blended; for nearly every harmonic fact is in its origin a phenomenon of counterpoint. And if in later musical developments it becomes possible to treat chords as, so to speak, harmonic lumps with a meaning independent of counterpoint, this does not mean that they have really changed their nature; but it shows a difference between modern and earlier music precisely similar to that between modern

English, in which metaphorical and abstract expressions are so constantly used that they have become a mere shorthand for the literal and concrete expression, and classical Greek, where metaphors and abstractions can appear only as elaborate similes or explicit philosophical ideas. The laws of counterpoint are, then, laws of harmony with the addition of such laws of melody as are not already produced by the interaction of harmonic and melodic principles. In so far as the laws of counterpoint are derived from purely harmonic principles, that is to say, derived from the properties of concord and discord, their origin and development are discussed in the article HARMONY. In so far as they depend entirely on melody they are too minute and changeable to admit of general discussion; and in so far as they show the interaction of melodic and harmonic principles it is more convenient to discuss them under the head of harmony, because they appear in such momentary phenomena as are more easily regarded as successions of chords than as principles of design. All that remains, then, for the present article is the explanation of certain technical terms.

1. *Canto Fermo* (*i.e.* plain chant) is a melody in long notes given to one voice while others accompany it with quicker counterpoints (the term "counterpoint" in this connexion meaning accompanying melodies). In the simplest cases the *Canto Fermo* has notes of equal length and is unbroken in flow. When it is broken up and its rhythm diversified, the gradations between counterpoint on a *Canto Fermo* and ordinary forms of polyphony, or indeed any kind of melody with an elaborate accompaniment, are infinite and insensible.

2. *Double Counterpoint* is a combination of melodies so designed that either can be taken above or below the other. When this change of position is effected by merely altering the octave of either or both melodies (with or without transposition of the whole combination to another key), the artistic value of the device is simply that of the raising of the lower melody to the

surface. The harmonic scheme remains the same, except in so far as some of the chords are not in their fundamental position, while others, not originally fundamental, have become so. But double counterpoint may be in other intervals than the octave; that is to say, while one of the parts remains stationary, the other may be transposed above or below it by some interval other than an octave, thus producing an entirely different set of harmonies.

Double Counterpoint in the 12th has thus been made a powerful means of expression and variety. The artistic value of this device depends not only on the beauty and novelty of the second scheme of harmony obtained, but also on the change of melodic expression produced by transferring one of the melodies to another position in the scale. Two of the most striking illustrations of this effect are to be found in the last chorus of Brahms's *Triumphlied* and in the fourth of his variations on a theme by Haydn.

Double Counterpoint in the 10th has, in addition to this, the property that the inverted melody can be given in the new and in the original positions simultaneously.

Double counterpoint in other intervals than the octave, 10th and 12th, is rare, but the general principle and motives for it remain the same under all conditions. The two subjects of the *Confiteor* in Bach's B minor Mass are in double counterpoint in the octave, 11th and 13th. And Beethoven's Mass in D is full of pieces of double counterpoint in the inversions of which a few notes are displaced so as to produce momentary double counterpoint in unusual intervals, obviously with the intention of varying the harmony. Technical treatises are silent as to this purpose, and leave the student in the belief that the classical composers used these devices, if at all, in a manner as meaningless as the examples in the treatises.

3. *Triple, Quadruple and Multiple Counterpoint.*—When more than two melodies are designed so as to combine in interchangeable positions, it

becomes increasingly difficult to avoid chords and progressions of which some inversions are incorrect. In triple counterpoint this difficulty is not so great; although a complete triad is dangerous, as it is apt to invert as a "6/4$_6^4$" which requires careful handling. On the other hand, in triple counterpoint the necessity for strictness is at its greatest, because there are only six possible inversions, and in a long polyphonic work most of these will be required. Moreover, the artistic value of the device is at its highest in three-part polyphonic harmony, which, whether invertible or not, is always a fine test of artistic economy, while the inversions are as evident to the ear, especially where the top part is concerned, as those in double counterpoint. Triple counterpoint (and a fortiori multiple counterpoint) is normally possible only at the octave; for it will be found that if three parts are designed to invert in some other interval this will involve two of them inverting in a third interval which will give rise to incalculable difficulty. This makes the fourth of Brahms's variations on a theme of Haydn almost miraculous. The plaintive expression of the whole variation is largely due to the fact that the flowing semiquaver counterpoint below the main theme is on each repeat inverted in the 12th, with the result that its chief emphasis falls upon the most plaintive parts of the scale. But in the first eight bars of the second part of the variation a third contrapuntal voice appears, and this too is afterwards inverted in the 12th, with perfectly natural and smooth effect. But this involves the inversion of two of the counterpoints with each other in the 9th, a kind of double counterpoint which is almost impossible. The case is unique, but it admirably illustrates the difference between artistic and merely academic mastery of technical resource.

Quadruple Counterpoint is not rare with Bach. It would be more difficult than triple, but for the fact that of its twenty-four possible inversions not more than four or five need be correct. *Quintuple counterpoint* is admirably illustrated in the finale of Mozart's *Jupiter Symphony*, in which everything in the successive statement and gradual development of the five themes

conspires to give the utmost effect to their combination in the coda. Of course Mozart has not room for more than five of the 120 possible combinations, and from these he selects such as bring fresh themes into the outside parts, which are the most clearly audible. *Sextuple Counterpoint* may be found in Bach's great double chorus, *Nun ist das Heil*, and in the finale of his concerto for three claviers in C, and probably in other places.

4. *Added Thirds and Sixths.*—An easy and effective imitation of triple and quadruple counterpoint, embodying much of the artistic value of inversion, is found in the numerous combinations of themes in thirds and sixths which arise from an extension of the principle which we mentioned in connexion with double counterpoint in the 10th, namely, the possibility of performing it in its original and inverted positions simultaneously. The *Pleni sunt coeli* of Bach's B minor Mass is written in this kind of transformation of double into quadruple counterpoint; and the artistic value of the device is perhaps never so magnificently realized as in the place, at bar 84, where the trumpet doubles the bass three octaves and a third above while the alto and second tenor have the counter subjects in close thirds in the middle.

Almost all other contrapuntal devices are derived from the principle of the *canon* and are discussed in the article CONTRAPUNTAL FORMS.

As a training in musical grammar and style, the rhythms of 16th-century polyphony were early codified into "the five species of counterpoint" (with various other species now forgotten) and practised by students of composition. The classical treatise on which Haydn and Beethoven were trained was Fux's *Gradus ad Parnassum* (1725). This was superseded in the 19th century by Cherubini's, the first of a long series of attempts to bring up to date as a dead language what should be studied in its original and living form.

(D. F. T.)

COUNTERSCARP (= “opposite scarp,” Fr. *contrescarpe*), a term used in fortification for the outer slope of a ditch; see FORTIFICATION and SIEGECRAFT.

COUNTERSIGN, a military term for a sign, word or signal previously arranged and required to be given by persons approaching a sentry, guard or other post. In some armies the “countersign” is strictly the reply of the sentry to the pass-word given by the person approaching.

COUNTRY (from the Mid. Eng. *contre* or *contrie*, and O. Fr. *cuntrée*; Late Lat. *contrata*, showing the derivation from *contra*, opposite, over against, thus the tract of land which fronts the sight, cf. Ger. *Gegend*, neighbourhood), an extent of land without definite limits, or such a region with some peculiar character, as the “black country,” the “fen country” and the like. The extension from such descriptive limitation to the limitation of occupation by particular owners or races is easy; this gives the common use

of the word for the land inhabited by a particular nation or race. Another meaning is that part of the land not occupied by towns, "rural" as opposed to "urban" districts; this appears too in "country-house" and "country town"; so too "countryman" is used both for a rustic and for the native of a particular land. The word appears in many phrases, in the sense of the whole population of a country, and especially of the general body of electors, as in the expression "go to the country," for the dissolution of parliament preparatory to a general election.

COUNTY (through Norm. Fr. *counté*, cf. O. Fr. *cunté*, *conté*, Mod. Fr. *comté*, from Lat. *comitatus*, cf. Ital. *comitato*, Prov. *comtat*; see COUNT), in its most usual sense the name given to certain important administrative divisions in the United Kingdom, the British dominions beyond the seas, and the United States of America. The word was first introduced after the Norman Conquest as the equivalent of the old English "shire," which has survived as its synonym, though occasionally also applied to divisions smaller than counties, *e.g.* Norhamshire, Hexhamshire and Hallamshire. The word "county" is also sometimes used, alternatively with "countship," to translate foreign words, *e.g.* the French *comté* and the German *Grafschaft*, which connote the territorial jurisdiction of a count (*q.v.*). The present article is confined to a sketch of the origin and development of English counties, which have served in a greater or less degree as the model for the county organizations in the various countries of the English-speaking world which are described under their proper headings.

About one-third of the English counties represent ancient kingdoms, sub-kingdoms or tribal divisions, such as Kent, Sussex, Norfolk, Devon; but most of the remaining counties take their names from some important town within their respective boundaries. The counties to the south of the Thames (except Cornwall) already existed in the time of Alfred, but those of the midlands seem to have been created during the reign of Edward the Elder (901-925) and to have been artificially bounded areas lying around some stronghold which became a centre of civil and military administration. There is reason, however, for thinking that the counties of Bedford, Cambridge, Huntingdon and Northampton are of Danish origin. Northumberland, Cumberland and Westmorland were not recognized as English counties until some time after the Norman Conquest, the last two definitely appearing as fiscal areas in 1177. The origin of Rutland as a county is obscure, but it had its own sheriff in 1154.

In the period preceding the Norman Conquest two officers appear at the head of the county organization. These are the ealdorman or earl, and the *scirgerefa* or sheriff. The shires of Wessex appear each to have had an ealdorman, whose duties were to command its military forces, to preside over the county assembly (*scirgemot*), to carry out the laws and to execute justice. The name ealdorman gave way to that of earl, probably under Danish influence, in the first half of the 11th century, and it is probable that the office of sheriff came into existence in the reign of Canute (1017-1035), when the great earldoms were formed and it was no longer possible for the earl to perform his various administrative duties in person in a group of counties. After the Norman Conquest the earl was occasionally appointed sheriff of his county, but in general his only official connexion with it was to receive the third penny of its pleas, and the earldom ceased to be an office and became merely a title. In the 12th century the office of coroner was created, two or more of them being chosen in the county court as vacancies occurred. In the same century verderers were first chosen in the

same manner for the purpose of holding inquisitions on vert and venison in those counties which contained royal forests. It was the business of the sheriff (*vicecomes*) as the king's representative to serve and return all writs, to levy distresses on the king's behalf, to execute all royal precepts and to collect the king's revenue. In this work he was assisted by a large staff of clerks and bailiffs who were directly responsible to him and not to the king. The sheriff also commanded the armed forces of the crown within his county, and either in person or by deputy presided over the county court which was now held monthly in most counties. In 1300 it was enacted that the sheriffs might be chosen by the county, except in Worcestershire, Cornwall, Rutland, Westmorland and Lancashire, where there were then sheriffs in fee, that is, sheriffs who held their offices hereditarily by royal grant. The elective arrangement was of no long duration, and it was finally decided in 1340 that the sheriffs should be appointed by the chancellor, the treasurer and the chief baron of the exchequer, but should hold office for one year only. The county was from an early period regarded as a community, and approached the king as a corporate body, while in later times petitions were presented through the knights of the shire. It was also an organic whole for the purpose of the conservation of the peace. The assessment of taxation by commissioners appointed by the county court developed in the 13th century into the representation of the county by two knights of the shire elected by the county court to serve in parliament, and this representation continued unaltered save for a short period during the Protectorate, until 1832, when many of the counties received a much larger representation, which was still further increased by later acts.

The royal control over the county was strengthened from the 14th century onward by the appointment of justices of the peace. This system was further developed under the Tudors, while in the middle of the 16th century the military functions of the sheriff were handed over to a new officer, the lord-lieutenant, who is now more prominently associated with the headship of

the county than is the sheriff. The lord-lieutenant now usually holds the older office of *custos rotulorum*, or keeper of the records of the county. The justices of the peace are appointed upon his nomination, and until lately he appointed the clerk of the peace. The latter appointment is now made by the joint committee of quarter sessions and county council.

The Tudor system of local government received little alteration until the establishment of county councils by the Local Government Act of 1888 handed over to an elected body many of the functions previously exercised by the nominated justices of the peace. For the purposes of this act the ridings of Yorkshire, the divisions of Lincolnshire, east and west Sussex, east and west Suffolk, the soke of Peterborough and the Isle of Ely are regarded as counties, so that there are now sixty administrative counties of England and Wales. Between 1373 and 1692 the crown granted to certain cities and boroughs the privilege of being counties of themselves. There were in 1835 eighteen of these counties corporate, Bristol, Chester, Coventry, Gloucester, Lincoln, Norwich, Nottingham, York and Carmarthen, each of which had two sheriffs, and Canterbury, Exeter, Hull, Lichfield, Newcastle-upon-Tyne, Poole, Southampton, Worcester and Haverfordwest, each of which had one sheriff. All these boroughs, with the exception of Carmarthen, Lichfield, Poole and Haverfordwest, which remain counties of themselves, and forty-seven others, were created county boroughs by the Local Government Act 1888, and are entirely dissociated from the control of a county council. The City of London is also a county of itself, whose two sheriffs are also sheriffs of Middlesex, while for the purposes of the act of 1888 the house-covered district which extends for many miles round the City constitutes a county.

The county has always been the unit for the organization of the militia, and from about 1782 certain regiments of the regular army were associated with particular counties by territorial titles. The army scheme of 1907-1908

provided for the formation of county associations under the presidency of the lords-lieutenant for the organization of the new territorial army.

See *Statutes of the Realm*; W. Stubbs, *Constitutional History of England* (1874-1878); F. W. Maitland, *Domesday Book and Beyond* (1897); Sir F. Pollock and F. W. Maitland, *History of English Law* (1895); H. M. Chadwick, *Studies on Anglo-Saxon Institutions* (1905), and *The Victoria History of the Counties of England*.

(G. J. T.)

COUNTY COURT, in England, a local court of civil jurisdiction. The county court, it has been said, is at once the most ancient and the most modern of English civil tribunals. The Saxon Curia Comitatus, maintained after the Norman Conquest, was a local court and a small debts court. It was instituted by Alfred the Great, its jurisdiction embracing civil, and, until the reign of William I., ecclesiastical matters. The officers of the court consisted of the earldorman, the bishop and the sheriff. The court was held once in every four weeks, being presided over by the earl, or, in his absence, the sheriff. The suitors of the court, *i.e.* the freeholders, were the judges, the sheriff being simply a presiding officer, pronouncing and afterwards executing the judgment of the court. The court was not one of record. The appointment of judges of assize in the reign of Henry II., as well as the expensive and dilatory procedure of the court, brought about its gradual disuse, and other local courts, termed courts of request or of conscience, were established. These, in turn, proved unsatisfactory, owing both to the limited nature of their jurisdiction (restricted to causes of debt

not exceeding 40s. in value, and to the fact that they were confined to particular places). Accordingly, with the view of making justice cheaper and more accessible the County Courts Act 1846 was passed. This act had the modest title of "An Act for the Recovery of Small Debts and Demands in England." The original limit of the jurisdiction of the new courts was £20, extended in 1850 to £50 in actions of debt, and in 1903 (by an act which came into force in 1905) to £100. Thirteen amending acts were passed, by which new jurisdiction was from time to time conferred on the county courts, and in the year 1888 an act was passed repealing the previous acts and consolidating their provisions, with some amendment. This is now the code or charter of the county courts.

The grain of mustard-seed sown in 1846 has grown into a goodly tree, with branches extending over the whole of England and Wales; and they embrace within their ambit a more multifarious jurisdiction than is possessed by any other courts in the kingdom. England and Wales were mapped out into 59 circuits (not including the city of London), with power for the crown, by order in council, to abolish any circuit and rearrange the areas comprised in the circuits (sec. 4). There is one judge to each circuit, but the lord chancellor is empowered to appoint two judges in a circuit, provided that the total number of judges does not exceed 60. The salary of a county court judge was originally fixed at £1200, but he now receives £1500. He must at the time of his appointment be a barrister-at-law of at least seven years' standing, and not more than sixty years of age; after appointment he cannot sit as a member of parliament or practise at the bar.

Every circuit (except in Birmingham, Clerkenwell, and Westminster) is divided into districts, in each of which there is a court, with a registrar and bailiffs. The judges are directed to attend and hold a court in each district at least once in every month, unless the lord chancellor shall otherwise direct (secs. 10, 11). But in practice the judge sits several times a month in the

large centres of population, and less frequently than once a month in the court town of sparsely inhabited districts. By sec. 185 of the act of 1888 the judges and officers of the city of London court have the like jurisdiction, powers, and authority as those of a county court, and the county court rules apply to that court.

The ordinary jurisdiction of the county courts may be thus tabulated:—

Subject matter.	Pecuniary limit of jurisdiction.
Common-law actions, with written consent of both parties	Unlimited.
Actions founded on contract (except for breach of promise of marriage, in which the county courts have no jurisdiction)	£100.
Actions founded on tort (except libel, slander, and seduction, in which the county courts have no jurisdiction)	£100.
Counter claims (unless plaintiff gives written notice of objection)	Unlimited.
Ejectment or questions of title to reality	£100 annual value.
Equity jurisdiction	£500.
Probate jurisdiction	£200 personalty and £300 realty.
Admiralty jurisdiction	£300.
Bankruptcy jurisdiction	Unlimited.
Replevin	Unlimited.
Interpleader transferred from High Court	£500.
Actions in contract transferred from High Court	£100.
Actions in tort transferred from High Court	Unlimited.

Companies (winding up), when the paid-up capital does not exceed	£10,000.

There is no discoverable principle upon which these limits of the jurisdiction of the county courts have been determined. But the above table is not by any means an exhaustive statement of the jurisdiction of the county courts. For many years it has been the practice of parliament to throw on the county court judges the duty of acting as judges or arbitrators for the purpose of new legislation relating to social subjects. It is impossible to classify the many statutes which have been passed since 1846 and which confer some jurisdiction, apart from that under the County Courts Act, on county courts or their judges. Some of these acts impose exceptional duties on the judges of the county courts, others confer unlimited jurisdiction concurrently with the High Court or some other court, others, again, confer limited or, sometimes, exclusive jurisdiction. A list of all the acts will be found in the *Annual County Courts Practice*. A county court judge may determine all matters of fact as well as law, but a jury may be summoned at the option of either plaintiff or defendant when the amount in dispute exceeds £5, and in actions under £5 the judge may in his discretion, on application of either of the parties, order that the action be tried by jury. The number of jurymen impanelled and sworn at the trial was, by the County Courts Act 1903, increased from five to eight.

There is an appeal from the county courts on matters of law to a divisional court of the High Court, *i.e.* to the admiralty division in admiralty cases and to the king's bench division in other cases (sec. 120 of act of 1888). The determination of the divisional court is final, unless leave be given by that court or the court of appeal (Judicature Acts 1894). (See further APPEAL.) In proceedings under the Workmen's Compensation Act the appeal from a county court judge is to the court of appeal, with a subsequent appeal to the House of Lords. In 1908 a Committee was appointed by the lord chancellor "to inquire into certain matters of county

court procedure." The committee presented a report in 1909 (H.C. 71), recommending the extension of existing county court jurisdiction, but a bill introduced to give effect to the recommendations was not proceeded with.

See *Annual County Courts Practice*, also "Fifty Years of the English County Courts," by County Court Judge Sir T. W. Snagge, in *Nineteenth Century*, October 1897.

COUPÉ (French for "cut off"), a small closed carriage of the brougham type, with four wheels and seats for two persons; the term is also used of the front compartment on a *diligence* or mail-coach on the continent of Europe, and of a compartment in a railway carriage with seats on one side only.

COUPLET, a pair of lines of verse, which are welded together by an identity of rhyme. The *New English Dict.* derives the use of the word from the French *couplet*, signifying two pieces of iron riveted or hinged together. In rhymed verse two lines which complete a meaning in themselves are particularly known as a couplet. Thus, in Pope's *Eloisa to Abelard*:—

"Speed the soft intercourse from soul to soul,
And waft a sigh from Indus to the Pole."

In much of old English dramatic literature, when the mass of the composition is in blank verse or even in prose, particular emphasis is given by closing the scene in a couplet. Thus, in the last act of Beaumont and Fletcher's *Thierry and Theodoret* the action culminates in an unexpected rhyme:—

"And now lead on; they that shall read this story
Shall find that virtue lives in good, not glory."

In French literature, the term couplet is not confined to a pair of lines, but is commonly used for a stanza. A "square" couplet, in French, for instance, is a strophe of eight lines, each composed of eight syllables. In this sense it is employed to distinguish the more emphatic parts of a species of verse which is essentially gay, graceful and frivolous, such as the songs in a vaudeville or a comic opera. In the 18th century, Le Sage, Piron and even Voltaire did not hesitate to engage their talents on the production of couplets, which were often witty, if they had no other merit, and were well fitted to catch the popular ear. This signification of the word *couplet* is not unknown in England, but it is not customary; it is probably used in a stricter and a more technical sense to describe a pair of rhymed lines, whether serious or merry. The normal type, as it may almost be called, of English versification is the metre of ten-syllabled rhymed lines designated as *heroic couplet*. This form of iambic verse, with five beats to each line, is believed to have been invented by Chaucer, who employs it first in the Prologue *The Legend of Good Women* the composition of which is attributed to the year 1385. That poem opens with the couplet:—

"A thousand times have I heard man tell
That there is joy in heaven and pain in hell."

This is an absolutely correct example of the heroic couplet, which ultimately reached such majesty in the hands of Dryden and such brilliancy in those of Pope. It has been considered proper for didactic, descriptive and satirical poetry, although in the course of the 19th century blank verse largely took its place. Epigram often selects the couplet as the vehicle of its sharpened arrows, as in Sir John Harington's

"Treason doth never prosper: what's the reason?
Why, if it prosper, none dare call it treason."

(E. G.)

COUPON (from Fr. *couper*, to cut), a certificate entitling its owner to some payment, share or other benefit; more specifically, one of a series of interest certificates or dividend warrants attached to a bond running for a number of years. The word coupon (a piece cut off) possesses an etymological meaning so comprehensive that, while on the Stock Exchange it is only used to denote such an interest certificate or a certificate of stock of a joint-stock company, it may be as suitably, and elsewhere is perhaps more frequently, applied to tickets sold by tourist agencies and others. The coupons by means of which the interest on a bond or debenture is collected are generally printed at the side or foot of that document, to be cut off and presented for payment at the bank or agency named on them as they become due. The last portion, called a "talon," is a form of certificate, and entitles the holder, when all the coupons have been presented, to obtain a fresh coupon sheet. They pass by delivery, and are as a rule exempt from stamp duty. Coupons for the payment of dividends are also attached to the

share warrants to bearer issued by some joint-stock companies. The coupons on the bonds of most of the principal foreign loans are payable in London in sterling as well as abroad.

COURANTE (a French word derived from *courir*, to run), a dance in 3-2 time march in vogue in France in the 17th century (see DANCE). It is also a musical term for a movement or independent piece based on the dance. In a *suite* it followed the Allemande (*q.v.*), with which it is contrasted in rhythm.

COURAYER, PIERRE FRANÇOIS LE (1681-1776), French Roman Catholic theological writer, was born at Rouen on the 17th of November 1681. While canon regular and librarian of the abbey of St Geneviève at Paris, he conducted a correspondence with Archbishop Wake on the subject of episcopal succession in England, which supplied him with material for his work, *Dissertation sur la validité des ordinations des Anglais et sur la succession des évêques de l'Église anglicane, avec les preuves justificatives des faits avancés* (Brussels, 1723; Eng. trans. by D. Williams, London, 1725; reprinted Oxford, 1844, with memoir of the author), an attempt to prove that there has been no break in the line of ordination from the apostles to the English clergy. His opinions exposed him to a prosecution,

and with the help of Bishop Atterbury, then in exile in Paris, he took refuge in England, where he was presented by the university of Oxford with a doctor's degree. In 1736 he published a French translation of Paolo Sarpi's *History of the Council of Trent*, and dedicated it to Queen Caroline, from whom he received a pension of £200 a year. Besides this he translated Sleidan's *History of the Reformation*, and wrote several theological works. He died in London on the 17th of October 1776, and was buried in the cloisters of Westminster Abbey. In his will, dated two years before his death, he declared himself still a member of the Roman Catholic Church, although dissenting from many of its opinions.

COURBET, GUSTAVE (1819-1877), French painter, was born at Ornans (Doubs) on the 10th of June 1819. He went to Paris in 1839, and worked at the studio of Steuben and Hesse; but his independent spirit did not allow him to remain there long, as he preferred to work out his own way by the study of Spanish, Flemish and French painters. His first works, an "Odalisque," suggested by Victor Hugo, and a "Lélia," illustrating George Sand, were literary subjects; but these he soon abandoned for the study of real life. Among other works he painted his own portrait with his dog, and "The Man with a Pipe," both of which were rejected by the jury of the Salon; but the younger school of critics, the neo-romantics and realists, loudly sang the praises of Courbet, who by 1849 began to be famous, producing such pictures as "After Dinner at Ornans" and "The Valley of the Loire." The Salon of 1850 found him triumphant with the "Burial at Ornans," the "Stone-Breakers" and the "Peasants of Flazey." His style still

gained in individuality, as in “Village Damsels” (1852), the “Wrestlers,” “Bathers,” and “A Girl Spinning” (1852). Though Courbet’s realistic work is not devoid of importance, it is as a landscape and sea painter that he will be most honoured by posterity. Sometimes, it must be owned, his realism is rather coarse and brutal, but when he paints the forests of Franche-Comté, the “Stag-Fight,” “The Wave,” or the “Haunt of the Does,” he is inimitable. When Courbet had made a name as an artist he grew ambitious of other glory; he tried to promote democratic and social science, and under the Empire he wrote essays and dissertations. His refusal of the cross of the Legion of Honour, offered to him by Napoleon III., made him immensely popular, and in 1871 he was elected, under the Commune, to the chamber. Thus it happened that he was responsible for the destruction of the Vendôme column. A council of war, before which he was tried, condemned him to pay the cost of restoring the column, 300,000 francs (£12,000). To escape the necessity of working to the end of his days at the orders of the State in order to pay this sum, Courbet went to Switzerland in 1873, and died at La Tour du Peilz, on the 31st of December 1877, of a disease of the liver aggravated by intemperance. An exhibition of his works was held in 1882 at the École des Beaux-Arts.

See Champfleury, *Les Grandes Figures d’hier et d’aujourd’ hui* (Paris, 1861); Mantz, “G. Courbet,” *Gaz. des beaux-arts* (Paris, 1878); Zola, *Mes Haines* (Paris, 1879); C. Lemonnier, *Les Peintres de la Vie* (Paris, 1888).

(H. Fr.)

COURBEVOIE, a town of northern France, in the department of Seine, 5 m. W.N.W. of Paris on the railway to Versailles. Pop. (1906) 29,339. It is a residential suburb of Paris, and has a fine avenue opening on the Neuilly bridge, and forming with it a continuation of the Champs Elysées. It carries on bleaching and the manufacture of carriage bodies, awnings, drugs, biscuits, &c.

COURCELLE-SENEUIL, JEAN GUSTAVE (1813-1892), French economist, was born at Seneuil (Dordogne) on the 22nd of December 1813. Seneuil was an additional name adopted from his native place. Devoting himself at first to the study of the law, he was called to the French bar in 1835. Soon after, however, he returned to Dordogne and settled down as a manager of ironworks. He found leisure to study economic and political questions, and was a frequent contributor to the republican papers. On the establishment of the second republic in 1848 he became director of the public domains. After the *coup d'état* of Napoleon III. in 1851 he went to South America, and held the professorship of political economy at the National Institute of Santiago, in Chile, from 1853 to 1863, when he returned to France. In 1879 he was made a councillor of state, and in 1882 was elected a member of the *Académie des sciences morales et politiques*. He died at Paris on the 29th of June 1892. Courcelle-Seneuil, as an economist, was strongly inclined towards the liberal school, and was equally partial to the historical and experimental methods; but his best energies were directed to applied economy and social questions. His principal work is *Traité théorique et pratique d'économie politique* (2 vols.,

1858); among his others may be mentioned *Traité théorique et pratique des opérations de banque* (1853); *Études sur la science sociale* (1862); *La Banque libre* (1867); *Liberté et socialisme* (1868); *Protection et libre échange* (1879); he also translated into French John Stuart Mill's *Principles*.

COURCI, JOHN DE (d. 1219?), Anglo-Norman conqueror of Ulster, was a member of a celebrated Norman family of Oxfordshire and Somersetshire, whose parentage is unknown, and around whose career a mass of legend has grown up. It would appear that he accompanied William Fitz-Aldelm to Ireland when the latter, after the death of Strongbow, was sent thither by Henry II., and that he immediately headed an expedition from Dublin to Ulster, where he took Downpatrick, the capital of the northern kingdom. After some years of desultory fighting de Courci established his power over that part of Ulster comprised in the modern counties of Antrim and Down, throughout which he built a number of castles, where his vassals, known as "the barons of Ulster," held sway over the native tribes. After the accession of Richard I., de Courci in conjunction with William de Lacy appears in some way to have offended the king by his proceedings in Ireland. De Lacy quickly made his peace with Richard, while de Courci defied him; and the subsequent history of the latter consisted mainly in the vicissitudes of a lasting feud with the de Lacys. In 1204 Hugh de Lacy utterly defeated de Courci in battle, and took him prisoner. De Courci, however, soon obtained his liberty, probably by giving hostages as security for a promise of submission which he failed to carry

out, seeking an asylum instead with the O'Neills of Tyrone. He again appeared in arms on hearing that Hugh de Lacy had obtained a grant of Ulster with the title of earl; and in alliance with the king of Man he ravaged the territory of Down; but was completely routed by Walter de Lacy, and disappeared from the scene till 1207, when he obtained permission to return to England. In 1210 he was in favour with King John, from whom he received a pension, and whom he accompanied to Ireland. There is some indication of his having sided with John in his struggle with the barons; but of the later history of de Courci little is known. He probably died in the summer of 1219. Both de Courci and his wife Affreca were benefactors of the church, and founded several abbeys and priories in Ulster.

A story is told that de Courci when imprisoned in the Tower volunteered to act as champion for King John in single combat against a knight representing Philip Augustus of France; that when he appeared in the lists his French opponent fled in panic; whereupon de Courci, to gratify the French king's desire to witness his prowess, "cleft a massive helmet in twain at a single blow," a feat for which he was rewarded by a grant of the privilege for himself and his heirs to remain covered in the presence of the king and all future sovereigns of England. This tale, which still finds a place in Burke's *Peerage* in the account of the baron Kingsale, a descendant of the de Courci family, is a legend without historic foundation which did not obtain currency till centuries after John de Courci's death. The statement that he was created earl of Ulster, and that he was thus "the first Englishman dignified with an Irish title of honour," is equally devoid of foundation. John de Courci left no legitimate children.

See J. H. Round's art. "Courci, John de," in *Dictionary of National Biography*, vol. xii. (London, 1887), to which is added a bibliography of the original and later authorities for the life of de Courci.

COURIER, PAUL LOUIS (1773-1825), French Hellenist and political writer, was born in Paris on the 4th of January 1773. Brought up on his father's estate of Méré in Touraine, he conceived a bitter aversion for the nobility, which seemed to strengthen with time. He would never take the name "de Méré," to which he was entitled, lest he should be thought a nobleman. At the age of fifteen he was sent to Paris to complete his education; his father's teaching had already inspired him with a passionate devotion to Greek literature, and although he showed considerable mathematical ability, he continued to devote all his leisure to the classics. He entered the school of artillery at Châlons, however, and immediately on receiving his appointment as sub-lieutenant in September 1793 he joined the army of the Rhine. He served in various campaigns of the Revolutionary wars, especially in those of Italy in 1798-99 and 1806-7, and in the German campaign of 1809. He became *chef d'escadron* in 1803.

He made his first appearance as an author in 1802, when he contributed to the *Magasin encyclopédique* a critique on Johannes Schweighäuser's edition of Athenaeus. In the following year appeared his *Éloge d'Hélène*, a free imitation rather than a translation from Isocrates, which he had sketched in 1798. Courier had given up his commission in the autumn of 1808, but the general enthusiasm in Paris over the preparations for the new campaign affected him, and he attached himself to the staff of a general of artillery. But he was horror-struck by the carnage at Wagram (1809), refusing from that time to believe that there was any art in war. He hastily quitted Vienna, escaping the formal charge of desertion because his new appointment had not been confirmed. The savage independence of his nature rendered subordination intolerable to him; he had been three times disgraced for absenting himself without leave, and his superiors resented his satirical humour. After leaving the army he went to Florence, and was fortunate enough to discover in the Laurentian Library a complete manuscript of Longus's *Daphnis and Chloe*, an edition of which he

published in 1810. In consequence of a misadventure—blotting the manuscript—he was involved in a quarrel with the librarian, and was compelled by the government to leave Tuscany. He retired to his estate at Véretz (Indre-et-Loire), but frequently visited Paris, and divided his attention between literature and his farm.

After the second restoration of the Bourbons the career of Courier as political pamphleteer began. He had before this time waged war against local wrongs in his own district, and had been the adviser and helpful friend of his neighbours. He now made himself by his letters and pamphlets one of the most dreaded opponents of the government of the Restoration. The first of these was his *Pétition aux deux chambres* (1816), exposing the sufferings of the peasantry under the royalist reaction. In 1817 he was a candidate for a vacant seat in the Institute; and failing, he took his revenge by publishing a bitter *Lettre à Messieurs de l'Académie des Inscriptions et Belles-Lettres* (1819). This was followed (1819-1820) by a series of political letters of extraordinary power published in *Le Censeur Européen*. He advocated a liberal monarchy, at the head of which he doubtless wished to see Louis Philippe. The proposal, in 1821, to purchase the estate of Chambord for the duke of Bordeaux called forth from Courier the *Simple Discours de Paul Louis, vigneron de la Chavonnière*, one of his best pieces. For this he was tried and condemned to suffer a short imprisonment and to pay a fine. Before he went to prison he published a *compte rendu* of his trial, which had a still larger circulation than the Discours itself. In 1823 appeared the *Livret de Paul Louis*, the *Gazette de village*, followed in 1824 by his famous *Pamphlet des pamphlets*, called by his biographer, Armand Carrel, his swan-song. Courier published in 1807 his translation from Xenophon, *Du commandement de la cavalerie et de l'équitation*, and had a share in editing the *Collections des romans grecs*. He also projected a translation of Herodotus, and published a specimen, in which he attempted to imitate archaic French; but he did not live to carry out this plan. In the autumn of

1825, on a Sunday afternoon (August 18th), Courier was found shot in a wood near his house. The murderers, who were servants of his own, remained undiscovered for five years.

The writings of Courier, dealing with the facts and events of his own time, are valuable sources of information as to the condition of France before, during, and after the Revolution. Sainte-Beuve finds in Courier's own words, "peu de matière et beaucoup d'art," the secret and device of his talent, which gives his writings a value independent of the somewhat ephemeral subject-matter.

A *Collection complète des pamphlets politiques et opuscules littéraires de P. L. Courier* appeared in 1826. See editions of his *Œuvres* (1848), with an admirable biography by Armand Carrel, which is reproduced in a later edition, with a supplementary criticism by F. Sarcey (1876-1877); also three notices by Sainte-Beuve in the *Causeries du lundi* and the *Nouveaux Lundis*.

COURIER (from the O. Fr. *courier*, modern *courrier*, from Lat. *currere*, to run), properly a running messenger, who carried despatches and letters; a system of couriers, mounted or on foot, formed the beginnings of the modern post-office (see POST, and POSTAL SERVICE). The despatches which pass between the foreign office and its representatives abroad, and which cannot be entrusted to the postal service or the telegraph, are carried by special couriers, styled, in the British service, King's Messengers. "Courier," more particularly, is applied to a travelling attendant, whose

duties are to arrange for the carrying of the luggage, obtaining of passports, settling of hotel accommodation, and generally to look to the comfort and facility of travel. The name "courier" and the similar word "*courant*" (Ital. *coranto*) have often been used as the title of a newspaper or periodical (see NEWSPAPERS); the *Courier*, founded in 1792, was for some time the leading London journal.

COURLAND, or KURLAND, one of the Baltic provinces of Russia, lying between 55° 45′ and 57° 45′ N. and 21° and 27° E. It is bounded on the N.E. by the river Dvina, separating it from the governments of Vitebsk and Livonia, N. by the Gulf of Riga, W. by the Baltic, and S. by the province of East Prussia and the Russian government of Kovno. The area is 10,535 sq. m., of which 101 sq. m. are occupied by lakes. The surface is generally low and undulating, and the coast-lands flat and marshy. The interior is characterized by wooded dunes, covered with pine, fir, birch and oak, with swamps and lakes, and fertile patches between. The surface nowhere rises more than 700 ft. above sea-level. The Mitau plain divides it into two parts, of which the western is fertile and thickly inhabited, except in the north, while the eastern is less fertile and thinly inhabited. One-third of the area is still forest.

Courland is drained by nearly one hundred rivers, of which only three, the Dvina, the Aa and the Windau, are navigable. They all flow north-westwards and discharge into the Baltic Sea. Owing to the numerous lakes and marshes, the climate is damp and often foggy, as well as changeable, and the winter is severe. Agriculture is the chief occupation, the principal

crops being rye, barley, oats, wheat, flax and potatoes. The land is mostly owned by nobles of German descent. In 1863 laws were issued to enable the Letts, who form the bulk of the population, to acquire the farms which they held, and special banks were founded to help them. By this means some 12,000 farms were bought by their occupants; but the great mass of the population are still landless, and live as hired labourers, occupying a low position in the social scale. On the large estates agriculture is conducted with skill and scientific knowledge. Fruit grows well. Excellent breeds of cattle, sheep and pigs are kept. Libau and Mitau are the principal industrial centres, with iron-works, agricultural machinery works, tanneries, glass and soap works. Flax spinning is mostly a domestic industry. Iron and limestone are the chief minerals; a little amber is found on the coast. The only seaports are Libau, Windau and Polangen, there being none on the Courland coast of the Gulf of Riga. The population was 619,154 in 1870; 674,437 in 1897, of whom 345,756 were women; 714,200 (estimate) in 1906. Of the whole, 79% are Letts, 8¼% Germans, 1.7% Russians, and 1% each Poles and Lithuanians. In addition there are about 8% Jews and some Lives. The chief towns of the ten districts are Mitau (Doblenskiy district), capital of the government (pop. 35,011 in 1897), Bauske (6543), Friedrichstadt (5223), Goldingen (9733), Grobin (1489), Hasenpoth (3338), Illuxt (2340), Talsen (6215), Tuckum (7542) and Windau (7132). The prevailing religion is the Lutheran, to which 76% of the population belong; the rest belong to the Orthodox Eastern and the Roman Catholic churches.

Anciently Courland was inhabited by the Cours or Kurs, a Lettish tribe, who were subdued and converted to Christianity by the Brethren of the Sword, a German military order, in the first quarter of the 13th century. In 1237 it passed under the rule of the Teutonic Knights owing to the amalgamation of this order with that of the Brethren of the Sword. At that time it comprised the two duchies of Courland and Semgallen. Under the increasing pressure of Russia (Muscovy) the Teutonic Knights in 1561

found it expedient to put themselves under the suzerainty of Poland, the grandmaster Gotthard Kettler (d. 1587) becoming the first duke of Courland. The duchy suffered severely in the Russo-Swedish wars of 1700-9. But by the marriage in 1710 of Kettler's descendant, Duke Frederick William (d. 1711), to the princess Anne, niece of Peter the Great and afterwards empress of Russia, Courland came into close relation with the latter state Anne being duchess of Courland from 1711 to 1730. The celebrated Marshal Saxe was elected duke in 1726, but only managed to maintain himself by force of arms till the next year. The last Kettler, William, titular duke of Courland, died in 1737, and the empress Anne now bestowed the dignity on her favourite Biren, who held it from 1737 to 1740 and again from 1763 till his death in 1772. During nearly the whole of the 18th century Courland, devastated by continual wars, was a shuttlecock between Russia and Poland; until eventually in 1795 the assembly of the nobles placed it under the Russian sceptre. The Baltic provinces—Esthonia, Livonia and Courland—ceased to form collectively one general government in 1876.

See H. Hollmann, *Kurlands Agrarverhältnisse* (Riga, 1893), and E. Seraphim, *Geschichte Liv-, Esth-, und Kurlands* (2 vols., Reval, 1895-1896).

COURNOT, ANTOINE AUGUSTIN (1801-1877), French economist and mathematician, was born at Gray (Haute-Saône) on the 28th of August 1801. Trained for the scholastic profession, he was appointed assistant professor at the Academy of Paris in 1831, professor of mathematics at

Lyons in 1834, rector of the Academy of Grenoble in 1835, inspector-general of studies in 1838, rector of the Academy of Dijon and honorary inspector-general in 1854, retiring in 1862. He died in Paris on the 31st of March 1877. Cournot was the first who, with a competent knowledge of both subjects, endeavoured to apply mathematics to the treatment of economic questions. His *Recherches sur les principes mathématiques de la théorie des richesses* (English trans. by N. T. Bacon, with bibliography of mathematics of economics by Irving Fisher, 1897) was published in 1838. He mentions in it only one previous enterprise of the same kind (though there had in fact been others)—that, namely, of Nicholas François Canard (c. 1750-1833), whose book, *Principes d'économie politique* (Paris, 1802), was crowned by the French Academy, though "its principles were radically false as well as erroneously applied." Notwithstanding Cournot's just reputation as a writer on mathematics, the *Recherches* made little impression. The truth seems to be that his results are in some cases of little importance, in others of questionable correctness, and that, in the abstractions to which he has recourse in order to facilitate his calculations, an essential part of the real conditions of the problem is sometimes omitted. His pages abound in symbols representing unknown functions, the form of the function being left to be ascertained by observation of facts, which he does not regard as a part of his task, or only some known properties of the undetermined function being used as bases for deduction. In his *Principes de la théorie des richesses* (1863) he abandoned the mathematical method, though advocating the use of mathematical symbols in economic discussions, as being of service in facilitating exposition. Other works of Cournot's were *Traité élémentaire de la théorie des fonctions et du calcul infinitésimal* (1841); *Exposition de la théorie des chances et des probabilités* (1843); *De l'origine et des limites de la correspondance entre l'algèbre et la géométrie* (1847); *Traité de l'enchaînement des idées*

fondamentales dans les sciences et dans l'histoire (1861); and *Revue sommaire des doctrines économiques* (1877).

COURSING (from Lat. *cursus*, *currere*, to run), the hunting of game by dogs solely by sight and not by scent. From time to time the sport has been pursued by various nations against various animals, but the recognized method has generally been the coursing of the hare by greyhounds. Such sport is of great antiquity, and is fully described by Arrian in his *Cynegeticus* about A.D. 150, when the leading features appear to have been much the same as in the present day. Other Greek and Latin authors refer to the sport; but during the middle ages it was but little heard of. Apart from private coursing for the sake of filling the pot with game, public coursing has become an exhilarating sport. The private sportsman seldom possesses good strains of blood to breed his greyhounds from or has such opportunities of trying them as the public courser.

The first known set of rules in England for determining the merits of a course were drawn up by Thomas, duke of Norfolk, in Queen Elizabeth's reign; but no open trials were heard of until half a century later, in the time of Charles I. The oldest regular coursing club of which any record exists is that of Swaffham, in Norfolk, which was founded by Lord Orford in 1766; and in 1780 the Ashdown Park (Berkshire) meeting was established. During the next seventy years many other large and influential societies sprang up throughout England and Scotland, the Altcar Club (on the Sefton estates, near Liverpool) being founded in 1825. The season lasts about six months, beginning in the middle of September. It was not until 1858 that a coursing

parliament, so to speak, was formed, and a universally accepted code of rules drawn up. In that year the National Coursing Club was founded. It is composed of representatives from all clubs in the United Kingdom of more than a year's standing, and possessing more than twenty-four members. Their rules govern meetings, and their committee adjudicate on matters of dispute. A comparative trial of two dogs, and not the capture of the game pursued, is the great distinctive trait of modern coursing. A greyhound stud-book was started in 1882.

The breeding and training of a successful kennel is a precarious matter; and the most unaccountable ups and downs of fortune often occur in a courser's career. At a meeting an agreed-on even number of entries are made for each stake, and the ties drawn by lot. After the first round the winner of the first tie is opposed to the winner of the second, and so on until the last two dogs left in compete for victory; but the same owner's greyhounds are "guarded" as far as it is possible to do so. A staff of beaters drive the hares out of their coverts or other hiding-places, whilst the slipper has the pair of dogs in hand, and slips them simultaneously by an arrangement of nooses, when they have both sighted a hare promising a good course. The judge accompanies on horseback, and the six points whereby he decides a course are—(1) speed; (2) the go-by, or when a greyhound starts a clear length behind his opponent, passes him in the straight run, and gets a clear length in front; (3) the turn, where the hare turns at not less than a right angle; (4) the wrench, where the hare turns at less than a right angle; (5) the kill; (6) the trip, or unsuccessful effort to kill. He may return a "no course" as his verdict if the dogs have not been fairly tried together, or an "undecided course" if he considers their merits equal. The open Waterloo meeting, held at Altcar every spring,—the name being taken from its being originated by the proprietor of the Waterloo Hotel, Liverpool,—is now the recognized fixture for the decision of the coursing championship, and the Waterloo Cup (1836) is the "Blue Riband" of the

leash. In the United States, several British colonies, and other countries, the name has been adopted, and Waterloo Coursing Cups are found there as in England. In America an American Coursing Board controls the sport, the chief meetings being in North and South Dakota, Kansas, Nebraska, Iowa and Minnesota.

The chief works on coursing are:—Arrian's *Cynegeticus*, translated by the Rev. W. Dansey (1831); T. Thacker, *Courser's Companion and Breeder's Guide* (1835); Thacker's *Courser's Annual Remembrancer* (1849-1851); D. P. Blaine, *Encyclopaedia of Rural Sports* (3rd ed., 1870); and J. H. Walsh, *The Greyhound* (3rd ed., 1875). See also the *Coursing Calendar* (since 1857); *Coursing and Falconry* (Badminton Library, 1892); *The Hare* ("Fur and Feather" series, 1896); and *The Greyhound Stud Book* (since 1882).

COURT, ANTOINE (1696-1760), French Protestant divine, was born in the village of Villeneuve-de-Berg, in the province of the Vivarais. He has been designated the "Restorer of Protestantism in France," and was the organizer of the "Church of the Desert." He was eight years old when the Camisard revolt was finally suppressed, and nineteen when on the 8th of March 1715 the edict of Louis XIV. was published, declaring that "he had abolished entirely the exercise of the so-called reformed religion" ("qu'il avait aboli tout exercice de la religion prétendue réformée"). Antoine, taken to the secret meetings of the persecuted Calvinists, began, when only seventeen, to speak and exhort in these congregations of "the desert." He came to suspect after a time that many of the so-called "inspired" persons

were “dupes of their own zeal and credulity,” and decided that it was necessary to organize at once the small communities of believers into properly constituted churches. To the execution of this vast undertaking he devoted his life. On the 21st of August 1715 he summoned all the preachers in the Cévennes and Lower Languedoc to a conference or synod near the village of Monoblet. Here elders were appointed, and the preaching of women, as well as pretended revelations, was condemned. The village of Monoblet “thus seems entitled to the honour of having had the first organized Protestant church after the revocation of the edict of Nantes” (H. M. Baird). But there were as yet no ordained pastors. Pierre Corteiz was therefore sent to seek ordination. He was ordained at Zürich, and from him Court himself received ordination. The scene of his labours for fifteen years was Languedoc, the Vivarais, and Dauphiné. His beginnings were very small prayer-meetings in “the desert.” But the work progressed under his wise direction, and he was able “to be present, in 1744, at meetings of ten thousand souls.” In 1724 Louis XV., again assuming that there were no Protestants in France, prohibited the most secret exercise of the Reformed religion, and imposed severe penalties. It was impossible fully to carry out this menace. But persecution raged, especially against the pastors. A price was set on the life of Court; and in 1730 he escaped to Lausanne. He had already, with the aid of some of the Protestant princes, established a theological college (“Seminaire de Lausanne”) there, and during the remaining thirty years of his life he filled the post of director. He had the title of deputy-general of the churches, and was really the pillar of their hope. The Seminary of Lausanne sent forth all the pastors of the Reformed Church of France till the days of the first French Empire. Court formed the design of writing a history of Protestantism, and made large collections for the purpose, which have been preserved in the Public Library of Geneva; but this he did not live to carry out. He died at Lausanne in 1760. He wrote, amongst other works, a *Histoire des troubles des Cévennes ou de la guerre*

des Camisards (1760). He was the father of the more generally known Antoine Court de Gebelin (*q.v.*).

For details of his life see Napoléon Peyrat's *Histoire des pasteurs du désert* (1842; English translation, 1852); Edmond Hugues, *Antoine Court, histoire de la restauration du protestantisme en France au XVIIIe siècle* (2nd ed., 1872), *Les Synodes du désert* (3 vols., 1885-1886), *Mémoires d'Antoine Court* (1885); E. and E. Haag, *La France protestante*, vol. iv. (1884, new edition); H. M. Baird, *The Huguenots and the Revocation of the Edict of Nantes* (1895), vol. ii.; cf. *Bulletin de la société de l'histoire du protestantisme français* (1893-1906).

COURT (from the O. Fr. *court*, Late Lat. *cortis*, *curtis*, a popular form of class. Lat. *cohors*, gen. *cohortis*; the mod. Fr. form *cour* is due to the influence of the Lat. *curia*, the word used in medieval documents to translate "court" in the feudal sense), a word originally denoting an enclosed place, and so surviving in its architectural sense (courtyard, &c.), but chiefly used as a general term for judicial tribunals and in the special sense of the household of the king, called "the court."[1] All law courts were not, however, purely judicial in character; the old county court, for instance, was the assembly of the freeholders of the county in which representatives and certain officers were elected. Such assemblies in early times exercised political and legislative as well as judicial functions. But these have now been almost entirely separated everywhere, and only judicial bodies are now usually called courts. In every court, says Blackstone, there must be three parts,—an *actor* or plaintiff, *reus* or defendant, and *judex*, or judge.

The language of legal fictions, which English lawyers invariably use in all constitutional subjects, makes the king the ultimate source of all judicial authority, and assumes his personal presence in all the courts.

> "As by our excellent constitution," says Blackstone, "the sole executive power of the laws is vested in the person of the king, it will follow that all courts of justice, which are the medium by which he administers the laws, are derived from the power of the crown. For whether created by act of parliament or letters patent, or subsisting by prescription (the only methods by which any court of judicature can exist), the king's consent in the two former is expressly, in the latter impliedly given. In all these courts the king is supposed in contemplation of law to be always present; but as that is in fact impossible, he is then represented by his judges, whose power is only an emanation of the royal prerogative."

These words might give a false impression of the historical and legal relations of the courts and the crown, if it is not remembered that they are nothing more than the expression of a venerable fiction. The administration of justice was, indeed, one of the functions of the king in early times; the king himself sat on circuit so late as the reign of Edward IV.; and even after regular tribunals were established, a reserve of judicial power still remained in the king and his council, in the exercise of which it was possible for the king to participate personally. The last judicial act of an English king, if such it can be called, was that by which James I. settled the dispute between the court of chancery and courts of common law. Since the establishment of parliamentary government the courts take their law directly from the legislature, and the king is only connected with them indirectly as a member of the legislative body. The king's name, however, is still used in this as in other departments of state action. The courts exercising jurisdiction in

England are divided by certain features which may here be briefly indicated.

We may distinguish between (1) superior and inferior courts. The former are the courts of common law and the court of chancery, now High Court of Justice. The latter are the local or district courts, county courts, &c. (2) Courts of record and courts not of record. "A court of record is one whereof the acts and judicial proceedings are enrolled for a perpetual memory and testimony, which rolls are called the records of the court, and are of such high and supereminent authority that their truth is not to be called in question. For it is a settled rule and maxim that nothing shall be averred against a record, nor shall any plea or even proof be admitted to the contrary. And if the existence of the record shall be denied it shall be tried by nothing but itself; that is, upon bare inspection whether there be any such record or no; else there would be no end of disputes. All courts of record are the courts of the sovereign in right of the crown and royal dignity, and therefore any court of record has authority to fine and imprison for contempt of its authority" (Stephen's *Blackstone*). (3) Courts may also be distinguished as civil or criminal. (4) A further distinction is to be made between courts of first instance and courts of appeal. In the former the first hearing in any judicial proceeding takes place; in the latter the judgment of the first court is brought under review. Of the superior courts, the High Court of Justice in its various divisions is a court of first instance. Over it is the court of appeal, and over that again the House of Lords. The High Court of Justice is (through divisional courts) a court of appeal for inferior courts. (5) There is a special class of local courts, which do not appear to fall within the description of either superior or inferior courts. Some, while administering the ordinary municipal law, have or had jurisdiction exclusive of their superior courts; such were the common pleas of Durham and Lancaster. Others have concurrent jurisdiction with the superior courts;

such are the lord mayor's court of London, the passage court of Liverpool, &c.

The distribution of judicial business among the various courts of law in England may be exhibited as follows.

Criminal Courts.—(1) The lowest is that of the justice of the peace, sitting in petty sessions of two or more, to determine in a summary way certain specified minor offences. In populous districts, such as London, Manchester, &c., stipendiary magistrates are appointed, generally with enlarged powers. Besides punishing by summary conviction, justices may commit prisoners for trial at the assizes. (2) The justices in quarter sessions are commissioned to determine felonies and other offences. An act of 1842 (5 & 6 Vict. c. 38) contains a list of offences *not* triable at quarter sessions —treason, murder, forgery, bigamy, &c. (see QUARTER SESSIONS, COURT OF). The corresponding court in a borough is presided over by a recorder. (3) The more serious offences are reserved for the judges of the superior courts sitting under a commission of oyer and terminer or gaol delivery for each county. The assize courts, as they are called, sit in general in each county twice a year, following the division of circuits; but additional assizes are also held under acts of 1876 and 1877, which permit several counties to be united together for that purpose (see CIRCUIT). London, which occupies an exceptional position in all matters of judicature, has a high criminal court of its own, established by the Central Criminal Court Act 1834, under the name of the central criminal court. Its judges usually present are a rota selected from the superior judges of common law, the recorder, common serjeant, and the judge of the City of London court.[2] The criminal appeal court, to which all persons convicted on indictment may appeal, superseded in 1908 (by the Criminal Appeal Act 1907) the court for crown cases reserved, to which any question of law arising on the trial of a prisoner could after conviction be remitted by the judge in his discretion. To the

criminal appeal court there is an appeal both on questions of fact and of law (see APPEAL).

Civil Courts.—In certain special cases, civil claims of small importance may be brought before justices or stipendiaries. Otherwise, and excepting the special and peculiar jurisdictions above mentioned, the civil business of England and Wales may be said to be divided between the county courts (taking small cases) and the High Court of Justice (taking all others).

The effect of the Judicature Acts on the constitution of the superior courts may be briefly stated. There is now one Supreme Court of Judicature, consisting of two permanent divisions called the High Court of Justice and the court of appeal. The former takes the jurisdiction of the court of chancery, the three common law courts, the courts of admiralty, probate, and divorce, the courts of pleas at Lancaster and Durham, and the courts created by commissions of assize, oyer and terminer, and gaol delivery. The latter takes the jurisdiction of the court of appeal in chancery (including chancery of Lancaster), the court of the lord warden of the stannaries, and of the exchequer chamber, and the appellate jurisdiction in admiralty and heresy matters of the judicial committee; and power is given to the sovereign to transfer the remaining jurisdiction of that court to the court of appeal. By the Appellate Jurisdiction Act of 1876 the House of Lords is enabled to sit for the hearing of appeals from the English court of appeal and the Scottish and Irish courts during the prorogation and dissolution of parliament. The lords of appeal, of whom three must be present, are the lord chancellor, the lords of appeal in ordinary, and peers who have held "high judicial office" in Great Britain or Ireland. The lords in ordinary are an innovation in the constitution of the House. They hold the rank of baron for life only, have a right to sit and vote in the House during tenure of office only, and a salary of £6000 per annum.

There are also many obsolete or decayed courts, of which the most noticeable are dealt with under their individual headings, as COURT BARON, COURT LEET, &c.

The history of English courts affords a remarkable illustration of the continuity that characterizes English institutions. It might perhaps be too much to say that all the courts now sitting in England may be traced back to a common origin, but at any rate the higher courts are all offshoots from the same original judicature. Leaving out of account the local courts, we find the higher jurisdiction after the Norman Conquest concentrated along with all other public functions in the king and council. The first sign of a separation of the judicial from the other powers of this body is found in the recognition of a Curia Regis, which may be described as the king's council, or a portion of it, charged specially with the management of judicial and revenue business. In relation to the revenue it became the exchequer, under which name a separate court grew up whose special field was the judicial business arising out of revenue cases. By Magna Carta the inconvenience caused by the curia following the king's person was remedied, in so far as private litigation was concerned, by the order that common pleas (Communia Placita) should be held at some fixed place; and hence arose the court of common pleas. The Curia Regis, after having thrown off these branches, is represented by the king's bench, so that from the same stock we have now three courts, differing at first in functions, but through competition for business, and the ingenious use of fictions, becoming finally the co-ordinate courts of common law of later history. But an inner circle of counsellors still surrounded the king, and in his name claimed to exercise judicial as well as other power; hence the chancellor's jurisdiction, which became, partly in harmony with the supra-legal power claimed from which it sprang, and partly through the influence of the ecclesiastical chancellors by whom it was first administered, the equity of English law. Similar developments of the same authority were the court of requests

(which was destroyed by a decision of the common pleas) and the court of star chamber—a court of criminal equity, as it has been called,—which, having been made the instrument of tyranny, was abolished in 1641. Even then the productive power of the council was not exhausted; the judicial committee of the privy council, established in 1832, superseding the previous court of delegates, exercises the jurisdiction in appeal belonging to the king in council. The appellate jurisdiction of the Lords rests on their claim to be the representatives of the ancient great council of the realm.

See further ADMIRALTY, HIGH COURT OF; APPEAL; CHANCERY; COMMON LAW; COMMON PLEAS, COURT OF; DIVORCE; EQUITY; &c.

United States.—The Federal judicial system of the United States is made by the Constitution independent both of the Legislature and of the Executive. It consists of the Supreme Court, the circuit courts, and the district courts.

The Supreme Court is created by the Constitution, and consisted in 1909 of nine judges, who are nominated by the President and confirmed by the Senate. They hold office during good behaviour, *i.e.* are removable only by impeachment, thus having a tenure even more secure than that of English judges. The court sits at Washington from October to July in every year. The sessions of the court are held in the Capitol. A rule requiring the presence of six judges to pronounce a decision prevents the division of the court into two or more benches; and while this secures a thorough consideration of every case, it also retards the despatch of business. Every case is discussed twice by the whole body, once to ascertain the view of the majority, which is then directed to be set forth in a written opinion; then again, when the written opinion, prepared by one of the judges, is submitted for criticism and adoption by the court as its judgment.

The other Federal courts have been created by Congress under a power in the Constitution to establish "inferior courts." The circuit courts consist of twenty-nine circuit judges, acting in nine judicial circuits, while to each circuit there is also allotted one of the justices of the Supreme Court. Circuit courts of appeals, established to relieve the Supreme Court, consist of three judges (two forming a quorum), and are made up of the circuit and district judges of each circuit and the Supreme Court justice assigned to the circuit. Some cases may, however, be appealed to the Supreme Court from the circuit court of appeals, and others directly from the lower courts. The district courts number (1909) ninety, in most cases having a single justice. There is also a special tribunal called the court of claims, which deals with the claims of private persons against the Federal government. It is not strictly a part of the general judicial system, but is a creation of Congress designed to relieve that body of a part of its own labours.

The jurisdiction of the Federal courts extends only to those cases in which the Constitution makes Federal law applicable. All other cases are left to the state courts, from which there is no appeal to the Federal courts, unless where some specific point arises which is affected by the Federal Constitution or a Federal law. The classes of cases dealt with by the Federal courts are as follows:—

1. Cases in law and equity arising under the Constitution, the laws of the United States, and treaties made under their authority;

2. Cases affecting ambassadors, other public ministers and consuls;

3. Cases of admiralty and maritime jurisdiction;

4. Controversies to which the United States shall be a party;

5. Controversies between two or more states, between a state and citizens of another state, between citizens of different states, between citizens of the

same state claiming lands under grants of different states, and between a state or the citizens thereof and foreign states, citizens or subjects (*Const.*, Art. III., § 2). Part of this jurisdiction has, however, been withdrawn by the eleventh Amendment to the Constitution, which declares that "the judicial power of the United States shall not be construed to extend to any suit commenced or prosecuted against one of the United States by citizens of another state, or by citizens or subjects of any foreign state."

The jurisdiction of the Supreme Court is original in cases affecting ambassadors, and wherever a state is a party; in other cases it is appellate. In some matters the jurisdiction of the Federal courts is exclusive; in others it is concurrent with that of the state courts.

As it frequently happens that cases come before state courts in which questions of Federal law arise, a provision has been made whereby due respect for the latter is secured by giving the party to a suit who relies upon Federal law, and whose contention is overruled by a state court, the right of having the suit removed to a Federal court. The Judiciary Act of 1789 (as amended by subsequent legislation) provides for the removal to the Supreme Court of the United States of "a final judgment or decree in any suit rendered in the highest court of a state in which a decision could be had, where is drawn in question the validity of a treaty or statute of, or an authority exercised under the United States, and the decision is against their validity; or where is drawn in question the validity of a statute of, or an authority exercised under, any state, on the ground of their being repugnant to the Constitution, treaties or laws of the United States, and the decision is in favour of their validity; or where any title, right, privilege or immunity is claimed under the Constitution, or any treaty or statute of, or commission held, or authority exercised under the United States, and the decision is against the title, right, privilege or immunity specially set up or claimed by either party under such Constitution, treaty, statute, commission or

authority." If the decision of the state court is in favour of the right claimed under Federal law or against the validity or applicability of the state law set up, there is no ground for removal, because the applicability or authority of Federal law in the particular case could receive no further protection from a Federal court than has in fact been given by the state court.

The power exercised by the Supreme Court in declaring statutes of Congress or of state legislatures (or acts of the Executive) to be invalid because inconsistent with the Federal Constitution, has been deemed by many Europeans a peculiar and striking feature of the American system. There is, however, nothing novel or mysterious about it. As the Federal Constitution, which emanates directly from the people, is the supreme law of the land everywhere, any statute passed by any lower authority (whether the Federal Congress or a state legislature), which contravenes the Constitution, must necessarily be invalid in point of law, just as in the United Kingdom a railway by-law which contravened an act of parliament would be invalid. Now, the functions of judicial tribunals—of all courts alike, whether Federal or state, whether superior or inferior—is to interpret the law, and if any tribunal finds a Congressional statute or state statute inconsistent with the Constitution, the tribunal is obliged to hold such statute invalid. A tribunal does this not because it has any right or power of its own in the matter, but because the people have, in enacting the Constitution as a supreme law, declared that all other laws inconsistent with it are *ipso jure* void. When a tribunal has ascertained that an inferior law is thus inconsistent, that inferior law is therewith, so far as inconsistent, to be deemed void. The tribunal does not enter any conflict with the Legislature or Executive. All it does is to declare that a conflict exists between two laws of different degrees of authority, whence it necessarily follows that the weaker law is extinct. This duty of interpretation belongs to all tribunals, but as constitutional cases are, if originating in a lower court, usually carried by appeal to the Supreme Court, men have grown accustomed to

talk of the Supreme Court as in a special sense the guardian of the Constitution.

The Federal courts never deliver an opinion on any constitutional question unless or until that question is brought before them in the form of a lawsuit. A judgment of the Supreme Court is only a judgment on the particular case before it, and does not prevent a similar question being raised again in another lawsuit, though of course this seldom happens, because it may be assumed that the court will adhere to its former opinion. There have, however, been instances in which the court has virtually changed its view on a constitutional question, and it is understood to be entitled so to do.

---

1 Cf. the German *Hof* for court-yard, court of law, and royal court.

2 The sittings are held in the court-house in the Old Bailey. The old sessions house was destroyed in the Gordon riots of 1780. The building erected in its place, although enlarged from time to time, was very incommodious, and a new structure, occupying the site of Newgate Prison, which was pulled down for the purpose, was completed in 1907.

COURT BARON, an English manorial court dating from the middle ages and still in existence. It was laid down by Coke that a manor had two courts, "the first by the common law, and is called a court baron," the freeholders ("barons") being its suitors; the other a customary court for the copyholders. Stubbs adopted this explanation, but the latest learning, expounded by Professor Maitland, holds that court baron means *curia baronis*, "*la court de seigneur*," and that there is no evidence for there being more than one court. The old view that at least two freeholders were

required for its composition is also now discarded. Prof. Maitland's conclusion is that the "court baron" was not even differentiated from the "court-leet" at the close of the 13th century, but that there was a distinction of jurisdictional rights, some courts having only feudal rights, while others had regalities as well. When the court-leet was differentiated, the court baron remained with feudal rights alone. These rights he was disposed to trace to a lord's jurisdiction over his men rather than to his possession of the manor, although in practice, from an early date, the court was associated with the manor. Its chief business was to administer the "custom of the manor" and to admit fresh tenants who had acquired copyholds by inheritance or purchase, and had to pay, on so doing, a "fine" to the lord of the manor. It is mainly for the latter purpose that the court is now kept. It is normally presided over by the steward of the lord of the manor, who is a lawyer, and its proceedings are recorded on "the court rolls," of which the older ones are now valuable for genealogical as well as for legal purposes.

See *Select Pleas in Manorial and other Seignorial Courts*, vol. i., and *The Court Baron* (Selden Society).

(J. H. R.)

COURT DE GEBELIN, ANTOINE (1728-1784), French scholar, son of Antoine Court (*q.v.*), was born at Nîmes in 1728. He received a good education, and became, like his father, a pastor of the Reformed Church. This office, however, he soon relinquished, to devote himself entirely to literary work. He had conceived the project of a work which should set in a new light the phenomena, especially the languages and mythologies, of the

ancient world; and, after his father's death, he went to Paris in order to be near the necessary books. After long years of research, he published in 1775 the first volume of his vast undertaking under the title of *Le Monde primitif, analysé et comparé avec le monde moderne*. The ninth volume appeared in 1784, leaving the work still unfinished. The literary world marvelled at the encyclopaedic learning displayed by the author, and supposed that the French Academy, or some other society of scholars, must have combined their powers in its production. Now, however, the world has well-nigh forgotten the huge quartos. These learned labours did not prevent Gebelin from pleading earnestly the cause of religious tolerance. In 1760 he published a work entitled *Les Toulousaines*, advocating the rights of the Protestants; and he afterwards established at Paris an agency for collecting information as to their sufferings, and for exciting general interest in their cause. He co-operated with Franklin and others in the periodical work entitled *Affaires de l'Angleterre et de l'Amérique* (1776, sqq.), which was devoted to the support of American independence. He was also a supporter of the principles of the economists, and Quesnay called him his well-beloved disciple. In the last year of his life he became acquainted with Mesmer, and published a *Lettre sur le magnétisme animal*. He was imposed upon by speculators in whom he placed confidence, and was reduced to destitution by the failure of a scheme in which they engaged him. He died at Paris on the 10th of May 1784.

See *La France protestante*, by the brothers Haag, tome iv.; Charles Dardier, *Court de Gebelin* (Nîmes, 1890).

COURTENAY, the name of a famous English family. French genealogists head the pedigree of this family with one Athon or Athos, who is said to have fortified Courtenay in Gâtinois about the year 1010. His son Josselin had, with other issue, Miles, lord of Courtenay, founder of the Cistercian abbey of Fontaine-Jean. By his wife Ermengarde, daughter of Renaud, count of Nevers, Miles left a son Renaud, one of the magnates who followed Louis le Jeune to the Holy Land. This was the last lord of Courtenay of the line of Athon. Elizabeth, his elder daughter—a younger daughter died without issue,—carried Courtenay and other lordships to her husband Pierre, seventh and youngest son of the French king Louis VI. the Fat, the marriage taking place about 1150, and the many descendants of this royal match bore the surname of Courtenay.

Pierre, the eldest son, was founder of a short-lived dynasty of emperors of Constantinople, which ended in 1261 when Baldwin (Baudouin), last of the Frankish emperors, fled before Michael Palaeologus from a capital in flames. Baldwin's son Philip, however, bore the empty title, and his granddaughter Catherine, wife of Charles, count of Valois, was titular empress. Other lines of the royal Courtenays, sprung from Pierre of France, were lords of Champignolles, Tanlai, Yerre, Bleneau, La Ferté Loupière and Chevillon. On the death of Gaspard, sieur de Bleneau, in 1655, his cousin Louis de Courtenay, comte de Cési (*jure uxoris*) and sieur de Chevillon, had Bleneau, and reckoned himself the surviving chief of his house. He styled himself Prince de Courtenay and his family made attempts to obtain recognition for their royal blood. But their laboriously constructed genealogies availed nothing to this impoverished race. The last "Prince de Courtenay," an ex-captain of dragoons, died in 1730; his uncle Roger de Courtenay, abbé des Eschalis, who died in 1733, was the last recognized member of the line of Pierre of France.

A younger branch of the first house of Courtenay came from Josselin, second son of Josselin, son of Athon. This Josselin, a notable crusader, went to the Holy Land with the count of Blois, and held by the sword for eleven years the county of Edessa, given him by his cousin King Baldwin II. Edessa was won back by the infidel from his son Josselin, who died a prisoner in Aleppo in 1147. A grandson, also a Josselin, was seneschal of the kingdom of Jerusalem.

In England a house of Courtenay has flourished with varying fortunes since the reign of the first Angevin king. The monks of Ford, to whom they were benefactors, complacently set down their patrons as the offspring of the royal Courtenays, of whose origin they had some dim knowledge, deriving them from “Florus,” son of Louis the Fat. A comparison of dates destroys the story. But they were, doubtless, Courtenays of the stock of Athon. Josselin, the first count of Edessa, has been suggested by modern writers as their founder, but the name Reinaud, borne by the first known ancestor of the English house, suggests that they may have sprung from a younger son of Josselin I. of Courtenay by his marriage about 1095 with Ermengarde, daughter of Reinaud, count of Nevers. It is also notable that the English Courtenays have, from the first introduction of armorial bearings, borne with various differences the three red roundels in a golden field, the arms of the Courtenays in France, the shield of the earls of Devonshire being identical with that of the lords of La Ferté Loupière.

Several Courtenays whose kinship cannot be exactly ascertained, appear in English records of the 12th century. One of them, Robert de Courtenay, married the daughter and heir of Reynold fitz Urse, the leader of the murderers of Archbishop Thomas Becket. His son, William, a Shropshire baron, held the castle of Montgomery, as heir by his mother of Baldwin de Buslers, or Bollers, to whom Henry I. had given it with his “niece” Sibil de

Falaise. This William married Ada of Dunbar, daughter of Patrick, earl of Dunbar, but died in the reign of King John, without issue.

Reinaud de Courtenay, ancestor of the main English line, may well have been a brother of the Robert above named. The English pedigrees confuse him with his son of the same name. He was a favourite with Henry II., his attestations of charters showing him as a constant companion at home and abroad of the king, whom he followed to Wexford in the Irish expedition of 1172. Henry gave him Berkshire lands at Sutton, still known as Sutton Courtenay, by a charter to which the date of 1161 can be assigned. In England he had to wife Maude, daughter of Robert fitz Roy by Maude of Avranches, the elder Maude being the heir of the house of Brionne. By her, who survived him, dying before January 1224, he had no issue, but by a wife who may have died before his coming to England he had, with other issue, Robert and Reinaud. Robert, who succeeded to Sutton about 1192, was husband of Alice de Rumeli, widow of Gilbert Pipard, and one of the three sisters and co-heirs of William, the boy of Egremond, of whose drowning in the Strid Wordsworth has made a ballad. Robert died childless in 1209. Of his brother Reinaud or Reynold de Courtenay little is known, save that he was a married man in 1178 when he and his wife Hawise were given by the pope a licence to have a free chapel at Okehampton. This wife, Hawise de Ayencourt, was, with Maude his father's second wife, a daughter and co-heir of Maude of Avranches, her father being the lord of Ayencourt, first husband of the last named Maude. Her great inheritance included the honour of Okehampton in Devonshire of which, as a widow, she had livery about 1205. Her son, Robert de Courtenay, succeeded to her land in 1219, having been his uncle Robert's heir in Sutton ten years before. Like his father he advanced his house by a great marriage, his wife being Mary, the younger daughter of William de Vernon, earl of Devon and of the Isle of Wight. He was succeeded in 1242 by his son John, who by Isabel, a daughter of Hugh de Vere, earl of Oxford, has issue Hugh, whose wife was

Eleanor, daughter of the earl of Winchester, elder of the two favourites of Edward II. The son of this marriage, another Hugh, followed his father at Okehampton in 1291. Two years later died Isabel, surviving sister and heir of Baldwin de Reviers, earl of Devon, and widow of William de Forz, last earl of Aumerle (Albemarle). On her death-bed she had granted her lordship of the Wight to the king, but her cousin Hugh de Courtenay succeeded her in the unalienated estates of the house of Reviers. He was summoned as a baron on the 6th of February 1298/9, and in 1300 he displayed his banner before the castle of Caerlaverock. Claiming the "third penny" of the county of Devon, he was refused by the exchequer as he did not claim in the name of an earl. Following, however, a writ of inquiry, a patent of the 22nd of February 1334/5 declared him earl of Devon and qualified to take such style as his ancestors, earls of Devon, were wont to take. Hugh, his son, the second earl, a warrior who drove the French back from their descent on Cornwall in 1339, made another of the brilliant marriages of this family, his wife being Eleanor, daughter of Humfrey de Bohun, earl of Hereford and Essex, by Elizabeth daughter of Edward I. Their eldest son, Sir Hugh de Courtenay, shared in the honours of Crécy and Calais, and was one of the knights founders of the order of the Garter, the stall-plate of his arms being yet in St George's chapel at Windsor. This knight died in the lifetime of the earl, as did his only son Hugh, summoned as a baron on the 3rd of January 1370/1, a companion at Najara of the Black Prince, whose step-daughter Maude of Holland he had married. The earl was therefore succeeded by his grandson Edward (son of Edward his third son), earl marshal of England in 1385, who died blind in 1419, the year after the death of Sir Edward his heir apparent, one of the conquerors at Agincourt. Hugh, a second son of Earl Edward, succeeded as fourth earl of the Courtenay line. By his wife, a sister of the renowned Talbot, earl of Shrewsbury, he had issue Thomas the fifth earl, a partisan of Henry VI., whose wife was Margaret Beaufort, daughter of John, earl of Somerset. The effigy of this grandaughter of John of Gaunt,

with the shields of Courtenay and Beaufort above it, is in Colyton church. It is less than life size, a fact which has given rise to a village legend that it represents “Little choke-a-bone,” an infant daughter of the tenth earl, who died “choked by a fish bone.” In spite of the evidence of the shields and the 15th century dress of the effigy, the legend has now been strengthened by an inscription upon a brass plate, and in the year 1907 ignorance engaged a monumental sculptor to deface the effigy by giving its broken features the newly carved face of a young child. Both sons of this marriage fell in the Wars of the Roses, Thomas the sixth earl being taken at Towton by the Yorkists and beheaded at York in 1462, his younger brother Henry having the same fate at Salisbury in 1466.

The earldom being extinguished by attainder, Sir Humphrey Stafford was created earl of Devon in 1469, but in the same year, having retired with his men from the expedition against Robin of Redesdale, another earl of Devon suffered at the headsman’s hands, his patent being afterwards annulled by a statute of Henry VII. On the restoration of Henry VI. John Courtenay, only surviving brother of Thomas and Henry, was restored to the earldom by the reversal of attainder. He, too, died in the Lancastrian cause, being killed on the 4th of May 1471 at Tewkesbury, where he led the rear of the host. The representation of the Reviers earls and of the Courtenay barony fell then to his sisters and their descendants. Beside him at Tewkesbury died his cousin Sir Hugh Courtenay of Boconnoc, son of Hugh, a younger brother of the blind earl, leaving a son Edward, who thus became the heir male of the house though not its heir general. Joining in the cause which had cost so many of his kinsmen their lives, he and his brother Walter shared the duke of Buckingham’s rising. On its failure they fled into France to the earl of Richmond, beside whom Sir Edward fought at Bosworth. By a patent of the 26th of October 1485 he was created earl of Devon with remainder to the heirs male of his body, and by an act of 1485 he was restored to all honours lost in his attainder by the Yorkist parliament. He defended Exeter against

Warbeck's rebels and was a knight of the Garter in 1489, dying twenty years later, when the earldom became again forfeit by his son's attainder. That son, William Courtenay, had drawn the jealousy of Henry VII. by a marriage with Catherine, sister of the queen and daughter of King Edward IV., the Yorkist sovereign whose hand had been so heavy on the Courtenays. After the queen's death, Henry sent his wife's brother-in-law to the Tower on a charge of corresponding with Edmund Pole, an attainder following. But on the accession of Henry VIII., the young king released his uncle, who although styled an earl was not fully restored in blood at his death in 1511. His son Henry Courtenay obtained from parliament in December 1512 a reversal of his father's attainder, thus succeeding to the earldom of his grandfather. At the Field of Cloth of Gold he ran a course with the king of France. He was knight of the Garter and on the 15th of June 1525 had a patent as marquess of Exeter. Profiting by the suppression of the monasteries he increased his estate, his power being all but supreme in the west country. But Cromwell was his enemy and the royal strain in his blood was a dangerous thing. Involved in correspondence with Cardinal Pole, he was sent to the Tower with his wife and his young son, and on the 9th of December 1538 he was beheaded as a traitor. The misfortunes of the house were heavy upon the son, who at twelve years old was a prisoner for the sake of his high descent. His honours had been forfeited, and release did not come until the accession of Queen Mary, who took him into favour. Noailles the ambassador found him *le plus beau et le plus agréable gentilhomme d'Angleterre*, and he had some hopes of becoming king consort. The queen created him earl of Devonshire by a patent of the 3rd of September 1553 and in the next month he was restored in blood. But, disappointed in his hopes, he formed some wild plans for marrying the Lady Elizabeth and making her queen. He could raise Devon and Cornwall. Wyat did raise Kent, but the plot was soon crushed. The earl was sent back to the Tower and thence to Fotheringhay. At Easter of 1555 he was released

on parole and exiled, dying suddenly at Padua in 1556. His co-heirs were the descendants of the four sisters of Earl Edward (d. 1519), the wives of four Cornish squires, and with him was extinguished, to the belief of all men, the Courtenays' earldom of Devon. His heir male was Sir William Courtenay, his sixth cousin once removed, head of a knightly line of Courtenays whose seat was Powderham Castle, a line which, during the civil wars, stood for the White Rose. Sir William, who is said to have been killed at St Quintin in 1557, was succeeded by his son, another Sir William, one of the undertakers for the settling of Ireland, where the family obtained great estates. William Courtenay of Powderham, of whose marriage with the daughter of Sir William Waller (the parliament's general) it is remarked that the years of bride and bridegroom added together were less than thirty when their first child was born, was created a baronet by writ of privy seal in February 1644, the patent being never enrolled. His great grandson, Sir William Courtenay, many years a member of parliament, was on the 6th of May 1762, ten days before his death, created Viscount Courtenay of Powderham Castle.

Since the death at Padua in 1556 of Edward, earl of Devon, that ancient title had been twice revived. Charles Blount, Lord Mountjoy, who was created earl of Devon in 1603, died without lawful issue in 1606. In 1618 Sir William Cavendish, son of the famous Bess of Hardwick, was given the same title, which is still among the peerage honours of the ducal house descending from him. For the Courtenays, who had without protest accepted a baronetcy and a viscounty, their earldom was dead. In the reign of William IV., the third and last Viscount Courtenay was living unmarried in Paris, an exile who for sufficient reasons was keeping out of the reach of the English criminal law. In the name of this man, his presumptive heir male, William Courtenay, clerk assistant of the parliament, succeeded in persuading the House of Lords that the Courtenay earldom under the patent of 1553 was still in existence, the plea being that the terms of the remainder

—to him and his heirs male for ever—did not limit the succession to heirs male of the body of the grantee. Five other cases wherein the words *de corpore suo* had been omitted from the patent are known to peerage lawyers. In no case had a peerage before been claimed by collateral heirs male. “I have often rallied Brougham,” writes Lord Campbell, “upon his creating William Courtenay earl of Devon. He says he consulted Chief Justice Tenterden. But Tenterden knew nothing of peerage law.” After the death of the exile in 1835 the clerk of the parliament succeeded him as an earl by force of the House of Lords decision of the 15th of March 1831. His second son, the Rev. Henry Hugh Courtenay (1811-1904), succeeded, as 13th earl, a nephew whose extravagance had impoverished the estates. He in turn was followed, as 14th earl, by his grandson Charles Pepys Courtenay (b. 1870).

No other recognized branch of this house, once so widely spread in the western counties, is now among the landed houses of England. Among its cadets were many famous warriors, but three prelates must be reckoned as the most eminent of the Courtenays. William, a younger son of the match of Courtenay and Bohun, was bishop of Hereford in 1370, bishop of London in 1375 and archbishop of Canterbury in 1381. Proceeding against Wycliffe he opposed John of Gaunt, who, taunting him with his trust in his great kinsfolk, threatened to drag him out of St Paul’s by his hair, a threat which roused the angry Londoners in his defence. He died in 1396 and lies buried at the feet of the Black Prince in his cathedral of Canterbury. By his will he left his best mitre to his nephew Richard Courtenay—son and pupil, as he styles him—against the time he should be a bishop. This Richard, a friend of Henry V. when prince, and treasurer of his household, was bishop of Norwich in 1413. Twice chancellor of Oxford, he repelled Archbishop Arundel and all his train when that primate would have had a visitation of the university, although the claim of the university to independence was at last broken down. Tall of stature, eloquent and learned, he kept the favour

of the king, who was with him when he died of dysentery in the host before Harfleur. Heir of this bishop was his nephew Sir Philip of Powderham, whose younger son Peter Courtenay was the third of the Courtenay prelates, being bishop of Exeter from 1478 to 1487, when he was translated to Winchester. Although of the Yorkist Courtenays, he was of Buckingham's party and, being attainted by Richard III. for joining with certain of his kinsfolk in an attempt to raise the west, he escaped to Brittany, whence he returned with the first Tudor sovereign, who had him in high favour. A fourth prelate of this family was Henry Reginald Courtenay, who was bishop of Bristol 1794-1797 and bishop of Exeter from 1797 to his death in 1803.

See charter, patent, close, fine and plea rolls, inquests *post mortem* and other records. G. E. C.'s *Complete Peerage*; *Dictionary of National Biography*; *Notes and Queries*, series viii. vol. 7; J. H. Round's *Peerage Studies*; *Calendars of State Papers*; Machyn's *Diary* (Camden Society); Chronicles of Capgrave, Wavrin, Adam of Usk, &c.

(O. Ba.)

COURTENAY, RICHARD (d. 1415), English prelate, was a son of Sir Philip Courtenay of Powderham Castle, near Exeter, and a grandson of Hugh Courtenay, earl of Devon (d. 1377). He was a nephew of William Courtenay, archbishop of Canterbury, and a descendant of Edward I. Educated at Exeter College, Oxford, he entered the church, where his advance was rapid. He held several prebends, was dean of St Asaph and then dean of Wells, and became bishop of Norwich in 1413. As chancellor

of the university of Oxford, an office to which he was elected in 1407 and again in 1410, Courtenay asserted the independence of the university against Thomas Arundel, archbishop of Canterbury, in 1411; but the archbishop, supported by Henry IV. and Pope John XXIII, eventually triumphed. Courtenay was a personal friend of Henry V. both before and after he came to the throne; and in 1413, immediately after Henry's accession, he was made treasurer of the royal household. On two occasions he went on diplomatic errands to France, and he was also employed by Henry on public business at home. Having accompanied the king to Harfleur in August 1415, Courtenay was attacked by dysentery and died on the 15th of September 1415, his body being buried in Westminster Abbey.

Another member of this family, PETER COURTENAY (d. 1492), a grandnephew of Richard, also attained high position in the English Church. Educated at Exeter College, Oxford, Peter became dean of Windsor, then dean of Exeter; in 1478 bishop of Exeter; and in 1487 bishop of Winchester in succession to William of Waynflete. With Henry Stafford, duke of Buckingham, and others he attempted to raise a rebellion against Richard III. in 1483, and fled to Brittany when this enterprise failed. Courtenay was restored to his dignities and estates in 1485 by Henry VII., whom he had accompanied to England, and he died on the 23rd of September 1492.

See J. H. Wylie, *History of England under Henry IV*. (London, 1884-1898).

COURTENAY, WILLIAM (c. 1342-1396), English prelate, was a younger son of Hugh Courtenay, earl of Devon (d. 1377), and through his mother Margaret, daughter of Humphrey Bohun, earl of Hereford, was a great-grandson of Edward I. Being a native of the west of England he was educated at Stapledon Hall, Oxford, and after graduating in law was chosen chancellor of the university in 1367. Courtenay's ecclesiastical and political career began about the same time. Having been made prebendary of Exeter, of Wells and of York, he was consecrated bishop of Hereford in 1370, was translated to the see of London in 1375, and became archbishop of Canterbury in 1381, succeeding Simon of Sudbury in both these latter positions. As a politician the period of his activity coincides with the years of Edward III.'s dotage, and with practically the whole of Richard II.'s reign. From the first he ranged himself among the opponents of John of Gaunt, duke of Lancaster; he was a firm upholder of the rights of the English Church, and was always eager to root out Lollardry. In 1373 he declared in convocation that he would not contribute to a subsidy until the evils from which the church suffered were removed; in 1375 he incurred the displeasure of the king by publishing a papal bull against the Florentines; and in 1377 his decided action during the quarrel between John of Gaunt and William of Wykeham ended in a temporary triumph for the bishop. Wycliffe was another cause of difference between Lancaster and Courtenay. In 1377 the reformer appeared before Archbishop Sudbury and Courtenay, when an altercation between the duke and the bishop led to the dispersal of the court, and during the ensuing riot Lancaster probably owed his safety to the good offices of his foe. Having meanwhile become archbishop of Canterbury Courtenay summoned a council, or synod, in London, which condemned the opinions of Wycliffe; he then attacked the Lollards at Oxford, and urged the bishops to imprison heretics. He was for a short time chancellor of England during 1381, and in January 1382 he officiated at the marriage of Richard II. with Anne of Bohemia, afterwards crowning the

queen. In 1382 the archbishop's visitation led to disputes with the bishops of Exeter and Salisbury, and Courtenay was only partially able to enforce the payment of a special tax to meet his expenses on this occasion. During his concluding years the archbishop appears to have upheld the papal authority in England, although not to the injury of the English Church. He protested against the confirmation of the statute of provisors in 1390, and he was successful in slightly modifying the statute of praemunire in 1393. Disliking the extravagance of Richard II. he publicly reproved the king, and after an angry scene the royal threats drove him for a time into Devonshire. In 1386 he was one of the commissioners appointed to reform the kingdom and the royal household, and in 1387 he arranged a peace between Richard and his enemies under Thomas of Woodstock, duke of Gloucester. Courtenay died at Maidstone on the 31st of July 1396, and was buried in Canterbury cathedral.

See W. F. Hook, *Lives of the Archbishops of Canterbury*, vol. iv. (London, 1860-1876); and W. Stubbs, *Constitutional History*, vols. ii. and iii. (Oxford, 1895-1896).

COURTESY (O. Fr. *curtesie*, later *courtoisie*), manners or behaviour that suit a court, politeness, due consideration for others. A special application of the word is in the expression "by courtesy," where something is granted out of favour and not of right, hence "courtesy" titles, *i.e.* those titles of rank which are given by custom to the eldest sons of dukes, marquesses and earls, usually the second title held by the father; to the younger sons and to the daughters of dukes and marquesses, viz. the prefix

"lord" and "lady" with the Christian and surname. For "tenure by the courtesy" see CURTESY. Another form of the word, "curtsey" or "curtsy," was early confined to the expression of courtesy or respect by a gesture or bow, now only of the reverence made by a woman, consisting in a bending of the knees accompanied by a lowering of the body.

COURTHOPE, WILLIAM JOHN (1842-), English writer and historian of poetry, whose father was rector of South Malling, Essex, was born on the 17th of July 1842. From Harrow school he went to New College, Oxford; took first-classes in classical "moderations" and "greats"; and won the Newdigate prize for poetry (1864) and the Chancellor's English essay (1868). He seemed destined for distinction as a poet, his volume of *Ludibria Lunae* (1869) being followed in 1870 by the remarkably fine *Paradise of Birds*. But a certain academic quality of mind seemed to check his output in verse and divert it into the field of criticism. Apart from many contributions to the higher journalism, his literary career is associated mainly with his continuation of the edition of Pope's works, begun by Whitwell Elwin (1816-1900), which appeared in ten volumes from 1871-1889; his life of Addison (Men of Letters series, 1882); his *Liberal Movement in English Literature* (1885); and his tenure of the professorship of Poetry at Oxford (1895-1901), which resulted in his elaborate *History of English Poetry* (the first volume appearing in 1895), and his *Life in Poetry* (1901). He deals with the history of English poetry as a whole, and in its unity as a result of the national spirit and thought in succeeding ages, and attempts to bring the great poets into relation with

this. In 1887 he was appointed a civil service commissioner, being first commissioner in 1892, and being made a C.B. He was made an honorary fellow of his old college at Oxford in 1896, and was given the honorary degrees of D.Litt. by Durham in 1895 and of LL.D. by Edinburgh University in 1898.

COURT LEET, an English petty criminal court for the punishment of small offences. It has been usual to make a distinction between court baron and court leet[1] as being separate courts, but in the early history of the court leet no such distinction can be drawn. At a very early time the lords of manors exercised or claimed certain jurisdictional franchises. Of these the most important was the "view of frankpledge" and its attendant police jurisdiction. Some time in the later middle ages the court baron when exercising these powers gained the name of *leet*, and, later, of "court leet." The *quo warranto* proceedings of Edward I. established a sharp distinction between the court baron, exercising strictly manorial rights, and the court leet, depending for its jurisdiction upon royal franchise. The court leet was a court of record, and its duty was not only to view the pledges but to present by jury all crimes that might happen within the jurisdiction, and punish the same. The steward of the court acted as judge, presiding wholly in a judicial character, the ministerial acts being executed by the bailiff. The court leet began to decline in the 14th century, being superseded by the more modern courts of the justices, but in many cases courts leet were kept up until nearly the middle of the 19th century. Indeed, it cannot be said that they are now

actually extinct, as many still survive for formal purposes, and by s. 40 of the Sheriffs Act 1887 they are expressly kept up.

---

1 The history of the word "leet" is very obscure. It appears in Anglo-French documents as *lete* and in Anglo-Latin as *leta*. Professor W. W. Skeat has connected it with Old English *láetan*, to let, which is very doubtful, though this is the origin of the use of the word in such expressions as "two-" "three-way leet," a place where cross-roads meet. The *New English Dictionary* suggests a connexion with "lathe," a term which survives as a division of the county of Kent, containing several "hundreds." This is of Old Norwegian origin, and seems to have meant "landed possessions." There is also another Old Norwegian *léith*, a court or judicial assembly, and modern Danish has *laegd*, a division of the country for military purposes. J. H. Round (*Feudal England*, p. 101) points out that the Suffolk hundred was divided for assessment into equal blocks called "leets" (see further F. W. Maitland, *Select Pleas in Manorial Courts*, Selden Soc. Publications I. lxxiii-lxxvi). "Leet" is also used, chiefly in Scotland, for a list of persons nominated for election to an office. This is, apparently, a shortened form of the French *élite*, elected.

COURT-MARTIAL, a court for the trial of offences against military or naval discipline, or for the administration of martial law. In England courts-martial have inherited part of the jurisdiction of the old *Curia militaris*, or court of the chivalry, in which a single marshal and at one time the high constable proceeded "according to the customs and usages of that court, and, in cases omitted according to the civil law, *secundum legem armorum*" (Coke, 4 *Ins.* 17). The modern form of the courts was adopted by ordinance in the time of Charles I., when English soldiers were studying the "articles and military laws" of Gustavus Adolphus and the Dutch military code of Arnheim; it is first recognized by statute in the first Mutiny Act of 1689. The Mutiny Act (with various extensions and amendments) and the statutory articles of war continued to be the sources of military law which

courts-martial administered until 1879, when they were codified in the Army Discipline and Regulation Act 1879, which was, in turn, superseded by the Army Act 1881. This act is re-enacted annually by the Army (Annual) Act. The constitution of courts-martial, their procedure, &c., are dealt with under MILITARY LAW.

Naval Courts-Martial.—The administration of the barbarous naval law of England was long entrusted to the discretion of commanders acting under instructions from the lord high admiral, who was supreme over both the royal and merchant navy. It was the leaders of the Long Parliament who first secured something like a regular tribunal by passing in 1645 an ordinance and articles concerning martial law for the government of the navy. Under this ordinance Blake, Monk and Penn issued instructions for the holding general and ship courts-martial with written records, the one for captains and commanders, the other for subordinate officers and men. Of the latter the mate, gunner and boatswain were members, but the admirals reserved a control over the more serious sentences. Under an act of 1661 the high admiral again received power to issue commissions for holding courts-martial—a power which continues to be exercised by the board of admiralty. During the 18th century, under the auspices of Anson, the jurisdiction was greatly extended, and the Consolidation Act of 1749 was passed in which the penalty of death occurs as frequently as the curses in the commination service. The Naval Articles of War have always been statutory, and the whole system may now be said to rest on the Naval Discipline Act 1866, as amended by the act of 1884. The navy has its courts of inquiry for the confidential investigation of charges "derogatory to the character of an officer and a gentleman." Under the act of 1866 a court-martial must consist of from five to nine officers of a certain rank, and must be held publicly on board of one of H.M. ships of war, and where at least two such ships are together. The rank of the president depends on that of the prisoner. A judge-advocate attends, and the procedure resembles that in

military courts, except that the prisoner is not asked to plead, and the sentence, if not one of death, does not require the confirmation of the commander-in-chief abroad or of the admiralty at home. The court has a large and useful power of finding the prisoner guilty of a less serious offence than that charged, which might well be imitated in the ordinary criminal courts. The death sentence is always carried out by hanging at the yard-arm; Admiral Byng, however, was shot in 1757. The board of admiralty have, under the Naval Discipline Acts, a general power of suspending, annulling, and modifying sentences which are not capital. The jurisdiction extends to all persons belonging to the navy, to land forces and other passengers on board, shipwrecked crews, spies, persons borne on the books of H.M. ships in commission, and civilians on board who endeavour to seduce others from allegiance. The definition of the jurisdiction by locality includes harbours, havens or creeks, lakes or rivers, in or out of the United Kingdom; all places within the jurisdiction of the admiralty; all places on shore out of the United Kingdom; the dockyards, barracks, hospitals, &c., of the service wherever situated; all places on shore in or out of the United Kingdom for all offences punishable under the Articles of War except those specified in section 38 of the Naval Discipline Act 1860, which are punishable by ordinary law. The Royal Marines, while borne on the books of H.M. ships, are subject to the Naval Discipline Acts, and, by an order in council, 1882, when they are embarked on board ship for service on shore; otherwise they are under the Army Acts. By s. 179, sub.-sec. 7, of the Army Act, in the application of the act to the Royal Marines the admiralty is substituted for military authorities.

AUTHORITIES.—Simmons, *On the Constitution and Practice of Courts-Martial*; Clode, *Military and Martial Law*; Stephens, Gifford and Smith, *Manual of Naval Law and Court-Martial Procedure*. The earlier writers on courts-martial are Adye (1796), M'Arthur (1813),

Maltby (1813, Boston), James (1820), D'Aguilar (1843), and Hough, *Precedents in Military Law* (1855).

COURTNEY, LEONARD HENRY COURTNEY, BARON (1832-), English politician and man of letters, eldest son of J. S. Courtney, a banker, was born at Penzance on the 6th of July 1832. At Cambridge, Leonard Courtney was second wrangler and first Smith's prizeman, and was elected a fellow of his college, St John's. He was called to the bar at Lincoln's Inn in 1858, was professor of political economy at University College from 1872 to 1875, and in December 1876, after a previous unsuccessful attempt, was elected to parliament for Liskeard in the Liberal interest. He continued to represent the borough, and the district into which it was merged by the Reform Act of 1885, until 1900, when his attitude towards the South African War—he was one of the foremost of the so-called "Pro-Boer" party—compelled his retirement. Until 1885 he was a devoted adherent of Mr Gladstone, particularly in finance and foreign affairs. In 1880 he was under-secretary of state for the home department, in 1881 for the colonies, and in 1882 secretary to the treasury; but he was always a stubborn fighter for principle, and upon finding that the government's Reform Bill in 1884 contained no recognition of the scheme for proportional representation, to which he was deeply committed, he resigned office. He refused to support Mr Gladstone's Home Rule Bill in 1885, and was one of those who chiefly contributed to its rejection, and whose reputation for unbending integrity and intellectual eminence gave solidity to the Liberal Unionist party. In 1886 he was elected chairman of

committees in the House of Commons, and his efficiency in this office seemed to mark him out for the speakership in 1895. A Liberal Unionist, however, could only be elected by Conservative votes, and he had made himself objectionable to a large section of the party by his independent attitude on various questions, on which his Liberalism outweighed his party loyalty. He would in any case have been incapacitated by an affection of the eyesight, which for a while threatened to withdraw him from public life altogether. After 1895 Mr Courtney's divergences from the Unionist party on questions other than Irish politics became gradually more marked. He became known in the House of Commons principally for his candid criticism of the measures introduced by his nominal leaders, and he was rather to be ranked among the Opposition than as a Ministerialist; and when the crisis with the Transvaal came in 1899, Mr Courtney's views, which remained substantially what they were when he supported the settlement after Majuba in 1881, had plainly become incompatible with his position even as a nominal follower of Lord Salisbury and Mr Chamberlain. He gradually reverted to formal membership of the Liberal party, and in January 1906 unsuccessfully contested a division of Edinburgh as a supporter of Sir Henry Campbell-Bannerman at the general election. Among the birthday honours of 1906 he was elevated to the peerage as Baron Courtney of Penwith (Cornwall). Lord Courtney, who in 1883 married Miss Catherine Potter (an elder sister of Mrs Sidney Webb), was a prominent supporter of the women's movement. In earlier years he was a regular contributor to *The Times*, and he wrote numerous essays in the principal reviews on political and economic subjects. In 1901 he published a book on *The Working Constitution of the United Kingdom*.

Two of his brothers, John Mortimer Courtney (b. 1838), and William Prideaux Courtney (b. 1845), also attained public distinction, the former in the government service in Canada (from 1869, retiring in 1906), rising to be

deputy-minister of finance, and the latter in the British civil service (1865-1892), and as a prominent man of letters and bibliographer.

COURTOIS, JACQUES (1621-1676) and **GUILLAUME** (1628-1679). The two French painters who bore these names are also called by the Italian equivalents Giacomo (or Jacopo) Cortese and Guglielmo Cortese. Each of the brothers is likewise named, from his native province, Le Bourguignon, or Il Borgognone.

Jacques Courtois was born at St Hippolyte, near Besançon, in 1621. His father was a painter, and with him Jacques remained studying up to the age of fifteen. Towards 1637 he came to Italy, was hospitably received at Milan by a Burgundian gentleman, and entered, and for three years remained in, the French military service. The sight of some battle-pictures revived his taste for fine art. He went to Bologna, and studied under the friendly tutelage of Guido; thence he proceeded to Rome, where he painted, in the Cistercian monastery, the “Miracle of the Loaves.” Here he took a house and after a while entered upon his own characteristic style of art, that of battle-painting, in which he has been accounted to excel all other old masters; his merits were cordially recognized by the celebrated Cerquozzi, named Michelangelo delle Battaglie. He soon rose from penury to ease, and married a painter’s beautiful daughter, Maria Vagini; she died after seven years of wedded life. Prince Matthias of Tuscany employed Courtois on some striking works in his villa, Lappeggio, representing with much historical accuracy the prince’s military exploits. In Venice also the artist executed for the senator Sagredo some remarkable battle-pieces. In

Florence he entered the Society of Jesus, taking the habit in Rome in 1655; it was calumniously rumoured that he adopted this course in order to escape punishment for having poisoned his wife. As a Jesuit father, Courtois painted many works in churches and monasteries of the society. He lived piously in Rome, and died there of apoplexy on the 20th of May 1676 (some accounts say 1670 or 1671). His battle-pieces have movement and fire, warm colouring (now too often blackened), and great command of the brush,—those of moderate dimensions are the more esteemed. They are slight in execution, and tell out best from a distance. Courtois etched with skill twelve battle-subjects of his own composition. The Dantzig painter named in Italy Pandolfo Reschi was his pupil.

Guillaume Courtois, born likewise at St Hippolyte, came to Italy with his brother. He went at once to Rome, and entered the school of Pietro da Cortona. He studied also the Bolognese painters and Giovanni Barbieri, and formed for himself a style with very little express mannerism, partly resembling that of Maratta. He painted the “Battle of Joshua” in the Quirinal Gallery, the “Crucifixion of St Andrew” in the church of that saint on Monte Cavallo, various works for the Jesuits, some also in co-operation with his brother. His last production was Christ admonishing Martha. His draughtsmanship is better than that of Jacques, whom he did not, however, rival in spirit, colour or composition. He also executed some etchings. Guillaume Courtois died of gout on the 15th of June 1679.

COURTRAI (Flemish, *Kortryk*), an important and once famous town of West Flanders, Belgium, situated on the Lys. Pop. (1904) 34,564. It is now

best known for its fine linen, which ranks with that of Larne. The lace factories are also important and employ 5000 hands. But considerable as is the prosperity of modern Courtrai it is but a shadow of what it was in the middle ages during the halcyon period of the Flemish communes. Then Courtrai had a population of 200,000, now it is little over a sixth of that number. On the 11th of July 1302 the great battle of Courtrai (see INFANTRY) was fought outside its walls, when the French army, under the count of Artois, was vanquished by the allied burghers of Bruges, Ypres and Courtrai with tremendous loss. As many as 700 pairs of golden spurs were collected on the field from the bodies of French knights and hung up as an offering in an abbey church of the town, which has long disappeared. There are still, however, some interesting remains of Courtrai's former grandeur. Perhaps the Pont de Broel, with its towers at either end of the bridge, is as characteristic and complete as any monument of ancient Flanders that has come down to modern times. The hôtel de ville, which dated from the earlier half of the 16th century, was restored in 1846, and since then statues have also been added to represent those that formerly ornamented the façade. Two richly and elaborately carved chimney-pieces in the hôtel de ville merit special notice. The one in the council chamber upstairs dates from 1527 and gives an allegorical representation of the Virtues and the Vices. The other, three-quarters of a century later, contains an heraldic representation of the noble families of the town. The church of St Martin dates from the 15th century, but was practically destroyed in 1862 by a fire caused by lightning. It has been restored. The most important building at Courtrai is the church of Notre Dame, which was begun by Count Baldwin IX. in 1191 and finished in 1211. The portal and the choir were reconstructed in the 18th century. In the chapel behind the choir is hung one of Van Dyck's masterpieces, "The Erection of the Cross." The chapel of the counts attached to the church dates from 1373, and contained mural paintings of the counts and countesses of Flanders down to the merging of

the title in the house of Burgundy. Most if not all of these had become obliterated, but they have now been carefully restored. With questionable judgment portraits have been added of the subsequent holders of the title down to the emperor Francis II. (I. of Austria), the last representative of the houses of Flanders and Burgundy to rule in the Netherlands. Courtrai celebrated the 600th anniversary of the battle mentioned above by erecting a monument on the field in 1902, and also by fêtes and historical processions that continued for a fortnight.

Courtrai, the *Cortracum* of the Romans, ranked as a town from the 7th century onwards. It was destroyed by the Normans, but was rebuilt in the 10th century by Baldwin III. of Flanders, who endowed it with market rights and laid the foundation of its industrial importance by inviting the settlement of foreign weavers. The town was once more burnt, in 1382, by the French after the battle of Roosebeke, but was rebuilt in 1385 by Philip the Bold, duke of Burgundy.

COURVOISIER, JEAN JOSEPH ANTOINE (1775-1835), French magistrate and politician, was born at Besançon on the 30th of November 1775. During the revolutionary period he left the country and served in the army of the *émigrés* and later in that of Austria. In 1801, under the Consulate, he returned to France and established himself as an advocate at Besançon, being appointed *conseiller-auditeur* to the court of appeal there in 1808. At the Restoration he was made advocate-general by Louis XVIII., resigned and left France during the Hundred Days, and was reappointed after the second Restoration in 1815. In 1817, after the modification of the

constitution by the *ordonnance* of the 5th of September, he was returned to the chamber of deputies, where he attached himself to the left centre and supported the moderate policy of Richelieu and Decazes. He was an eloquent speaker, and master of many subjects; and his proved royalism made it impossible for the ultra-Royalists to discredit him, much as they resented his consistent opposition to their short-sighted violence. After the revolt at Lyons in 1817 he was nominated *procureur-général* of the city, and by his sense and moderation did much to restore order and confidence. He was again a member of the chamber from 1819 to 1824, and vigorously opposed the exceptional legislation which the second administration of Richelieu passed under the influence of the ultra-Royalists. In 1824 he failed to secure re-election, and occupied himself with his judicial duties until his nomination as councillor of state in 1827. On the 8th of August 1829 he accepted the offer of the portfolio of justice in the Polignac ministry, but resigned on the 19th of May 1830, when he realized that the government intended to abrogate the Charter and the inevitable revolution that would follow. During the trial of the ex-ministers, in December, he was summoned as a witness, and paid a tribute to the character of his former colleagues which, under the circumstances, argued no little courage. He refused to take office under Louis Philippe, and retired into private life, dying on the 18th of September 1835.

COUSCOUS, or KOUS-KOUS (an Arabic word derived from *kaskasa*, to pound), a dish common among the inhabitants of North Africa, made of

flour rubbed together and steamed over a stew of mutton, fowl, &c., with which it is eaten.

COUSIN, JEAN (1500-1590), French painter, was born at Soucy, near Sens, and began as a glass-painter, his windows in the Sainte Chapelle at Vincennes being considered the finest in France. As a painter of subject pictures he is ranked as the founder of the French school, as having first departed from the practice of portraits. His "Last Judgment," influenced by Parmigiano, is in the Louvre, and a "Descent from the Cross" (1523) in the museum at Mainz is attributed to him. He was known also as a sculptor, and an engraver, both in etching and on wood, his wood-cuts for Jean le Clerc's Bible (1596) and other books being his best-known work. He also wrote a *Livre de perspective* (1560), and a *Livre de portraiture* (1571).

See Ambroise Firmin-Didot, *Étude sur J. Cousin* (1872), and *Recueil des œuvres choisies de J. Cousin* (1873).

COUSIN, VICTOR (1792-1867), French philosopher, the son of a watchmaker, was born in Paris, in the Quartier St Antoine, on the 28th of November 1792. At the age of ten he was sent to the grammar school of the Quartier St Antoine, the Lycée Charlemagne. Here he studied until he was

eighteen. The lycée had a connexion with the university, and when Cousin left the secondary school he was "crowned" in the ancient hall of the Sorbonne for the Latin oration delivered by him there, in the general concourse of his school competitors. The classical training of the lycée strongly disposed him to literature. He was already known among his compeers for his knowledge of Greek. From the lycée he passed to the Normal School of Paris, where Laromiguière was then lecturing on philosophy. In the second preface to the *Fragmens philosophiques*, in which he candidly states the varied philosophical influences of his life, Cousin speaks of the grateful emotion excited by the memory of the day in 1811, when he heard Laromiguière for the first time. "That day decided my whole life. Laromiguière taught the philosophy of Locke and Condillac, happily modified on some points, with a clearness and grace which in appearance at least removed difficulties, and with a charm of spiritual *bonhomie* which penetrated and subdued." Cousin was set forthwith to lecture on philosophy, and he speedily obtained the position of master of conferences (*maître de conférences*) in the school. The second great philosophical impulse of his life was the teaching of Royer-Collard. This teacher, as he tells us, "by the severity of his logic, the gravity and weight of his words, turned me by degrees, and not without resistance, from the beaten path of Condillac into the way which has since become so easy, but which was then painful and unfrequented, that of the Scottish philosophy." In 1815-1816 Cousin attained the position of *suppléant* (assistant) to Royer-Collard in the history of modern philosophy chair of the faculty of letters. There was still another thinker who influenced him at this early period,—Maine de Biran, whom Cousin regarded as the unequalled psychological observer of his time in France.

These men strongly influenced both the method and the matter of Cousin's philosophical thought. To Laromiguière he attributes the lesson of decomposing thought, even though the reduction of it to sensation was

inadequate. Royer-Collard taught him that even sensation is subject to certain internal laws and principles which it does not itself explain, which are superior to analysis and the natural patrimony of the mind. De Biran made a special study of the phenomena of the will. He taught him to distinguish in all cognitions, and especially in the simplest facts of consciousness, the fact of voluntary activity, that activity in which our personality is truly revealed. It was through this "triple discipline," as he calls it, that Cousin's philosophical thought was first developed, and that in 1815 he entered on the public teaching of philosophy in the Normal School and in the faculty of letters.[1] He then took up the study of German, worked at Kant and Jacobi, and sought to master the *Philosophy of Nature* of Schelling, by which he was at first greatly attracted. The influence of Schelling may be observed very markedly in the earlier form of his philosophy. He sympathized with the principle of faith of Jacobi, but regarded it as arbitrary so long as it was not recognized as grounded in reason. In 1817 he went to Germany, and met Hegel at Heidelberg. In this year appeared Hegel's *Encyclopädie der philosophischen Wissenschaften*, of which Cousin had one of the earliest copies. He thought Hegel not particularly amiable, but the two became friends. The following year Cousin went to Munich, where he met Schelling for the first time, and spent a month with him and Jacobi, obtaining a deeper insight into the *Philosophy of Nature*.

Political troubles.

The political troubles of France interfered for a time with his career. In the events of 1814-1815 he took the royalist side. He at first adopted the views of the party known as *doctrinaire*, of which Royer-Collard was the philosophical chief. He seems then to have gone farther than his party, and even to have approached the extreme Left. Then came a reaction against liberalism, and in 1821-1822 Cousin was deprived of his offices alike in the faculty of letters and in the Normal School. The Normal School itself was swept away, and

Cousin shared at the hands of a narrow and illiberal government the fate of Guizot, who was ejected from the chair of history. This enforced abandonment of public teaching was not wholly an evil. He set out for Germany with a view to further philosophical study. While at Berlin in 1824-1825 he was thrown into prison, either on some ill-defined political charge at the instance of the French police, or on account of certain incautious expressions which he had let fall in conversation. Liberated after six months, he continued under the suspicion of the French government for three years. It was during this period, however, that he thought out and developed what is distinctive in his philosophical doctrine. His eclecticism, his ontology and his philosophy of history were declared in principle and in most of their salient details in the *Fragmens philosophiques* (Paris, 1826).

Fragmens philosophiques.

The preface to the second edition (1833) and the *Avertissement* to the third (1838) aimed at a vindication of his principles against contemporary criticism. Even the best of his later books, the *Philosophie écossaise* (4th ed., 1863), the *Du vrai, du beau, et du bien* (12th ed., 1872; Eng. trans., 3rd ed., Edinburgh, 1854), and the *Philosophie de Locke* (4th ed., 1861) were simply matured revisions of his lectures during the period from 1815 to 1820. The lectures on Locke were first sketched in 1819, and fully developed in the course of 1829.

During the seven years of enforced abandonment of teaching he produced, besides the *Fragmens*, the edition of the works of Proclus (6 vols., 1820-1827), and the works of Descartes (11 vols., 1826). He also commenced his *Translation of Plato* (13 vols.), which occupied his leisure time from 1825 to 1840.

We see in the *Fragmens* very distinctly the fusion of the different philosophical influences by which his opinions were finally matured. For Cousin was as eclectic in thought and habit of mind as he was in

philosophical principle and system. It is with the publication of the *Fragmens* of 1826 that the first great widening of his reputation is associated. In 1827 followed the *Cours de l'histoire de la philosophie*.

Career as a lecturer.

In 1828 M. de Vatimesnil, minister of public instruction in Martignac's ministry, recalled Cousin and Guizot to their professorial positions in the university. The three years which followed were the period of Cousin's greatest triumph as a lecturer. His return to the chair was the symbol of the triumph of constitutional ideas and was greeted with enthusiasm. The hall of the Sorbonne was crowded as the hall of no philosophical teacher in Paris had been since the days of Abelard. The lecturer had a singular power of identifying himself for the time with the system which he expounded and the historical character he portrayed. Clear and comprehensive in the grasp of the general outlines of his subject, he was methodical and vivid in the representation of details. In exposition he had the rare art of unfolding and aggrandizing. There was a rich, deep-toned, resonant eloquence mingled with the speculative exposition; his style of expression was clear, elegant and forcible, abounding in happy turns and striking antitheses. To this was joined a singular power of rhetorical climax. His philosophy exhibited in a striking manner the generalizing tendency of the French intellect, and its logical need of grouping details round central principles.

There was withal a moral elevation in his spiritual philosophy which came home to the hearts of his hearers, and seemed to afford a ground for higher development in national literature and art, and even in politics, than the traditional philosophy of France had appeared capable of yielding. His lectures produced more ardent disciples, imbued at least with his spirit, than those of any other professor of philosophy in France during the 18th century. Tested by the power and effect of his teaching influence, Cousin occupies a foremost place in the rank of professors of philosophy, who like

Jacobi, Schelling and Dugald Stewart have united the gifts of speculative, expository and imaginative power. Tested even by the strength of the reaction which his writings have in some cases occasioned, his influence is hardly less remarkable. The taste for philosophy—especially its history—was revived in France to an extent unknown since the 17th century.

Among the men who were influenced by Cousin we may note T. S. Jouffroy, J. P. Damiron, Garnier, J. Barthélemy St Hilaire, F. Ravaisson-Mollien, Rémusat, Jules Simon and A. Franck. Jouffroy and Damiron were first fellow-students and then disciples. Jouffroy, however, always kept firm to the early—the French and Scottish—impulses of Cousin's teaching. Cousin continued to lecture regularly for two years and a half after his return to the chair. Sympathizing with the revolution of July, he was at once recognized by the new government as a friend of national liberty. Writing in June 1833 he explains both his philosophical and his political position:—

Disciples and followers.

> "I had the advantage of holding united against me for many years both the sensational and the theological school. In 1830 both schools descended into the arena of politics. The sensational school quite naturally produced the demagogic party, and the theological school became quite as naturally absolutism, safe to borrow from time to time the mask of the demagogue in order the better to reach its ends, as in philosophy it is by scepticism that it undertakes to restore theocracy. On the other hand, he who combated any exclusive principle in science was bound to reject also any exclusive principle in the state, and to defend representative government."

The government was not slow to do him honour. He was induced by the ministry of which his friend Guizot was the head to become a member of the council of public instruction and counsellor of state, and in 1832 he was

made a peer of France. He ceased to lecture, but retained the title of professor of philosophy. Finally, he accepted the position of minister of public instruction in 1840 under Thiers. He was besides director of the Normal School and virtual head of the university, and from 1840 a member of the Institute (Academy of the Moral and Political Sciences). His character and his official position at this period gave him great power in the university and in the educational arrangements of the country. In fact, during the seventeen and a half years of the reign of Louis Philippe, Cousin mainly moulded the philosophical and even the literary tendencies of the cultivated class in France.

But the most important work he accomplished during this period was the organization of primary instruction. It was to the efforts of Cousin that France owed her advance, in primary education, between 1830 and 1848.

Relation to primary education in France.

Prussia and Saxony had set the national example, and France was guided into it by Cousin. Forgetful of national calamity and of personal wrong, he looked to Prussia as affording the best example of an organized system of national education; and he was persuaded that "to carry back the education of Prussia into France afforded a nobler (if a bloodless) triumph than the trophies of Austerlitz and Jena." In the summer of 1831, commissioned by the government, he visited Frankfort and Saxony, and spent some time in Berlin. The result was a series of reports to the minister, afterwards published as *Rapport sur l'état de l'instruction publique dans quelques pays de l'Allemagne et particulièrement en Prusse*. (Compare also *De l'instruction publique en Hollande*, 1837.) His views were readily accepted on his return to France, and soon afterwards through his influence there was passed the law of primary instruction. (See his *Exposé des motifs et projet de loi sur l'instruction primaire, présentés à la chambre des députés, séance du 2 janvier 1833*.)

In the words of the *Edinburgh Review* (July 1833), these documents "mark an epoch in the progress of national education, and are directly conducive to results important not only to France but to Europe." The *Report* was translated into English by Mrs Sarah Austin in 1834. The translation was frequently reprinted in the United States of America. The legislatures of New Jersey and Massachusetts distributed it in the schools at the expense of the states. Cousin remarks that, among all the literary distinctions which he had received, "None has touched me more than the title of foreign member of the American Institute for Education." To the enlightened views of the ministries of Guizot and Thiers under the citizen-king, and to the zeal and ability of Cousin in the work of organization, France owes what is best in her system of primary education,—a national interest which had been neglected under the Revolution, the Empire and the Restoration (see *Exposé*, p. 17). In the first two years of the reign of Louis Philippe more was done for the education of the people than had been either sought or accomplished in all the history of France. In defence of university studies he stood manfully forth in the chamber of peers in 1844, against the clerical party on the one hand and the levelling or Philistine party on the other. His speeches on this occasion were published in a tractate *Défense de l'université et de la philosophie* (1844 and 1845).

This period of official life from 1830 to 1848 was spent, so far as philosophical study was concerned, in revising his former lectures and writings, in maturing them for publication or reissue, and in research into certain periods of the history of philosophy. In 1835 appeared *De la Métaphysique d'Aristote, suivi d'un essai de traduction des deux premiers livres*; in 1836, *Cours de philosophie professé à la faculté des lettres pendant l'année 1818*, and *Ouvrages inédits d'Abélard*. This *Cours de philosophie* appeared later in 1854 as *Du vrai, du beau, et du bien*. From 1825 to 1840 appeared *Cours de l'histoire de la philosophie*, in 1829 *Manuel de l'histoire*

Philosophical writings.

de la philosophie de Tennemann, translated from the German. In 1840-1841 we have *Cours d'histoire de la philosophie morale au XVIIIe siècle* (5 vols.). In 1841 appeared his edition of the *Œuvres philosophiques de Maine-de-Biran*; in 1842, *Leçons de philosophie sur Kant* (Eng. trans. A. G. Henderson, 1854), and in the same year *Des Pensées de Pascal*. The *Nouveaux fragments* were gathered together and republished in 1847. Later, in 1859, appeared *Petri Abaelardi Opera*.

During this period Cousin seems to have turned with fresh interest to those literary studies which he had abandoned for speculation under the influence of Laromiguière and Royer-Collard. To this renewed interest we owe his studies of men and women of note in France in the 17th century. As the results of his work in this line, we have, besides the *Des Pensées de Pascal*, 1842, *Études sur les femmes et la société du XVIIe siècle*, 1853. He has sketched Jacqueline Pascal (1844), Madame de Longueville (1853), the marquise de Sablé (1854), the duchesse de Chevreuse (1856), Madame de Hautefort (1856).

Literary studies.

When the reign of Louis Philippe came to a close through the opposition of his ministry, with Guizot at its head, to the demand for electoral reform and through the policy of the Spanish marriages, Cousin, who was opposed to the government on these points, lent his sympathy to Cavaignac and the Provisional government. He published a pamphlet entitled *Justice et charité*, the purport of which showed the moderation of his political views. It was markedly anti-socialistic. But from this period he passed almost entirely from public life, and ceased to wield the personal influence which he had done during the preceding years. After the *coup d'état* of the 2nd of December, he was deprived of his position as permanent member of the superior council of public instruction. From Napoleon and the Empire he stood aloof. A decree of 1852 placed him along with Guizot and Villemain

in the rank of honorary professors. His sympathies were apparently with the monarchy, under certain constitutional safeguards. Speaking in 1853 of the political issues of the spiritual philosophy which he had taught during his lifetime, he says,—"It conducts human societies to the true republic, that dream of all generous souls, which in our time can be realized in Europe only by constitutional monarchy."[2]

During the last years of his life he occupied a suite of rooms in the Sorbonne, where he lived simply and unostentatiously. The chief feature of the rooms was his noble library, the cherished collection of a lifetime. He died at Cannes on the 13th of January 1867, in his sixty-fifth year. In the front of the Sorbonne, below the lecture rooms of the faculty of letters, a tablet records an extract from his will, in which he bequeaths his noble and cherished library to the halls of his professorial work and triumphs.

Philosophy.—There are three distinctive points in Cousin's philosophy. These are his method, the results of his method, and the application of the method and its results to history,—especially to the history of philosophy. It is usual to speak of his philosophy as eclecticism. It is eclectic only in a secondary and subordinate sense. All eclecticism that is not self-condemned and inoperative implies a system of doctrine as its basis,—in fact, a criterion of truth. Otherwise, as Cousin himself remarks, it is simply a blind and useless syncretism. And Cousin saw and proclaimed from an early period in his philosophical teaching the necessity of a system on which to base his eclecticism. This is indeed advanced as an illustration or confirmation of the truth of his system,—as a proof that the facts of history correspond to his analysis of consciousness. These three points—the method, the results, and the philosophy of history—are with him intimately connected; they are developments in a natural order of sequence. They become in practice Psychology, Ontology and Eclecticism in history.

First, as to method. On no point has Cousin more strongly insisted than the importance of method in philosophy. That which he adopts, and the necessity of which he so strongly proclaims, is the ordinary one of observation, analysis and induction. This observational method Cousin regards as that of the 18th century,—the method which Descartes began and abandoned, and which Locke and Condillac applied, though imperfectly, and which Reid and Kant used with more success, yet not completely. He insists that this is the true method of philosophy as applied to consciousness, in which alone the facts of experience appear. But the proper condition of the application of the method is that it shall not through prejudice of system omit a single fact of consciousness. If the authority of consciousness is good in one instance, it is good in all. If not to be trusted in one, it is not to be trusted in any. Previous systems have erred in not presenting the facts of consciousness, *i.e.* consciousness itself, in their totality. The observational method applied to consciousness gives us the science of psychology. This is the basis and the only proper basis of ontology or metaphysics—the science of being—and of the philosophy of history. To the observation of consciousness Cousin adds induction as the complement of his method, by which he means inference as to reality necessitated by the data of consciousness, and regulated by certain laws found in consciousness, viz. those of reason. By his method of observation and induction as thus explained, his philosophy will be found to be marked off very clearly, on the one hand from the deductive construction of notions of an absolute system, as represented either by Schelling or Hegel, which Cousin regards as based simply on hypothesis and abstraction, illegitimately obtained; and on the other, from that of Kant, and in a sense, of Sir W. Hamilton, both of which in the view of Cousin are limited to psychology, and merely relative or phenomenal knowledge, and issue in scepticism so far as the great realities of ontology are concerned. What Cousin finds psychologically in the individual

Method.

consciousness, he finds also spontaneously expressed in the common sense or universal experience of humanity. In fact, it is with him the function of philosophy to classify and explain universal convictions and beliefs; but common-sense is not with him philosophy, nor is it the instrument of philosophy; it is simply the material on which the philosophical method works, and in harmony with which its results must ultimately be found.

Results.

The three great results of psychological observation are Sensibility, Activity or Liberty, and Reason.

These three facts are different in character, but are not found apart in consciousness. Sensations, or the facts of the sensibility, are necessary; we do not impute them to ourselves. The facts of reason are also necessary, and reason is not less independent of the will than the sensibility. Voluntary facts alone are marked in the eyes of consciousness with the characters of imputability and personality. The will alone is the person or *Me*. The me is the centre of the intellectual sphere without which consciousness is impossible. We find ourselves in a strange world, between two orders of phenomena which do not belong to us, which we apprehend only on the condition of our distinguishing ourselves from them. Further, we apprehend by means of a light which does not come from ourselves. All light comes from the reason, and it is the reason which apprehends both itself and the sensibility which envelops it, and the will which it obliges but does not constrain. Consciousness, then, is composed of these three integrant and inseparable elements. But Reason is the immediate ground of knowledge and of consciousness itself.

But there is a peculiarity in Cousin's doctrine of activity or freedom, and in his doctrine of reason, which enters deeply into his system. This is the element of spontaneity in volition and in reason. This is the heart of what is new alike in his doctrine of knowledge and being. Liberty or freedom is a generic term which means a cause or being endowed with self-activity. This

Spontaneity in will.

is to itself and its own development its own ultimate cause. Free-will is so, although it is preceded by deliberation and determination, *i.e.* reflection, for we are always conscious that even after determination we are free to will or not to will. But there is a primary kind of volition which has not reflection for its condition, which is yet free and spontaneous. We must have willed thus spontaneously first, otherwise we could not know, before our reflective volition, that we could will and act. Spontaneous volition is free as reflective, but it is the prior act of the two. This view of liberty of will is the only one in accordance with the facts of humanity; it excludes reflective volition, and explains the enthusiasm of the poet and the artist in the act of creation; it explains also the ordinary actions of mankind, which are done as a rule spontaneously and not after reflective deliberation.

But it is in his doctrine of the Reason that the distinctive principle of the philosophy of Cousin lies. The reason given to us by psychological observation, the reason of our consciousness, is impersonal in its nature. We

Impersonality of reason.

do not make it; its character is precisely the opposite of individuality; it is universal and necessary. The recognition of universal and necessary principles in knowledge is the essential point in psychology; it ought to be put first and emphasized to the last that these exist, and that they are wholly impersonal or absolute. The number of these principles, their enumeration and classification, is an important point, but it is secondary to that of the recognition of their true nature. This was the point which Kant missed in his analysis, and this is the fundamental truth which Cousin thinks he has restored to the integrity of philosophy by the method of the observation of consciousness. And how is this impersonality or absoluteness of the conditions of knowledge to be established? The answer is in substance that Kant went wrong in putting necessity first as the criterion of those laws. This brought them within the sphere of reflection,

and gave as their guarantee the impossibility of thinking them reversed; and led to their being regarded as wholly relative to human intelligence, restricted to the sphere of the phenomenal, incapable of revealing to us substantial reality—necessary, yet subjective. But this test of necessity is a wholly secondary one; these laws are not thus guaranteed to us; they are each and all given to us, given to our consciousness, in an act of spontaneous apperception or apprehension, immediately, instantaneously, in a sphere above the reflective consciousness, yet within the reach of knowledge. And "all subjectivity with all reflection expires in the spontaneity of apperception. The reason becomes subjective by relation to the voluntary and free self; but in itself it is impersonal; it belongs not to this or to that self in humanity; it belongs not even to humanity. We may say with truth that nature and humanity belong to it, for without its laws both would perish."

But what is the number of those laws? Kant reviewing the enterprise of Aristotle in modern times has given a complete list of the laws of thought, but it is arbitrary in classification and may be legitimately reduced.

Laws of reason.

According to Cousin, there are but two primary laws of thought, that of causality and that of substance. From these flow naturally all the others. In the order of nature, that of substance is the first and causality second. In the order of acquisition of our knowledge, causality precedes substance, or rather both are given us in each other, and are contemporaneous in consciousness.

These principles of reason, cause and substance, given thus psychologically, enable us to pass beyond the limits of the relative and subjective to objective and absolute reality,—enable us, in a word, to pass from psychology, or the science of knowledge, to ontology or the science of being. These laws are inextricably mixed in consciousness with the data of volition and sensation, with free activity and fatal action or impression, and

they guide us in rising to a personal being, a self or free cause, and to an impersonal reality, a not-me—nature, the world of force—lying out of us, and modifying us. As I refer to myself the act of attention and volition, so I cannot but refer the sensation to some cause, necessarily other than myself, that is, to an external cause, whose existence is as certain for me as my own existence, since the phenomenon which suggests it to me is as certain as the phenomenon which had suggested my reality, and both are given in each other. I thus reach an objective impersonal world of forces which corresponds to the variety of my sensations. The relation of these forces or causes to each other is the order of the universe.

But these two forces, the me and the not-me, are reciprocally limitative. As reason has apprehended these two simultaneous phenomena, attention and sensation, and led us immediately to conceive the two sorts of distinct causes, correlative and reciprocally finite, to which they are related, so, from the notion of this limitation, we find it impossible under the same guide not to conceive a supreme cause, absolute and infinite, itself the first and last cause of all. This is relatively to self and not-self what these are to their proper effects. This cause is self-sufficient, and is sufficient for the reason. This is God; he must be conceived under the notion of cause, related to humanity and the world. He is absolute substance only in so far as he is absolute cause, and his essence lies precisely in his creative power. He thus creates, and he creates necessarily.

The infinite or absolute.

This theodicy of Cousin laid him open obviously enough to the charge of pantheism. This he repels, and his answer may be summed up as follows. Pantheism is properly the deification of the law of phenomena, the universe God. But I distinguish the two finite causes self and not-self from each other and from the infinite cause. They are not mere modifications of this cause or properties, as

Charge of Pantheism.

with Spinoza,—they are free forces having their power or spring of action in themselves, and this is sufficient for our idea of independent finite reality. I hold this, and I hold the relation of these as effects to the one supreme cause. The God I plead for is neither the deity of Pantheism, nor the absolute unity of the Eleatics, a being divorced from all possibility of creation or plurality, a mere metaphysical abstraction. The deity I maintain is creative, and necessarily creative. The deity of Spinoza and the Eleatics is a mere substance, not a cause in any sense. As to the necessity under which Deity exists of acting or creating, this is the highest form of liberty, it is the freedom of spontaneity, activity without deliberation. His action is not the result of a struggle between passion and virtue. He is free in an unlimited manner; the purest spontaneity in man is but the shadow of the freedom of God. He acts freely but not arbitrarily, and with the consciousness of being able to choose the opposite part. He cannot deliberate or will as we do. His spontaneous action excludes at once the efforts and the miseries of will and the mechanical operation of necessity.

The elements found in consciousness are also to be found in the history of humanity and in the history of philosophy. In external nature there are expansion and contraction which correspond to spontaneity and reflection.

History of philosophy.

External nature again in contrast with humanity expresses spontaneity; humanity expresses reflection. In human history the East represents the spontaneous stage; the Pagan and Christian world represent stages of reflection.

This was afterwards modified, expanded and more fully expressed by saying that humanity in its universal development has three principal moments. First, in the spontaneous stage, where reflection is not yet developed, and art is imperfect, humanity has thought only of the immensity around it. It is preoccupied by the infinite. Secondly, in the

reflective stage, mind has become an object to itself. It thus knows itself explicitly or reflectively. Its own individuality is now the only or at least the supreme thing. This is the moment of the finite. Thirdly, there comes an epoch in which the self or me is subordinated. Mind realizes another power in the universe. The finite and the infinite become two real correlatives in the relation of cause and product. This is the third and highest stage of development, the relation of the finite and the infinite. As philosophy is but the highest expression of humanity, these three moments will be represented in its history. The East typifies the infinite, Greece the finite or reflective epoch, the modern era the stage of relation or correlation of infinite and finite. In theology, the dominant philosophical idea of each of these epochs results in pantheism, polytheism, theism. In politics we have in correspondence also with the idea, monarchy, democracy, constitutionalism.

Eclecticism.

Eclecticism thus means the application of the psychological method to the history of philosophy. Confronting the various systems co-ordinated as sensualism, idealism, scepticism, mysticism, with the facts of consciousness, the result was reached "that each system expresses an order of phenomena and ideas, which is in truth very real, but which is not alone in consciousness, and which at the same time holds an almost exclusive place in the system; whence it follows that each system is not false but incomplete, and that in re-uniting all incomplete systems, we should have a complete philosophy, adequate to the totality of consciousness." Philosophy, as thus perfected, would not be a mere aggregation of systems, as is ignorantly supposed, but an integration of the truth in each system after the false or incomplete is discarded.

Such is the system in outline. The historical position of the system lies in its relations to Kant, Schelling and Hegel. Cousin was opposed to Kant in asserting that the unconditioned in the form of infinite or absolute cause is

Relations to Kant, Schelling and Hegel.

but a mere unrealizable tentative or effort on the part of the mind, something different from a mere negation, yet not equivalent to a positive thought. With Cousin the absolute as the ground of being is grasped positively by the intelligence, and it renders all else intelligible; it is not as with Kant a certain hypothetical or regulative need.

With Schelling again Cousin agrees in regarding this supreme ground of all as positively apprehended, and as a source of development, but he utterly repudiates Schelling's method. The intellectual intuition either falls under the eye of consciousness, or it does not. If not, how do you know it and its object which are identical? If it does, it comes within the sphere of psychology; and the objections to it as thus a relative, made by Schelling himself, are to be dealt with. Schelling's intellectual intuition is the mere negation of knowledge.

Again the pure being of Hegel is a mere abstraction,—a hypothesis illegitimately assumed, which he has nowhere sought to vindicate. The very point to be established is the possibility of reaching being per se or pure being; yet in the Hegelian system this is the very thing assumed as a starting-point. Besides this, of course, objections might be made to the method of development, as not only subverting the principle of contradiction, but as galvanizing negation into a means of advancing or developing the whole body of human knowledge and reality. The intellectual intuition of Schelling, as above consciousness, the pure being of Hegel, as an empty abstraction, unvindicated, illegitimately assumed, and arbitrarily developed, are equally useless as bases of metaphysics. This led Cousin, still holding by essential knowledge of being, to ground it in an analysis of consciousness,—in psychology.

The absolute or infinite—the unconditioned ground and source of all reality—is yet apprehended by us as an immediate datum or reality; and it is

apprehended in consciousness—under its condition, that, to wit, of distinguishing subject and object, knower and known. The doctrine of Cousin was criticized by Sir W. Hamilton in the *Edinburgh Review* of 1829, and it was animadverted upon about the same time by Schelling. Hamilton's objections are as follows. The correlation of the ideas of infinite and finite does not necessarily imply their correality, as Cousin supposes; on the contrary, it is a presumption that finite is simply positive and infinite negative of the same—that the finite and infinite are simply contradictory relatives. Of these "the positive alone is real, the negative is only an abstraction of the other, and in the highest generality even an abstraction of thought itself." A study of the few sentences under this head might have obviated the trifling criticism of Hamilton's objection which has been set afloat recently, that the denial of a knowledge of the absolute or infinite implies a foregone knowledge of it. How can you deny the reality of that which you do not know? The answer to this is that in the case of contradictory statements—A and not A—the latter is a mere negation of the former, and posits nothing; and the negation of a notion with positive attributes, as the finite, does not extend beyond abolishing the given attributes as an object of thought. The infinite or non-finite is not necessarily known, ere the finite is negated, or in order to negate it; all that needs be known is the finite itself; and the contradictory negation of it implies no positive. Non-organized may or may not correspond to a positive —*i.e.* an object or notion with qualities contradictory of the organized; but the mere sublation of the organized does not posit it, or suppose that it is known beforehand, or that anything exists corresponding to it. This is one among many flaws in the Hegelian dialectic, and it paralyzes the whole of the *Logic*. Secondly, the conditions of intelligence, which Cousin allows, necessarily exclude the possibility of knowledge of the absolute—they are held to be incompatible with its unity. Here Schelling and Hamilton argue that Cousin's absolute is a mere relative. Thirdly, it is objected that in order

to deduce the conditioned, Cousin makes his absolute a relative; for he makes it an absolute cause, *i.e.* a cause existing absolutely under relation. As such it is necessarily inferior to the sum total of its effects, and dependent for reality on these—in a word, a mere potence or becoming. Further, as a theory of creation, it makes creation a necessity, and destroys the notion of the divine. Cousin made no reply to Hamilton's criticism beyond alleging that Hamilton's doctrine necessarily restricted human knowledge and certainty to psychology and logic, and destroyed metaphysics by introducing nescience and uncertainty into its highest sphere—theodicy.

Criticism of his philosophy. Impersonality of reason.

The attempt to render the laws of reason or thought impersonal by professing to find them in the sphere of spontaneous apperception, and above reflective necessity, can hardly be regarded as successful. It may be that we first of all primitively or spontaneously affirm cause, substance, time, space, &c., in this way. But these are still in each instance given us as realized in a particular form. In no single act of affirmation of cause or substance, much less in such a primitive act, do we affirm the universality of their application. We might thus get particular instances or cases of these laws, but we could never get the laws themselves in their universality, far less absolute impersonality. And as they are not supposed to be mere generalizations from experience, no amount of individual instances of the application of any one of them by us would give it a true universality. The only sure test we have of their universality in our experience is the test of their reflective necessity. We thus after all fall back on reflection as our ground for their universal application; mere spontaneity of apprehension is futile; their universality is grounded in their necessity, not their necessity in their universality. How far and in what sense this ground of necessity renders them personal are of course questions still to be solved.

But if these three correlative facts are immediately given, it seems to be thought possible by Cousin to vindicate them in reflective consciousness. He seeks to trace the steps which the reason has spontaneously and consciously, but irreflectively, followed. And here the question arises—Can we vindicate in a reflective or mediate process this spontaneous apprehension of reality?

The self is found to be a cause of force, free in its action, on the ground that we are obliged to relate the volition of consciousness to the self as its cause, and its ultimate cause. It is not clear from the analysis whether the self is immediately observed as an acting or originating cause, or whether reflection working on the principle of causality is compelled to infer its existence and character. If self is actually so given, we do not need the principle of causality to infer it; if it is not so given, causality could never give us either the notion or the fact of self as a cause or force, far less as an ultimate one. All that it could do would be to warrant a cause of some sort, but not this or that reality as the cause. And further, the principle of causality, if fairly carried out, as universal and necessary, would not allow us to stop at personality or will as the ultimate cause of its effect—volition. Once applied to the facts at all, it would drive us beyond the first antecedent or term of antecedents of volition to a still further cause or ground—in fact, land us in an infinite regress of causes.

The same criticism is even more emphatically applicable to the influence of a not-self, or world of forces, corresponding to our sensations, and the cause of them. Starting from sensation as our basis, causality could never give us this, even though it be allowed that sensation is impersonal to the extent of being independent of our volition. Causality might tell us that a cause there is of sensation somewhere and of some sort; but that this cause is a force or sum of forces, existing in space, independently of us, and corresponding to our sensations, it could never tell us, for the simple reason

that such a notion is not supposed to exist in our consciousness. Causality cannot add to the number of our notions,—cannot add to the number of realities we know. All it can do is to necessitate us to think that a cause there is of a given change, but *what* that cause is it cannot of itself inform us, or even suggest to us, beyond implying that it must be adequate to the effect. Sensation might arise, for aught we know, so far as causality leads us, not from a world of forces at all, but from a will like our own, though infinitely more powerful, acting upon us, partly furthering and partly thwarting us. And indeed such a supposition is, with the principle of causality at work, within the limits of probability, as we are already supposed to know such a reality—a will—in our own consciousness. When Cousin thus set himself to vindicate those points by reflection, he gave up the obvious advantage of his other position that the realities in question are given us in immediate and spontaneous apprehension. The same criticism applies equally to the inference of an absolute cause from the two limited forces which he names self and not-self. Immediate spontaneous apperception may seize this supreme reality; but to vindicate it by reflection as an inference on the principle of causality is impossible. This is a mere paralogism; we can never infer either absolute or infinite from relative or finite.

The truth is that Cousin's doctrine of the spontaneous apperception of impersonal truth amounts to little more than a presentment in philosophical language of the ordinary convictions and beliefs of mankind. This is important as a preliminary stage, but philosophy properly begins when it attempts to co-ordinate or systematize those convictions in harmony, to conciliate apparent contradiction and opposition, as between the correlative notions of finite and infinite, the apparently conflicting notions of personality and infinitude, self and not-self; in a word, to reconcile the various sides of consciousness with each other. And whether the laws of our reason are the laws of all intelligence and being—whether and how we are

to relate our fundamental, intellectual and moral conceptions to what is beyond our experience, or to an infinite being—are problems which Cousin cannot be regarded as having solved. These are in truth the outstanding problems of modern philosophy.

Volition.

Cousin's doctrine of spontaneity in volition can hardly be said to be more successful than his impersonality of the reason through spontaneous apperception. Sudden, unpremeditated volition may be the earliest and the most artistic, but it is not the best. Volition is essentially a free choice between alternatives, and that is best which is most deliberate, because it is most rational. Aristotle touched this point in his distinction between βούλησις and προαίρεσις. The sudden and unpremeditated wish represented by the former is wholly inferior in character to the free choice of the latter, guided and illumined by intelligence. In this we can deliberately resolve upon what is in our power; in that we are subject to the vain impulse of wishing the impossible. Spontaneity is pleasing, sometimes beautiful, but it is not in this instance the highest quality of the thing to be obtained. That is to be found in a guiding and illumining reflective activity.

General estimate.

Eclecticism is not open to the superficial objection of proceeding without a system or test in determining the complete or incomplete. But it is open to the objection of assuming that a particular analysis of consciousness has reached all the possible elements in humanity and in history, and all their combinations. It may be asked, Can history have that which is not in the individual consciousness? In a sense not; but our analysis may not give all that is there, and we ought not at once to impose that analysis or any formula on history. History is as likely to reveal to us in the first place true and original elements, and combinations of elements in man, as a study of consciousness. Besides, the tendency of applying a formula of this sort to

history is to assume that the elements are developed in a certain regular or necessary order, whereas this may not at all be the case; but we may find at any epoch the whole mixed, either crossing or co-operative, as in the consciousness of the individual himself. Further, the question as to how these elements may possibly have grown up in the general consciousness of mankind is assumed to be non-existent or impossible.

It was the tendency of the philosophy of Cousin to outline things and to fill up the details in an artistic and imaginative interest. This is necessarily the case, especially in the application to history of all formulas supposed to be derived either from an analysis of consciousness, or from an abstraction called pure thought. Cousin was observational and generalizing rather than analytic and discriminating. His search into principles was not profound, and his power of rigorous consecutive development was not remarkable. He left no distinctive permanent principle of philosophy. But he left very interesting psychological analyses, and several new, just, and true expositions of philosophical systems, especially that of Locke and the philosophers of Scotland. He was at the same time a man of impressive power, of rare and wide culture, and of lofty aim,—far above priestly conception and Philistine narrowness. He was familiar with the broad lines of nearly every system of philosophy ancient and modern. His eclecticism was the proof of a reverential sympathy with the struggles of human thought to attain to certainty in the highest problems of speculation. It was eminently a doctrine of comprehension and of toleration. In these respects it formed a marked and valuable contrast to the arrogance of absolutism, to the dogmatism of sensationalism, and to the doctrine of church authority, preached by the theological school of his day. His spirit, while it influenced the youth of France, saved them from these influences. As an educational reformer, as a man of letters and learning, who trod “the large and impartial ways of knowledge,” and who swayed others to the same paths, as a thinker influential alike in the action and the reaction to which he led, Cousin

stands out conspicuously among the memorable Frenchmen of the 19th century.

Sir W. Hamilton (*Discussions*, p. 541), one of his most resolute opponents, described Cousin as "A profound and original thinker, a lucid and eloquent writer, a scholar equally at home in ancient and in modern learning, a philosopher superior to all prejudices of age or country, party or profession, and whose lofty eclecticism, seeking truth under every form of opinion, traces its unity even through the most hostile systems."

BIBLIOGRAPHY.—J. Barthélemy St Hilaire, *V. Cousin, sa vie et sa correspondence* (3 vols., Paris, 1895); H. Höffding, *Hist. of Mod. Phil.* ii. 311 (Eng. trans., 1900); C. E. Fuchs, *Die Philosophie Victor Cousins* (Berlin, 1847); J. Alaux, *La Philos. de M. Cousin* (Paris, 1864); P. Janet, *Victor Cousin et son œuvre* (Paris, 1885); Jules Simon, *V. Cousin* (1887); Adolphe Franck, *Moralistes et philosophes* (1872); J. P. Damiron, *Souvenirs de vingt ans d'enseignement* (Paris, 1859); H. Taine in *Les Philosophes* (Paris, 1868), pp. 79-202.

(J. V.; X.)

1 *Fragmens philosophiques—préface deuxième.*

2 *Du vrai, du beau, et du bien* (preface).

COUSIN (Fr. *cousin*, Ital. *cugino*, Late Lat. *cosinus*, perhaps a popular and familiar abbreviation of *consobrinus*, which has the same sense in classical Latin), a term of relationship. Children of brothers and sisters are to each other first cousins, or cousins-german; the children of first cousins are to each other second cousins, and so on; the child of a first cousin is to the first cousin of his father or mother a first cousin once removed.

The word cousin has also, since the 16th century, been used by sovereigns as an honorific style in addressing persons of exalted, but not equal sovereign, rank, the term "brother" being reserved as the style used by one sovereign in addressing another. Thus, in Great Britain, dukes, marquesses and earls are addressed by the sovereign in royal writs, &c., as "cousin." In France the kings thus addressed princes of the blood royal,

cardinals and archbishops, dukes and peers, the marshals of France, the grand officers of the crown and certain foreign princes. In Spain the right to be thus addressed is a privilege of the grandees.

COUSINS, SAMUEL (1801-1887), English mezzotint engraver, was born at Exeter on the 9th of May 1801. He was preeminently the interpreter of Sir Thomas Lawrence, his contemporary. During his apprenticeship to S. W. Reynolds he engraved many of the best amongst the three hundred and sixty little mezzotints illustrating the works of Sir Joshua Reynolds which his master issued in his own name. In the finest of his numerous transcripts of Lawrence, such as “Lady Acland and her Sons,” “Pope Pius VII.” and “Master Lambton,” the distinguishing characteristics of the engraver’s work, brilliancy and force of effect in a high key, corresponded exactly with similar qualities in the painter. After the introduction of steel for engraving purposes about the year 1823, Cousins and his contemporaries were compelled to work on it, because the soft copper previously used for mezzotint plates did not yield a sufficient number of fine impressions to enable the method to compete commercially against line engraving, from which much larger editions were obtainable. The painter-like quality which distinguished the 18th-century mezzotints on copper was wanting in his later works, because the hardness of the steel on which they were engraved impaired freedom of execution and richness of tone, and so enhanced the labour of scraping that he accelerated the work by stipple, etching the details instead of scraping them out of the “ground” in the manner of his predecessors. To this “mixed style,” previously used by Richard Earlom on

copper, Cousins added heavy roulette and rocking-tool textures, tending to fortify the darks, when he found that the "burr" even on steel failed to yield enough fine impressions to meet the demand. The effect of his prints in this method after Reynolds and Millais was mechanical and out of harmony with the picturesque technique of these painters, but the phenomenal popularity which Cousins gained for his works at least kept alive and in favour a form of mezzotint engraving during a critical phase of its history. Abraham Raimbach, the line engraver, dated the decline of his own art in England from the appearance in 1837 of Cousins's print (in the "mixed style") after Landseer's "Bolton Abbey." Such plates as "Miss Peel," after Lawrence (published in 1833); "A Midsummer Night's Dream," after Landseer (1857); "The Order of Release" and "The First Minuet," after Millais (1856 and 1868); "The Strawberry Girl" and "Lavinia, Countess Spencer," after Reynolds; and "Miss Rich," after Hogarth (1873-1877), represent various stages of Cousins's mixed method. It reached its final development in the plates after Millais's "Cherry Ripe" and "Pomona," published in 1881 and 1882, when the invention of coating copper-plates with a film of steel to make them yield larger editions led to the revival of pure mezzotint on copper, which has since rendered obsolete the steel plate and the mixed style which it fostered. The fine draughtsmanship of Cousins was as apparent in his prints as in his original lead-pencil portraits exhibited in London in 1882. In 1885 he was elected a full member of the Royal Academy, to which institution he later gave in trust £15,000 to provide annuities for superannuated artists who had not been so successful as himself. One of the most important figures in the history of British engraving, he died in London, unmarried, on the 7th of May 1887.

See George Pycroft, M.R.C.S.E., *Memoir of Samuel Cousins, R.A., Member of the Legion of Honour* (published for private circulation by E. E. Leggatt, London, 1899); Algernon Graves, *Catalogue of the Works of Samuel Cousins, R.A.* (published by H. Graves and Co.,

London, 1888); and Alfred Whitman, *Samuel Cousins* (published by George Bell & Sons, London, 1904), which contains a catalogue, good illustrations, and much detail useful to the collector and dealer. (G. P. R.)

COUSTOU, the name of a famous family of French sculptors.

NICOLAS COUSTOU (1658-1733) was the son of a wood-carver at Lyons, where he was born. At eighteen he removed to Paris, to study under C. A. Coysevox, his mother's brother, who presided over the recently-established Academy of Painting and Sculpture; and at three-and-twenty he gained the Colbert prize, which entitled him to four years' education at the French Academy at Rome. He afterwards became rector and chancellor of the Academy of Painting and Sculpture. From the year 1700 he was a most active collaborator with Coysevox at the palaces of Marly and Versailles. He was remarkable for his facility; and though he was specially influenced by Michelangelo and Algardi, his numerous works are among the most typical specimens of his age now extant. The most famous are "La Seine et la Marne," "La Saône," the "Berger Chasseur" in the gardens of the Tuileries, the bas-relief "Le Passage du Rhin" in the Louvre, and the "Descent from the Cross" placed behind the choir altar of Notre Dame at Paris.

His younger brother, GUILLAUME COUSTOU (1677-1746), was a sculptor of still greater merit. He also gained the Colbert prize; but refusing to submit to the rules of the Academy, he soon left it, and for some time wandered houseless through the streets of Rome. At length he was

befriended by the sculptor Legros, under whom he studied for some time. Returning to Paris, he was in 1704 admitted into the Academy of Painting and Sculpture, of which he afterwards became director; and, like his brother, he was employed by Louis XIV. His finest works are the famous group of the "Horse Tamers," originally at Marly, now in the Champs Elysées at Paris, the colossal group "The Ocean and the Mediterranean" at Marly, the bronze "Rhône" which formed part of the statue of Louis XIV. at Lyons, and the sculptures at the entrance of the Hôtel des Invalides. Of these latter, the bas-relief representing Louis XIV. mounted and accompanied by Justice and Prudence was destroyed during the Revolution, but was restored in 1815 by Pierre Cartellier from Coustou's model; the bronze figures of Mars and Minerva, on either side of the doorway, were not interfered with.

Another GUILLAUME COUSTOU (1716-1777), the son of Nicolas, also studied at Rome, as winner of the Colbert prize. While to a great extent a copyist of his predecessors, he was much affected by the bad taste of his time, and produced little or nothing of permanent value.

See Louis Gougenot, *Éloge de M. Coustou le jeune* (1903); Arsène Houssaye, *Histoire de l'art français au XVIIIe siècle* (1860); Lady Dilke, *Gazette des beaux-arts*, vol. xxv. (1901) (2 articles).

COUTANCES, WALTER OF (d. 1207), bishop of Lincoln and archbishop of Rouen, commenced his career in the chancery of Henry II., was elected bishop of Lincoln in 1182, and in 1184 obtained, with the

king's help, the see of Rouen. Throughout his career he was much employed in diplomatic and administrative duties. He started with Richard I. for the Third Crusade, but was sent back from Messina to investigate the charges which the barons and the official class had brought against the chancellor, William Longchamp. There was no love lost between the two; and they were popularly supposed to be rivals for the see of Canterbury. The archbishop of Rouen sided with the barons and John, and sanctioned Longchamp's deposition—a step which was technically warranted by the powers which Richard had given, but by no means calculated to protect the interests of the crown. The Great Council now recognized the archbishop as chief justiciar, and he remained at the head of the government till 1193, when he was replaced by Hubert Walter. The archbishop did good service in the negotiations for Richard's release, but subsequently quarrelled with his master and laid Normandy under an interdict, because the border stronghold of Château Gaillard in the Vexin had been built on his land without his consent. After Richard's death the archbishop accepted John as the lawful heir of Normandy and consecrated him as duke. But his personal inclinations leaned to Arthur of Brittany, whom he was with difficulty dissuaded from supporting. The archbishop accepted the French conquest of Normandy with equanimity (1204), although he kept to his old allegiance while the issue of the struggle was in doubt. He did not long survive the conquest, and his later history is a blank.

See W. Stubbs's editions of *Benedictus Abbas*, *Hoveden* and *Diceto* (Rolls series); R. Howlett's edition of "William of Newburgh" and "Richard of Devizes" in *Chronicles, &c., of the Reigns of Stephen, Henry II. and Richard I.* (Rolls series). See also the preface to the third volume of Stubbs's *Hoveden*, pp. lix.-xcviii.; J. H. Round's *Commune of London*, and the French poem on *Guillaume le Maréchal* (ed. P. Meyer, *Soc. de l'Histoire de France*).

(H. W. C. D.)

COUTANCES, a town of north-western France, capital of an arrondissement of the department of Manche, 7 m. E. of the English Channel and 58 m. S. of Cherbourg on the Western railway. Pop. (1906) 6089. Coutances is beautifully situated on the right bank of the Soulle on a granitic eminence crowned by the celebrated cathedral of Notre-Dame. The date of this church has been much disputed, but while traces of Romanesque architecture survive, the building is, in the main, Gothic in style and dates from the first half of the 13th century. The slender turrets massed round the western towers and the octagonal central tower, which forms a lantern within, are conspicuous features of the church. In the interior, which comprises the nave with aisles, transept and choir with ambulatory and side chapels, there are fine rose-windows with stained glass of the 14th century, and other works of art. Of the other buildings of Coutances the church of St Pierre, in which Renaissance architecture is mingled with Gothic, and that of St Nicolas, of the 16th and 17th centuries, demand mention. There is an aqueduct of the 14th century to the west of the town. Coutances is a quiet town with winding streets and pleasant boulevards bordering it on the east; on the western slope of the hill there is a public garden. The town is the seat of a bishop, a court of assizes and a sub-prefect; it has tribunals of first instance and of commerce, a lycée for boys, a communal college and a training college for girls, and an ecclesiastical seminary. Leather-dressing and wool-spinning are carried on and there is trade in live-stock, in agricultural produce, especially eggs, and in marble.

Coutances is the ancient *Cosedia*, which before the Roman conquest was one of the chief towns in the country of the Unelli. Towards the end of the 3rd century its name was changed to *Constantia*, in honour of the emperor Constantius Chlorus, who fortified it. It became the capital of the *pagus Constantinus* (Cotentin), and in the middle ages was the seat of a viscount. It has been an episcopal see since the 5th century. In the 17th century it was the centre of the revolt of the *Nu-pieds*, caused by the imposition of the salt-tax (*gabelle*).

A good bibliography of general works and monographs on the archaeology and the history of the town and diocese of Coutances is given in U. Chevalier, *Répertoire des sources, &c., Topo-Bibliographie* (Montbéliard, 1894-1899), s.v.

COUTHON, GEORGES (1755-1794), French revolutionist, was born at Orcet, a village in the district of Clermont in Auvergne. He studied law, and was admitted advocate at Clermont in 1785. At this period he was noted for his integrity, gentle-heartedness and charitable disposition. His health was feeble and both legs were paralysed. In 1787 he was a member of the provincial assembly of Auvergne. On the outbreak of the Revolution Couthon, who was now a member of the municipality of Clermont-Ferrand, published his *L'Aristocrate converti*, in which he revealed himself as a liberal and a champion of constitutional monarchy. He became very popular, was appointed president of the tribunal of the town of Clermont in 1791, and in September of the same year was elected deputy to the Legislative Assembly. His views had meanwhile been embittered by the

attempted flight of Louis XVI., and he distinguished himself now by his hostility to the king. A visit to Flanders for the sake of his health brought him into close intercourse and sympathy with Dumouriez. In September 1792 Couthon was elected member of the National Convention, and at the trial of the king voted for the sentence of death without appeal. He hesitated for a time as to which party he should join, but finally decided for that of Robespierre, with whom he had many opinions in common, especially in matters of religion. He was the first to demand the arrest of the proscribed Girondists. On the 30th of May 1793 he became a member of the Committee of Public Safety, and in August was sent as one of the commissioners of the Convention attached to the army before Lyons. Impatient at the slow progress made by the besieging force, he decreed a *levée en masse* in the department of Puy-de-Dôme, collected an army of 60,000 men, and himself led them to Lyons. When the city was taken, on the 9th of October 1793, although the Convention ordered its destruction, Couthon did not carry out the decree, and showed moderation in the punishment of the rebels. The Republican atrocities began only after Couthon was replaced, on the 3rd of November 1793, by Collot d'Herbois. Couthon returned to Paris, and on the 21st of December was elected president of the Convention. He contributed to the prosecution of the Hébertists, and was responsible for the law of the 22nd Prairial, which in the case of trials before the Revolutionary Tribunal deprived the accused of the aid of counsel or of witnesses or their defence, on the pretext of shortening the proceedings. During the crisis preceding the 9th Thermidor, Couthon showed considerable courage, giving up a journey to Auvergne in order, as he wrote, that he might either die or triumph with Robespierre and liberty. Arrested with Robespierre and Saint-Just, his colleagues in the triumvirate of the Terror, and subjected to indescribable sufferings and insults, he was taken to the scaffold on the same cart with Robespierre on the 28th of July 1794 (10th Thermidor).

See Fr. Mège, *Correspondance de Couthon ... suivie de "l'Aristocrate converti," comédie en deux actes de Couthon* (Paris, 1872); and *Nouveaux Documents sur Georges Couthon* (Clermont-Ferrand, 1890); also F. A. Aulard, *Les Orateurs de la Législative et de la Convention* (Paris, 1885-1886), ii. 425-443.

COUTTS, THOMAS (1735-1822), English banker and founder of the banking house of Coutts & Co., was born on the 7th of September 1735. He was the fourth son of John Coutts (1699-1751), who carried on business in Edinburgh as a corn factor and negotiator of bills of exchange, and who in 1742 was elected lord provost of the city. The family was originally of Montrose, but one of its members had settled at Edinburgh about 1696. Soon after the death of John Coutts the business was divided into two branches, one carried on in Edinburgh, the other in London. The banking business in London was in the hands of James and Thomas Coutts, sons of John Coutts. From the death of his brother in 1778, Thomas, as surviving partner, became sole head of the firm; and under his direction the banking house rose to the highest distinction. His ambition was to establish his character as a man of business and to make a fortune; and he lived to succeed in this aim and long to enjoy his reputation and wealth. A gentleman in manners, hospitable and benevolent, he counted amongst his friends some of the literary men and the best actors of his day. Of the enormous wealth which came into his hands he made munificent use. His private life was not without its romantic elements. Soon after his settlement in London he married Elizabeth Starkey, a young woman of humble origin,

who was in attendance on the daughter of his brother James. They lived happily together, and had three daughters—Susan, married in 1796 to the 3rd earl of Guilford; Frances, married in 1800 to John, 1st marquess of Bute; and Sophia, married in 1793 to Sir Francis Burdett. Mrs Coutts dying in 1815, her husband soon after married the popular actress, Harriet Mellon; and to her he left the whole of his immense fortune. He died in London on the 24th of February 1822. His widow married in 1827 the 9th duke of St Albans, and died ten years later, having bequeathed her property to Angela, youngest daughter of Sir Francis Burdett, who then assumed the additional name and arms of Coutts. In 1871 this lady was created Baroness Burdett-Coutts (*q.v.*).

See C. Rogers, *Genealogical Memoirs of the Families of Colt and Coutts* (1879); and R. Richardson, *Coutts & Co.* (1900).

COUTURE, THOMAS (1815-1879), French painter, was born at Senlis (Oise), and studied under Baron A. J. Gros and Paul Delaroche, winning a Prix de Rome in 1837. He began exhibiting historical and *genre* pictures at the Salon in 1840, and obtained several medals. His masterpiece was his "Romans in the Decadence of the Empire" (1847), now in the Luxembourg; and his "Love of Money" (1844; at Toulouse), "Falconer" (1855), and "Damocles" (1872), are also good examples.

COUVADE (literally a “brooding,” from Fr. *couver*, to hatch, Lat. *cubare*, to lie down), a custom so called in Béarn, prevalent among several peoples in different parts of the world, requiring that the father, at and sometimes before the birth of his child, shall retire to bed and fast or abstain from certain kinds of food, receiving the attentions generally shown to women at their confinements. The existence of the custom in ancient classical times is testified to by Apollonius Rhodius, Diodorus (who refers to its existence among the Corsicans), and Strabo (who noticed it among the Spanish Basques, by whom, as well as by the Gascons, it has been said to be still observed, though the most recent researches entirely discredit this). Travellers, from the time of Marco Polo, who relates its observance in Chinese Turkestan, have found the custom to prevail in China, India, Borneo, Siam, Africa and the Americas. Even in Europe it cannot be said to have entirely disappeared. In certain of the Baltic provinces of Russia the husband, on the lying-in of the wife, takes to his bed and groans in mock pain. One writer believes he found traces of it in the little island of Marken in the Zuyder Zee. Even in rural England, notably in East Anglia, a curiously obstinate belief survives (the prevalence of which in earlier times is proved by references to it in Elizabethan drama) that the pregnancy of the woman affects the man, and the young husband who complains of a toothache is assailed by pleasantries as to his wife’s condition. In Guiana the custom is observed in its most typical form. The woman works to within a few hours of the birth, but some days before her delivery the father leaves his occupations and abstains from certain kinds of animal food lest the child should suffer. Thus the flesh of the agouti is forbidden, lest the child should be lean, and that of the capibara or water-cavy, for fear he should inherit through his father’s gluttony that creature’s projecting teeth. A few hours before delivery the woman goes alone, or with one or two women-friends, into the forest, where the baby is born. She returns as soon as she can stand, to her work, and the man then takes to his hammock and becomes the

invalid. He must do no work, must touch no weapons, is forbidden all meat and food, except at first a fermented liquor and after the twelfth day a weak gruel of *cassava* meal. He must not even smoke, or wash himself, but is waited on hand and foot by the women. So far is the comedy carried that he whines and groans as if in actual pain. Six weeks after the birth of the child he is taken in hand by his relatives, who lacerate his skin and rub him with a decoction of the pepper-plant. A banquet is then held from which the patient is excluded, for he must not leave his bed till several days later; and for six months he must eat the flesh of neither fish nor bird. Almost identical ceremonies have been noticed among the natives of California and New Mexico; while in Greenland and Kamchatka the husband may not work for some time before and after his wife's confinement. Among the Larkas of Bengal a period of isolation and uncleanness, synchronous with that compulsory on the woman, is imperative for the man, on the conclusion of which the child's parentage is publicly proclaimed.

No certain explanation can be offered for the custom. The most reasonable view is that adopted by E. B. Tylor, who traces in it the transition from the earlier matriarchal to the later patriarchal system of tribe-organization. Among primitive tribes, and probably in all ages, the former order of society, in which descent and inheritance are reckoned through the mother alone, as being the earliest form of family life, is and was very common, if not universal. The acknowledgment of a relationship between father and son is characteristic of the progress of society towards a true family life. It may well be that the Couvade arose in the father's desire to emphasize the bond of blood between himself and his child. It is a fact that in some countries the father has to purchase the child from its mother; and in the Roman ceremony of the husband raising the baby from the floor we may trace the savage idea that the male parent must formally proclaim his adoption of and responsibility for the offspring. Max Müller, in his *Chips from a German Workshop*, endeavoured to find an explanation in

primitive "henpecking," asserting that the unfortunate husband was tyrannized over by "his female relatives and afterwards frightened into superstition,"—that, in fact, the whole fabric of ceremony is reared on nothing but masculine hysteria; but this theory can scarcely be taken seriously. The missionary, Joseph François Lafitau, suspected a psychological reason, assuming the custom to be a dim recollection of original sin, the isolation and fast types of repentance. The explanation of the American Indians is that if the father engaged in any hard or hazardous work, *e.g.* hunting, or was careless in his diet, the child would suffer and inherit the physical faults and peculiarities of the animals eaten. This belief that a person becomes possessed of the nature and form of the animal he eats is widespread, being as prevalent in the Old World as in the New, but it is insufficient to account for the minute ceremonial details of La Couvade as practised in many lands. It is far more likely that so universal a practice has no trivial beginnings, but is to be considered as a mile-stone marking a great transitional epoch in human progress.

AUTHORITIES.—E. B. Tylor's *Early History of Man* (1865; 2nd ed. p. 301); F. Max Müller, *Chips from a German Workshop* (1868-1875), ii. 281; Lord Avebury, *Origin of Civilisation* (1900); Brett's *Indian Tribes of Guiana*; Johann Baptist von Spix and Karl F. P. von Martius, *Travels in Brazil* (1823-1831), ii. 281; J. F. Lafitau, *Mœurs des sauvages américains* (1st ed., 1724); W. Z. Ripley, *Races of Europe* (1900); A. H. Keane's *Ethnology* (1896), p. 368 and footnote; A. Giraud-Teulon, *Les Origines du mariage et de la famille* (Paris, 1884).

COVE, a word mostly used in the sense of a small inlet or sheltered bay in a coast-line. In English dialect usage it is also applied to a cave or to a recess in a mountain-side. The word in O. Eng. is *cofa*, and cognate forms are found in the Ger. *Koben*, Norwegian *kove*, and in various forms in other Teutonic languages. It has no connexion with "alcove," recess in a room or building, which is derived through the Span. *alcoba* from Arab. *al*, the, and *qubbah*, vault, arch, nor with "cup" or "coop," nor with "cave" (Lat. *cava*). The use of the word was first confined to a small chamber or cell or inner recess in a room or building. From this has come the particular application in architecture to any kind of concave moulding, the term being usually applied to the quadrantal curve rising from the cornice of a lofty room to the moulded borders of the horizontal ceiling. The term "coving" is given in half-timbered work to the curved soffit under a projecting window, or in the 18th century to that occasionally found carrying the gutter of a house. In the Musée Plantin at Antwerp the hearth of the fireplace of the upper floor is carved on coving, which forms part of the design of the chimney-piece in the room below. The slang use of "cove" for any male person, like a "fellow," "chap," &c., is found in the form "cofe" in T. Harman's *Caveat for Cursetors* (1587) and other early quotations. This seems to be identical with the Scots word "cofe," a pedlar, hawker, which is formed from "coff," to sell, purchase, cognate with the Ger. *kaufen*, to buy, and the native English "cheap." The word "cove," therefore, is in ultimate origin the same as "chap," short for "chapman," a pedlar.

COVELLITE, a mineral species consisting of cupric sulphide, CuS, crystallizing in the hexagonal system. It is of less frequent occurrence in nature than copper-glance, the orthorhombic cuprous sulphide. Crystals are very rare, the mineral being usually found as compact and earthy masses or as a blue coating on other copper sulphides. Hardness 1½-2; specific gravity 4.6. The dark indigo-blue colour is a characteristic feature, and the mineral was early known as indigo-copper (Ger. *Kupferindig*). The name covellite is taken from N. Covelli, who in 1839 observed crystals of cupric sulphide encrusting Vesuvian lava, the mineral having been formed here by the interaction of hydrogen sulphide and cupric chloride, both of which are volatile volcanic products. Covellite is, however, more commonly found in copper-bearing veins, where it has resulted by the alteration of other copper sulphides, namely chalcopyrite, copper-glance and erubescite. It is found in many copper mines; localities which may be specially mentioned are Sangerhausen in Prussian Saxony, Butte in Montana, and Chile; in the Medicine Bow Mountains of Wyoming a platiniferous covellite is mined, the platinum being present as sperrylite (platinum arsenide).

(L. J. S.)

COVENANT (an O. Fr. form, later *convenant*, from *convenir*, to agree, Lat. *convenire*), a mutual agreement of two or more parties, or an undertaking made by one of the parties. In the Bible the Hebrew word הירב, *bĕrīth*, is used widely for many kinds of agreements; it is then applied to a contract between two persons or to a treaty between two nations, such as the covenant made between Abimelech and Isaac, representing a treaty between the Israelites and the Philistines (Gen. xxvi. 26, seq.); more

particularly to an engagement made between God and men, or such agreements as, by the observance of a religious rite, regarded God as a party to the engagement. Two suggestions have been made for the derivation of *bĕrīth*: (1) tracing the word from a root "to cut," and the reference is to the primitive rite of cutting victims into parts, between which the parties to an agreement passed, cf. the Greek ὅρκια τέμνειν, and the account (Gen. xv. 17) of the covenant between God and Abraham, where "a smoking furnace and burning lamp passed between the pieces" of the victims Abraham had sacrificed; (2) connecting it with an Assyrio-Babylonian *biritu*, fetter, alliance. *Bĕrīth* was translated in the Septuagint by διαθήκη, which in classical Greek had the meaning of "will"; hence the Vulgate, in the Psalms and the New Testament, translates the word by *testamentum*, but elsewhere in the Old Testament by *foedus* or *pactum*; similarly Wycliffe's version gives "testament" and "covenant" respectively. The books of Scripture dealing with the old or Mosaic, and new or Christian dispensation are sometimes known as the Books of the Old and the New Covenant. The word appears in the system of theology developed by Johannes Cocceius (*q.v.*), and known as the "Covenant" or "Federal" Theology, based on the two Covenants of Works or Life made by God with Adam, on condition of obedience, and of grace or redemption, made with Christ. In Scottish ecclesiastical history, covenant appears in the two agreements signed by the members of the Scottish Church in defence of their religious and ecclesiastical systems (see COVENANTERS).

COVENANT, in law, is the English equivalent of the Lat. *conventio*, which, although not technical, was the most general word in Roman law for "agreement." It was frequently used along with *pactum*, also a general term, but applied especially to agreements to settle a question without carrying it before the courts of law.

The word "covenant" has been used in a variety of senses in English law.

1. In its strict sense, covenant means an agreement *under seal*, that something has or has not already been done, or shall or shall not be done hereafter (Shep. *Touchstone*, 160, 162). It is most commonly used with reference to sales or leases of land, but is sometimes applied to any promise or stipulation, whether under seal or not. The person who makes, and is bound to perform, the promise or stipulation is the covenantor: the person in whose favour it is made is the covenantee.

2. Covenants have been subdivided into numerous classes, only a few of which need to be described. It is unnecessary to do more than mention affirmative and negative covenants, joint or several, alternative or disjunctive covenants, dependent or independent covenants. As to collateral covenants, covenants "running with the land," and covenants in leases (including "usual," "proper" and "restrictive" covenants), see LANDLORD AND TENANT. But there are other classes as to which something must be said.

A covenant is said to be *express* when it is created by the express words of the parties to the deed declaratory of their intention. It is not indispensable that the word "covenant" should be used. Any word which clearly indicates the intention of the parties to covenant will suffice. An *implied* covenant, or *covenant in law*, "depends for its existence on the intendment and construction of law. There are some words which of themselves do not import an express covenant, yet, being made use of in

certain contracts, have a similar operation and are called covenants in law; and they are as effectually binding on the parties as if expressed in the most unequivocal terms" (Platt on *Covenants*, p. 40). Thus, the word "demise," used in a lease of deed, raises the implication of a covenant both for "quiet enjoyment" and for title to let; and it has been judicially suggested that a covenant for quiet enjoyment may be implied from any word or words of like import (*Budd-Scott* v. *Daniell*, 1902, 2 K.B. p. 359). The Conveyancing Act 1881 provides (§ 7) that in a conveyance for valuable consideration, other than a mortgage, there shall be implied, as against the person who conveys and is expressed to convey as "beneficial owner," certain *qualified* covenants—*i.e.* covenants extending only to the acts or omissions of the vendor, persons through whom he derives title otherwise than by purchase for value, and persons claiming under them—for "right to convey," "quiet enjoyment," "freedom from incumbrances" and "further assurance." Of these statutory covenants for title the only one which requires explanation is the covenant for further assurance. It imports an agreement on the part of the covenantor to do such reasonable acts, in addition to those already performed, as may be necessary for the completion of the transfer made (or intended to be made) at the requirements of the covenantee (Platt on *Covenants*, p. 341). All these statutory implied covenants "run with the land" (see LANDLORD AND TENANT). Where a mortgagor conveys, and is expressed to convey, as "beneficial owner," there are implied *absolute* covenants—*i.e.* covenants amounting to a warranty against and for the acts and omissions of the whole world—that he has a right to convey, that the mortgagee shall have quiet enjoyment of the property after default, free from incumbrances and for further assurance. Special provisions as to implied covenants by the lessor in leases are made in England by § 7 (B) of the Conveyancing Act 1881 and in Ireland by the Land Act (Ireland) 1860, § 41. The distinction between *real* and *personal* covenants is that the former do, while the latter do not, run with the land. An *inherent* covenant is

another name for a *real* covenant (Shep. *Touchstone*, 176; Platt, 60). When a covenant relates to an act already done, it is usually termed a covenant *executed*; where the performance is future, the covenant is termed *executory*. The *covenant for seisin* was an assurance to the grantee that the grantor had the estate which he purported to convey. In England it is now included in the covenant for right to convey; but is still in separate use in several states in America. The *covenant to stand seised to uses* was an assurance by means of which, under the Statute of Uses [1536] (see USES), a conveyance of an estate might be effected. When such a covenant is made, the legal estate in the land passes at once to the covenantee under the statute. The consideration for the covenant must be relationship by blood or marriage. It is still occasionally though very rarely employed. The *covenant not* to *sue* belongs to the law of contract and needs no explanation.

Most of the classes of covenants above mentioned are in use in the United States. In New York, Michigan, Minnesota, Oregon, Wisconsin and Wyoming the implication of covenants for title has been, with certain exceptions, prohibited by statute. In Alabama, Arkansas, Delaware, Illinois, Indiana, Mississippi, Missouri, Montana, Nevada, New Mexico, Pennsylvania and Texas the words *grant*, *bargain* and *sell*, in conveyances in fee, unless specially restricted, amount to qualified covenants that the grantor was seised in fee, free from incumbrances, and for quiet enjoyment (4 Kent, *Commentaries*, § 473; Bouvier, *Law Dictionary*, s.v. Covenant). In some of the states a *covenant of non-claim*, or of *warranty*, an assurance by the grantor that neither he nor his heirs, nor any other person shall claim any title in the premises conveyed, is in general use.

3. An *action of covenant* lay for breaking covenant. As to the history of this action see Pollock and Maitland, *History of English Law*, ii. 106; and Holmes, *The Common Law*, p. 272. There was also a *writ of covenant*. But

this remedy had fallen into disuse before 1830 (see Platt on *Covenants*, p. 543), and was abolished by the Common Law Procedure Acts. Since the Judicature Acts, an action on a covenant follows the same course as, and is indistinguishable from, any ordinary action for breach of contract. The remedy is by damages, decree of specific performance or injunction to prevent the breach.

The term "covenant" is unknown to Scots law. But its place is filled to some extent by the doctrine of "warrandice." Many of the British colonies have legislated, as to the implication of covenants for title, on the lines of the English Conveyancing Act 1881; *e.g.* Tasmania, Conveyancing and Law of Property Act 1884 (47 Vict. No. 10).

As to covenants in restraint of trade see RESTRAINT.

AUTHORITIES.—In addition to the authorities cited in the text see: *English Law*; Goodeve, *Law of Real Property* (5th ed., London, 1906); C. Foa, *Landlord and Tenant* (3rd ed., London, 1901); Hamilton, *Law of Covenants* (London); Fawcett, *Law of Landlord and Tenant* (3rd ed., London, 1905). *American Law: Rawle, Law of Covenants for Title* (Boston, 1887); *Encyclopaedia of American Law* (3rd ed., 1890), vol. viii., tit. "Covenants."

(A. W. R.)

COVENANTERS, the name given to a party which, originating in the Reformation movement, played an important part in the history of Scotland, and to a lesser extent in that of England, during the 17th century. The

Covenanters were thus named because in a series of *bands* or *covenants* they bound themselves to maintain the Presbyterian doctrine and polity as the sole religion of their country. The first "godly band" is dated December 1557; but more important is the covenant of 1581, drawn up by John Craig in consequence of the strenuous efforts which the Roman Catholics were making to regain their hold upon Scotland, and called the King's Confession or National Covenant. Based upon the Confession of Faith of 1560, this document denounced the pope and the doctrines of the Roman Catholic Church in no measured terms. It was adopted by the General Assembly, signed by King James VI. and his household, and enjoined on persons of all ranks and classes; and was again subscribed in 1590 and 1596. In 1637 Scotland was in a state of turmoil. Charles I. and Archbishop Laud had just met with a reverse in their efforts to impose the English liturgy upon the Scots; and fearing further measures on the part of the king, it occurred to Archibald Johnston, Lord Warriston, to revive the National Covenant of 1581. Additional matter intended to suit the document to the special circumstances of the time was added, and the covenant was adopted and signed by a large gathering in Greyfriars' churchyard, Edinburgh, on the 28th of February 1638, after which copies were sent throughout the country for additional signatures. The subscribers engaged by oath to maintain religion in the state in which it existed in 1580, and to reject all innovations introduced since that time, while professed expressions of loyalty to the king were added. The General Assembly of 1638 was composed of ardent Covenanters, and in 1640 the covenant was adopted by the parliament, and its subscription was required from all citizens. Before this date the Covenanters were usually referred to as *Supplicants*, but from about this time the former designation began to prevail.

A further development took place in 1643. The leaders of the English parliament, worsted in the Civil War, implored the aid of the Scots, which was promised on condition that the Scottish system of church government

was adopted in England. After some haggling a document called the Solemn League and Covenant was drawn up. This was practically a treaty between England and Scotland for the preservation of the reformed religion in Scotland, the reformation of religion in England and Ireland "according to the word of God and the example of the best reformed churches," and the extirpation of popery and prelacy. It was subscribed by many in both kingdoms and also in Ireland, and was approved by the English parliament, and with some slight modifications by the Westminster Assembly of Divines. Charles I. refused to accept it when he surrendered himself to the Scots in 1646, but he made important concessions in this direction in the "Engagement" made with the Scots in December 1647. Charles II. before landing in Scotland in June 1650 declared by a solemn oath his approbation of both covenants, and this was renewed on the occasion of his coronation at Scone in the following January.

From 1638 to 1651 the Covenanters were the dominant party in Scotland, directing her policy both at home and abroad. Their power, however, which had been seriously weakened by Cromwell's victory at Dunbar in September 1651, was practically destroyed when Charles II. was restored nine years later. Firmly seated upon the throne Charles renounced the covenants, which in 1662 were declared unlawful oaths, and were to be abjured by all persons holding public offices. Episcopacy was restored, the court of high commission was revived, and ministers who refused to recognize the authority of the bishops were expelled from their livings. Gathering around them many of the Covenanters who clung tenaciously to their standards of faith, these ministers began to preach in the fields, and a period of persecution marked by savage hatred and great brutality began. Further oppressive measures were directed against the Covenanters, who took up arms about 1665, and the struggle soon assumed the proportions of a rebellion. The forces of the crown under John Graham of Claverhouse and others were sent against them, and although the insurgents gained isolated

successes, in general they were worsted and were treated with great barbarity. They maintained, however, their cherished covenants with a zeal which persecution only intensified; in 1680 the more extreme members of the party signed a document known as the "Sanquhar Declaration," and were afterwards called Cameronians from the name of their leader, Richard Cameron (*q.v.*). They renounced their allegiance to King James and were greatly disappointed when their standards found no place in the religious settlement of 1689, continuing to hold the belief that the covenants should be made obligatory upon the entire nation. The Covenanters had a martyrology of their own, and the halo of romance has been cast around their exploits and their sufferings. Their story, however, especially during the time of their political predominance, is part of the general history of Scotland (*q.v.*).

The texts of the National Covenant and the Solemn League and Covenant are printed in S. R. Gardiner's *Constitutional Documents of the Puritan Revolution* (Oxford, 1899). See also J. H. Burton, *History of Scotland* (Edinburgh, 1905); A. Lang, *History of Scotland* (Edinburgh, 1900); S. R. Gardiner, *History of England* (London, 1883-1884); G. Grub, *Ecclesiastical History of Scotland* (Edinburgh, 1861); J. Macpherson, *History of the Church in Scotland* (Paisley, 1901); and J. K. Hewison, *The Covenanters* (1908).

COVENT GARDEN, formerly an open space north of the Strand, London, England, now occupied by the principal flower, fruit and vegetable market in the metropolis. This was originally the so-called "convent

garden" belonging to the abbey of St Peter, Westminster. In the first half of the 17th century the site of the garden was laid out as a square by Inigo Jones, with a piazza on two sides; and as early as 1656 it was becoming a market place for the same commodities as are now sold in it. Covent Garden Theatre (1858) is the chief seat of grand opera in London. The site has carried a theatre since 1733, but earlier buildings were burnt in 1809 and 1856.

COVENTRY, SIR JOHN (d. 1682), son of John Coventry, the second son of Thomas, Lord Keeper Coventry, was returned to the Long Parliament in 1640 as member for Evesham. During the Civil War he served for the king, and at the Restoration was created a knight. In 1667, and in the following parliaments of 1678, 1679 and 1681, he was elected for Weymouth, and opposed the government. On the 21st of December 1670, owing to a jest made by Coventry in the House of Commons on the subject of the king's amours, Sir Thomas Sandys, an officer of the guards, with other accomplices, by the order of Monmouth, and (it was said) with the approval of the king himself, waylaid him as he was returning home to Suffolk Street and slit his nose to the bone. The outrage created an extraordinary sensation, and in consequence a measure known as the "Coventry Act" was passed, declaring assaults accompanied by personal mutilation a felony without benefit of clergy. Sir John died in 1682. Sir William Coventry, his uncle, speaks slightingly of him, ridicules his vanity and wishes him out of the House of Commons to be "out of harm's way."

COVENTRY, THOMAS COVENTRY, 1st Baron (1578-1640), lord keeper of England, eldest son of Sir Thomas Coventry, judge of the common pleas (a descendant of John Coventry, lord mayor of London in the reign of Henry VI.), and of Margaret Jeffreys of Earls Croome, or Croome D'Abitot, in Worcestershire, was born in 1578. He entered Balliol College, Oxford, in 1592, and the Inner Temple in 1594, becoming bencher of the society in 1614, reader in 1616, and holding the office of treasurer from 1617 till 1621. His exceptional legal abilities were rewarded early with official promotion. On the 16th of November 1616 he was made recorder of London in spite of Bacon's opposition, who, although allowing him to be "a well trained and an honest man," objected that he was "bred by my Lord Coke and seasoned in his ways."[1] On the 14th of March 1617 he was appointed solicitor-general and was knighted; was returned for Droitwich to the parliament of 1621; and on the 11th of January in that year was made attorney-general. He took part in the proceedings against Bacon for corruption, and was manager for the Commons in the impeachment of Edward Floyd for insulting the elector and electress palatine.

On the 1st of November 1625 he was made lord keeper of the great seal; in this capacity he delivered the king's reprimand to the Commons on the 29th of March 1626, when he declared that "liberty of counsel" alone belonged to them and not "liberty of control." On the 10th of April 1628 he received the title of Baron Coventry of Aylesborough in Worcestershire. At the opening of parliament in 1628 he threatened that the king would use his prerogative if further thwarted in the matter of supplies. In the subsequent debates, however, while strongly supporting the king's prerogative against the claims of the parliament to executive power, he favoured a policy of moderation and compromise. He defended the right of the council to commit to prison without showing cause, and to issue "general" warrants; though he allowed it should only be employed in special circumstances, disapproved of the king's sudden dissolution of parliament, and agreed to

the liberation on bail of the seven imprisoned members on condition of their giving security for their good behaviour. He showed less subservience than Bacon to Buckingham, and his resistance to the latter's pretensions to the office of lord high constable greatly incensed the duke. Buckingham taunted Coventry with having gained his place by his favour; to which the lord keeper replied, "Did I conceive I had my place by your favour, I would presently unmake myself by returning the seal to his Majesty."[2] After this defiance Buckingham's sudden death alone probably prevented Coventry's displacement. He passed sentence of death on Lord Audley in 1631, drafted and enforced the proclamation of the 20th of June 1632 ordering the country gentlemen to leave London, and in 1634 joined in Laud's attack on the earl of Portland for peculation. The same year, in an address to the judges, he supported the proposed levy of ship-money on the inland as well as the maritime counties on the plea of the necessity of effectually arming, "so that they might not be enforced to fight," "the wooden walls" being in his opinion "the best walls of this kingdom."[3] In the Star Chamber Coventry was one of Lilburne's judges in 1637, but he generally showed conspicuous moderation, inclining to leniency in the cases of Richard Chambers in 1629 for seditious speeches, and of Henry Sherfield in 1632 for breaking painted glass in a church. He prevented also the hanging of men for resistance to impressment, and pointed out its illegality, since the men were not subject to martial law. While contributing thirty horse to the Scottish expedition in 1638, and lending the king £10,000 in 1639, he gave no support to the forced loan levied upon the city in the latter year. He died on the 14th of January 1640.

Lord Coventry held the great seal for nearly fifteen years, and was enabled to collect a large fortune. He was an able judge, and he issued some important orders in chancery, probably alluded to by Wood, who ascribes to him a tract on "The Fees of all law Officers."[4] Whitelocke accuses him of mediocrity,[5] but his contemporaries in general have united in extolling his

judicial ability, his quick despatch of business and his sound and sterling character. Clarendon in particular praises his statesmanship, and compares his capacity with Lord Strafford's, adding, however, that he seldom spoke in the council except on legal business and had little influence in political affairs; to the latter circumstance he owed his exceptional popularity. He describes him as having "in the plain way of speaking and delivery a strange power of making himself believed," as a man of "not only firm gravity but a severity and even some morosity," as "rather exceedingly liked than passionately loved."

Lord Coventry married (1) Sarah, daughter of Sir Edward Sebright of Besford in Worcestershire, by whom besides a daughter he had one son, Thomas, who succeeded him as 2nd baron, and (2) Elizabeth, daughter of John Aldersley of Spurstow, Cheshire, and widow of William Pitchford, by whom he had four sons, John, Francis, Henry and Sir William Coventry, the statesman.

Thomas Coventry, 5th baron (d. 1699), was created an earl in 1697 with a special limitation, on failure of his own male issue, to that of Walter, youngest brother of the lord keeper, from whom the present earl of Coventry is descended.

---

1 Spedding's *Bacon*. vi. 97.

2 Hacket's *Life of Bishop Williams*, ii. 19.

3 Rushworth (1680), part ii. vol. i. 294.

4 *Ath. Oxon.* ii. 650.

5 There is an adverse opinion also expressed in Pepys's *Diary*, August 26, 1666, probably based on little real knowledge.

COVENTRY, SIR WILLIAM (c. 1628-1686), English statesman, son of the lord keeper, Thomas, Lord Coventry, by his second wife Elizabeth Aldersley, was born about 1628. He matriculated at Queen's College, Oxford, at the age of fourteen. Owing to the outbreak of the Civil War he was obliged to quit his studies, but according to Sir John Bramston "he had a good tutor who made him a scholar, and he travelled and got the French language in good perfection." "He was young whilst the war continued," wrote Clarendon, "yet he had put himself before the end of it into the army and had the command of a foot company and shortly after travelled into France." Here he remained till all hopes of obtaining foreign assistance and of raising a new army had to be laid aside, when he returned to England and kept aloof from the various royalist intrigues. When, however, a new prospect of a restoration appeared in 1660, Coventry hastened to Breda, was appointed secretary to James, duke of York, lord high admiral of England, and headed the royal procession when Charles entered London in triumph.

He was returned to the Restoration parliament of 1661 for Great Yarmouth, became commissioner for the navy in May 1662 and in 1663 was made D.C.L. at Oxford. His great talents were very soon recognized in parliament, and his influence as an official was considerable. His appointment was rather that of secretary to the admiralty than of personal assistant to the duke of York,[1] and was one of large gains. Wood states that he collected a fortune of £60,000. Accusations of corruption in his naval administration, and especially during the Dutch war, were brought against him, but there is nothing to show that he ever transgressed the limits sanctioned by usage and custom in obtaining his emoluments. Pepys in his diary invariably testifies to the excellence of his administration and to his zeal for reform and economy. His ability and energy, however, did little to avert the naval collapse, owing chiefly to financial mismanagement and to the ill-advised appointments to command. Coventry denied all responsibility for the Dutch War in 1665, which Clarendon sought to place

upon his shoulders, and his repudiation is supported by Pepys; it was, moreover, contrary to his well-known political opinion. The war greatly increased his influence, and shortly after the victory off Lowestoft, on the 3rd of June 1665, he was knighted and made a privy councillor (26th of June) and was subsequently admitted to the committee on foreign affairs. In 1667 he was appointed to the board of treasury to effect financial reforms. "I perceive," writes Pepys on the 23rd of August 1667, "Sir William Coventry is the man and nothing done till he comes," and on his removal in 1669 the duke of Albemarle, no friendly or partial critic, declares that "nothing now would be well done." His appointment, however, came too late to ward off the naval disaster at Chatham the same year and the national bankruptcy in 1672.

Meanwhile Coventry's rising influence had been from the first the cause of increasing jealousy to the old chancellor Clarendon, who especially disliked and discouraged the younger generation. Coventry resented this repression and thought ill of the conduct of the administration. He became the chief mover in the successful attack made upon Clarendon, but refused to take any part in his impeachment. Two days after Clarendon's resignation (on the 31st of August), Coventry announced his intention of leaving the duke's service and of terminating his connexion with the navy.[2] As the principal agent in effecting Clarendon's fall he naturally acquired new power and influence, and the general opinion pointed to him as his successor as first minister of the crown. Personal merit, patriotism and conspicuous ability, however, were poor passports to place and power in Charles II.'s reign. Coventry retained merely his appointment at the treasury, and the brilliant but unscrupulous and incapable duke of Buckingham, a favourite of the king, succeeded to Lord Clarendon. The relations between the two men soon became unfriendly. Buckingham ridiculed Sir William's steady attention to business, and was annoyed at his opposition to Clarendon's impeachment. Coventry rapidly lost influence,

was excluded from the cabinet council, and six months after Clarendon's fall complains he has scarcely a friend at court. Finally, in March 1669, Buckingham having written a play in which Sir William was ridiculed, the latter sent him a challenge. Notice of the challenge reached the authorities through the duke's second, and Sir William was imprisoned in the Tower on the 3rd of March and subsequently expelled from the privy council. He was superseded in the treasury on the 11th of March by Buckingham's favourite, Sir Thomas Osborne, afterwards earl of Danby and duke of Leeds, and was at last released from the Tower on the 21st in disgrace. The real cause of his dismissal was clearly the final adoption by Charles of the policy of subservience to France and desertion of Holland and Protestant interests. Six weeks before Coventry's fall, the conference between Charles, James, Arlington, Clifford and Arundel had taken place, which resulted a year and a half later in the disgraceful treaty of Dover. To such schemes Sir William, with his steady hostility to France and active devotion to Protestantism, was doubtless a formidable opponent. He now withdrew definitely from official life, still retaining, however, his ascendancy in the House of Commons, and leading the party which condemned and criticized the reactionary and fatal policy of the government, his credit and reputation being rather enhanced than diminished by his dismissal.[3]

In 1673 was published a pamphlet which went through five editions the same year, entitled *England's appeal from the Private Cabal at Whitehall to the Great Council of the Nation ... by a true Lover of his Country*, an anonymous work universally ascribed to Sir William, which forcibly reflects his opinions on the French entanglement. In the great matter of the Indulgence, while refusing to discuss the limits of prerogative and liberty, he argued that the dispensing power of the crown could not be valid during the session of parliament, and criticized the manner of the declaration while approving its ostensible object. He supported the Test Act, but maintained a statesmanlike moderation amidst the tide of indignation rising against the

government, and refused to take part in the personal attacks upon ministers, drawing upon himself the same unpopularity as his nephew Halifax incurred later. In the same year he warmly denounced the alliance with France. During the summer of 1674 he was again received at court. In 1675 he supported the bill to exclude Roman Catholics from both Houses, and also the measure to close the House of Commons to placemen; and he showed great activity in his opposition to the French connexion, especially stigmatizing the encouragement given by the government to the levying of troops for the French service. In May 1677 he voted for the Dutch alliance. Like most of his contemporaries he accepted the story of the popish plot in 1678. Coventry several times refused the highest court appointments, and he was not included in Sir W. Temple's new-modelled council in April 1679. In the exclusion question he favoured at first a policy of limitations, and on his nephew Halifax, who on his retirement became the leader of the moderate party, he enjoined prudence and patience, and greatly regretted the violence of the opposition which eventually excited a reaction and ruined everything. He refused to stand for the new parliament, and retired to his country residence at Minster Lovell near Witney, in Oxfordshire. He died unmarried on the 23rd of June 1686, at Somerhill near Tunbridge Wells, where he had gone to take the waters, and was buried at Penshurst, where a monument was erected to his memory. In his will he ordered his funeral to be at small expense, and left £2000 to the French Protestant refugees in England, besides £3000 for the liberation of captives in Algiers. He had shortly before his death already paid for the liberation of sixty slaves. He was much beloved and respected in his family circle, his nephew, Henry Savile, alluding to him in affectionate terms as "our dearest uncle" and "incomparable friend."

Though Sir William Coventry never filled that place in the national administration to which his merit and exceptional ability clearly entitled him, his public life together with his correspondence are sufficient to

distinguish him from amongst his contemporaries as a statesman of the first rank. Lord Halifax obviously derived from his honoured mentor those principles of government which, by means of his own brilliant intellectual gifts, originality and imaginative insight, gained further force and influence. Halifax owed to him his interest in the navy and his grasp of the necessity to a country of a powerful maritime force. He drew his antagonism to France, his religious tolerance, wide religious views but firm Protestantism doubtless from the same source. Sir William was the original "Trimmer." Writing to his nephew Viscount Weymouth, while denying the authorship of *The Character of a Trimmer*, he says:—"I have not been ashamed to own myself to be a trimmer ... one who would sit upright and not overturn the boat by swaying too much to either side." He shared the Trimmer's dislike of party, urging Halifax in the exclusion contest "not to be thrust by the opposition of his enemies into another party, but that he keep upon a national bottom which at length will prevail." His prudence is expressed in his "perpetual unwillingness to do things which I cannot undo." "A singular independence of spirit, a breadth of mind which refused to be contracted by party formulas, a sanity which was proof against the contagion of national delirium, were equally characteristic of uncle and nephew."[4] Sir William Coventry's conceptions of statesmanship, under the guiding hand of his nephew, largely inspired the future revolution settlement, and continued to be an essential condition of English political growth and progress.

Besides the tract already mentioned Coventry was the author of *A Letter to Dr Burnet giving an Account of Cardinal Pool's Secret Powers ...* (1685). *The Character of a Trimmer*, often ascribed to him, is now known to have been written by Lord Halifax. "Notes concerning the Poor," and an essay "concerning the decay of rents and the remedy," are among the Malet Papers (*Hist. MSS. Comm.* Ser. 5th Rep. app. 320 (a)) and *Add. MSS.* Brit. Mus. (cal. 1882-1887); an "Essay concerning France" (4th Rep. app. 229

(b)) and a "Discourse on the Management of the Navy" (230b) are among the MSS. of the marquess of Bath, also a catalogue of his library (233(a)).

BIBLIOGRAPHY.—No adequate life of Sir William Coventry has been written; the most satisfactory appreciation of his character and abilities is to be found in the several passages relating to him in the *Life of George Savile, Marquis of Halifax*, by Miss A. C. Foxcroft (1898); see also *Hist. MSS. Comm.* 3 and 4 Rep. (Longleat Collection), 5 Rep. (*Malet Collection* and see Index) now in the Brit. Mus. add. Cal. (1882-1887), Some of his papers being also at Devonshire House; *MSS. of Marquis of Ormond*, iii. of *J. M. Heathcote and Miscellaneous Collections*; Clarendon's *Life and Continuation* (Oxford, 1857); *Calendar of Clarendon Papers; Burnet's Hist, of His Own Times* (Oxford, 1823); *Hallam's Constitutional Hist*. (1854), chap. xi.; John Evelyn's *Memoirs*; Pepys's *Diary* and *Pepysiana* (ed. H. B. Wheatley, 1903); *Calendar of State Papers, Domestic; Savile Correspondence* (Camden Society, 1858, vol. lxxi.); A. Grey's *Debates*; Sir John Bramston's *Autobiography* (Camden Soc., 1845); Wood's *Athenae Oxonienses*, iv. 190; *Saturday Review* (Oct. 11, 1873).

(P. C. Y.)

---

1 *Pepysiana*, by H. B. Wheatley (1903), 154.

2 Foxcroft, *Life of Sir G. Savile*, i. 54.

3 *Savile Correspondence* (Camden Soc.), 295.

4 Foxcroft's *Life of Sir G. Savile*, i. 36.

COVENTRY, a municipal, county and parliamentary borough of Warwickshire, England; 94 m. N.W. from London by the London & North Western railway. Pop. (1901) 69,978. The Coventry canal communicates with the Trent and Mersey and Birmingham canals, and the midland system generally. Coventry stands on a gentle eminence, with higher ground lying to the west, and is watered by the Sherbourne and the Radford Brook, feeders of the Avon, which unite within the town. Of its ancient fortifications two gates and some portions of the wall are still extant, and several of the older streets are picturesque from the number of half-timbered houses projecting over the footways.

The most remarkable buildings are the churches; of these the oldest are St Michael's, one of the finest specimens of Perpendicular architecture in England, with a beautiful steeple rising to a height of 303 ft.; Holy Trinity church, a cruciform structure with a lofty steeple at the intersection; and St John's, or Bablake church, which is nearly a parallelogram on the ground plan, but cruciform in the clerestory with a central tower. Christ church dates only from 1832, but it is attached to the ancient spire of the Grey Friars' church. Of secular buildings the most interesting is St Mary's hall, erected by the united gilds in the early part of the 15th century. The principal chamber, situated above a fine crypt, is 76 ft. long, 30 ft. wide and 34 ft. high; its roof is of carved oak, and in the north end there is a large window of old stained glass, with a curious piece of tapestry beneath nearly as old as the building. In the treasury is preserved a valuable collection of ancient muniments. A statue of Sir Thomas White, lord mayor of London (1532-1533), founder of St John's College, Oxford, was erected in 1883. The cemetery, laid out by Sir Joseph Paxton, the architect and landscape gardener, and enlarged in 1887, is particularly beautiful. The educational institutions include a well-endowed free grammar school, founded in the reign of Elizabeth, in modern buildings (1885), a technical school, school of art, endowed charity schools, and a county reformatory for girls; and among

the charitable foundations, which are numerous and valuable, Bond's hospital for old men and Ford's hospital for old women are remarkable as fine specimens of ancient timber work. Swanswell and Spenser Parks were opened in 1883, and a recreation ground in 1880.

Coventry was formerly noted for its woollens, and subsequently acquired such a reputation for its dyeing that the expression "as true as Coventry blue" became proverbial. Existing industries are the making of motor cars, cycles and their accessories, for which Coventry is one of the chief centres in Great Britain; sewing machines are also produced; and carpet-weaving and dyeing, art metal working and watch making are carried on. An ancient fair is held in Whit-week. A county of itself till 1843, the town became a county borough in 1888. The corporation consists of a mayor, 10 aldermen and 30 councillors. The parliamentary borough returns one member. In 1894 a suffragan bishopric of Coventry was established under the see of Worcester, but no longer exists. Area, 4149 acres.

The village which afterwards became important as Coventry (*Coventreu*, *Coventre*) owed its existence to the foundation of a Benedictine monastery by Earl Leofric and his wife Godgyfu, the famous Lady Godiva (*q.v.*), in 1043. The manor, which in 1066 belonged to the latter, descended to the earls of Chester and to Robert de Montalt, and from him passed to Isabella queen of Edward II. and the crown. Ranulf, earl of Chester, granted the earliest extant charter to the town in 1153, by which his burgesses were to hold of him in free burgage as they held of his father, and to have their portmote. This, with further privileges, was confirmed by Henry II. in 1177, and by nearly every succeeding sovereign until the 17th century. In 1345 Edward III. gave Coventry a corporation, mayor and bailiffs empowered to hold pleas and keep the town prison. Edward the Black Prince granted the mayor and bailiffs the right to hold the town in fee farm of £50 and to build a wall. In 1452 Henry VI. formed the city and surrounding hamlets into a

county, and James I. incorporated Coventry in 1622. It first sent two representatives to parliament in 1295, but the returns were irregular. The prior's market on Fridays was probably of Saxon origin; a second market was granted in 1348, while fairs, still held, were obtained in 1217 for the octave of Holy Trinity, and in 1348 and in 1442 for eight days from the Friday after Corpus Christi. As early as 1216 Coventry was important for its trade in wool, cloth and caps, its gilds later being particularly numerous and wealthy. In 1568 Flemish weavers introduced new methods, but the trade was destroyed in the wars of the 17th century. During the middle of the 16th century there was a flourishing manufacture of blue thread, but this decayed before 1581; in the 18th century the manufacture of ribbon was introduced.

The popular phrase "to send to Coventry" (*i.e.* to refuse to associate with a person) is of uncertain derivation. The *New English Dictionary* selects the period of the Civil War of the 17th century as that in which the origin of the phrase is probably to be found. Clarendon (*History of the Great Rebellion*, 1647) states that the citizens of Birmingham rose against certain small parties of the king's supporters, and sent the prisoners they captured to Coventry, which was then strongly parliamentarian.

See *Victoria County History, Warwick*; William Dugdale, *The Antiquities of Coventre, illustrated from records* (Coventry, 1765).

COVER (from the Fr. *couvert*, from *couvrir*, to cover, Lat. *cooperire*), that which hides, shuts in or conceals, a lid to a box or vessel, &c., the binding of a book or wrapper of a parcel; as a hunting term, the wood or

undergrowth which shelters game. As a commercial term, the word means in its widest sense a security against loss, but is employed more particularly in connexion with stock exchange transactions to signify a “deposit made with a broker to secure him from being out of pocket in the event of the stocks falling against his client and the client not paying the difference” (*In re Cronmire*, 1898, 2 Q.B. 383). It is a mode of speculation engaged in almost entirely by persons who wish to limit their risk to a small amount, and, as a rule, the transactions are largely carried out in England with “outside” brokers, *i.e.* those dealers in securities who are not members of the Stock Exchange. The deposit is so much per cent or per share, usually 1% on the market value of the securities up to about twice the amount of the turn of the market; the client being able to close the transaction at any time during the currency of the cover, but the broker only when the cover is exhausted or has “run off.” Cover is not money deposited to abide the event of a wager, but as security against a debt which may arise from a gaming contract, and it may be recovered back, if unappropriated.

COVERDALE, MILES (1488?-1569), English translator of the Bible and bishop of Exeter, was born of Yorkshire parents about 1488, studied philosophy and theology at Cambridge, was ordained priest at Norwich in 1514, and then entered the convent of Austin friars at Cambridge. Here he came under the influence of the prior, Robert Barnes, made the acquaintance of Sir Thomas More and of Thomas Cromwell, and began a thorough study of the Scriptures. He was one of those who met at the White Horse tavern to discuss theological questions, and when Barnes was

arrested on a charge of heresy, Coverdale went up to London to assist him in drawing up his defence. Soon afterwards he left the convent, assumed the habit of a secular priest, and began to preach against confession and the worship of images. In 1531 he graduated bachelor of canon law at Cambridge, but from 1528 to 1534 he prudently spent most of his time abroad. No corroboration has, however, been found for Foxe's statement that in 1529 he was at Hamburg assisting Tyndale in his translation of the Pentateuch. In 1534 he published two translations of his own, the first Dulichius's *Vom alten und newen Gott*, and the second a *Paraphrase upon the Psalms*, and in 1535 he completed his translation of the Bible. The venture seems to have been projected by Jacob van Meteren, who apparently employed Coverdale to do the translation, and Froschover of Zürich to do the printing. No perfect copy is known to exist, and the five or six which alone have title-pages give no name of publisher or place of publication. The volume is dedicated to the king of England, where Convocation at Cranmer's instance had, in December 1534, petitioned for an authorized English version of the Scriptures. As a work of scholarship it does not rank particularly high. Some of the title-pages state that it had been translated out of "Douche" (*i.e.* German) "and Latyn": and Coverdale mentions that he used five interpreters, which are supposed to have been the Vulgate, the Latin version of Pagninus, Luther's translation, the Zürich version, and Tyndale's Pentateuch and New Testament. There is no definite mention of the original Greek and Hebrew texts; but it has considerable literary merit, many of Coverdale's phrases are retained in the authorized version, and it was the first complete Bible to be printed in English. Two fresh editions were issued in 1537, but none of them received official sanction. Coverdale was, however, employed by Cromwell to assist in the production of the Great Bible of 1539, which was ordered to be placed in all English churches. The work was done at Paris until the French government stopped it, when Coverdale and his colleagues returned to England early in

1539 to complete it. He was also employed in the same year in assisting at the suppression of superstitious usages, but the reaction of 1540 drove him once more abroad. His Bible was prohibited by proclamation in 1542, while Coverdale himself defied the Six Articles by marrying Elizabeth Macheson, sister-in-law to Dr John MacAlpine.

For a time Coverdale lived at Tübingen, where he was created D.D. In 1545 he was pastor and schoolmaster at Bergzabern in the duchy of Pfalz-Zweibrücken. In March 1548 he was at Frankfort, when the new English Order of Communion reached him; he at once translated it into German and Latin and sent a copy to Calvin, whose wife had befriended Coverdale at Strassburg. Calvin, however, does not seem to have approved of it so highly as Coverdale.

Coverdale was already on his way back to England, and in October 1548 he was staying at Windsor Castle, where Cranmer and some other divines, inaccurately called the Windsor Commission, were preparing the First Book of Common Prayer. His first appointment had been as almoner to Queen Catherine Parr, then wife of Lord Seymour; and he preached her funeral sermon in September 1548. He was also chaplain to the young king and took an active part in the reforming measures of his reign. He was one of the most effective preachers of the time. A sermon by him at St Paul's on the second Sunday in Lent, 1549, was immediately followed by the pulling down of "the sacrament at the high altar." A few weeks later he preached at the penance of some Anabaptists, and in January 1550 he was put on a commission to prosecute Anabaptists and all who infringed the Book of Common Prayer. In 1549 he wrote a dedication to Edward for a translation of the second volume of Erasmus's *Paraphrases*; and in 1550 he translated Otto Wermueller's *Precious Pearl*, for which Protector Somerset, who had derived spiritual comfort from the book while in the Tower, wrote a preface. He was much in request at funerals: he preached at Sir James Wilford's in

November 1550, and at Lord Wentworth's before a great concourse in Westminster Abbey in March 1551.

Perhaps it was his gift of oratory which suggested his appointment as bishop of the refractory men of Devon and Cornwall. He had already, in August 1549, at some risk, gone down with Lord Russell to turn the hearts of the rebels by preaching and persuasion, and two years later he was appointed bishop of Exeter by letters patent, on the compulsory retirement of his predecessor, Veysey, who had reached an almost mythical age. He was an active prelate, and perhaps the vigorous Protestantism of the West in Elizabeth's reign was partly due to his persuasive powers. He sat on the commission for the reform of the canon law, and was in constant attendance during the parliaments of 1552 and 1553. On Mary's accession he was at once deprived on the score of his marriage, and Veysey in spite of his age was restored. Coverdale was called before the privy council on the 1st of September, and required to find sureties; but he was not further molested, and when Christian III. of Denmark at the instance of Coverdale's brother-in-law, MacAlpine, interceded in his favour, he was in February 1555 permitted to leave for Denmark with two servants, and his baggage unsearched; one of these "servants" is said to have been his wife. He declined Christian's offer of a living in Denmark, and preferred to preach at Wesel to the numerous English refugees there, until he was invited by Duke Wolfgang to resume his labours at Bergzabern. He was at Geneva in December 1558, and is said to have participated in the preparation of the Geneva version of the Bible.

In 1559 Coverdale returned to England and resumed his preaching at St Paul's and elsewhere. Clothed in a plain black gown, he assisted at Parker's consecration, in spite of the facts that he had himself been deprived, and did not resume his bishopric, and that his original appointment had been by the uncanonical method of letters patent. Conscientious objections were

probably responsible for his non-restoration to the see of Exeter, and his refusal of that of Llandaff in 1563. He objected to vestments, and in his living of St Magnus close to London Bridge, which he received in 1563, he took other liberties with the Act of Uniformity. His bishop, Grindal, was his friend, and his vagaries were overlooked until 1566, when he resigned his living rather than conform. He still preached occasionally, and always drew large audiences. He died in February 1568, and was buried on the 19th in St Bartholomew's behind the Exchange. When this church was pulled down in 1840 to make room for the new Exchange, his remains were removed to St Magnus.

Coverdale's works, most of them translations, number twenty-six in all; nearly all, with his letters, were published in a collected edition by the Parker Soc., 2 vols., 1846. An excellent account is given in the *Dict. Nat. Biog.* of his life, with authorities, to which may be added R. W. Dixon's *Church History*, Bishop and Gasquet's *Edward VI. and the Book of Common Prayer*; Acts of the Privy Council; Letters and Papers of Henry VIII.; *Lit. Rem. of Edward VI.* (Roxburghe Club); Whittingham's *Brief Discourse of Troubles at Frankfort*; Pocock's *Troubles connected with the Prayer-Book* (Camden Soc.).

(A. F. P.)

COVERTURE (a covering, an old French form of the modern *couverture*), a term in English law applied to the condition of a woman during marriage, when she is supposed to be under the cover, influence and protection of her husband, and so immune in certain cases from punishment

for crime committed in the presence and on the presumed coercion of her husband. (See further HUSBAND AND WIFE.)

COVILHÃ, a town of Portugal, in the district of Castello Branco, formerly included in the province of Beira; on the eastern slope of the Serra da Estrella, and on the Abrantes-Guarda railway. Pop. (1900) 15,469. Covilhã, which has been often compared with a collection of swallows' nests clinging to the rugged granitic mountain side, is shaped like an amphitheatre of closely crowded houses, overlooking the river Zezere and its wild valley from a height of 2180 ft. Over 4000 operatives are employed in the manufacture of *saragoça*, a coarse brown cloth worn by the peasantry throughout Portugal. The village of Unhaes da Serra (1507), 6 m. W.S.W., is noted for its sulphurous springs and baths.

COVILHAM (COVILHÃO, COVILHÃ), **PERO** or PEDRO DE, Portuguese explorer and diplomatist (fl. 1487-1525), was a native of Covilhã in Beira. In early life he had gone to Castile and entered the service of Alphonso, duke of Seville; later, when war broke out between Castile and Portugal, he returned to his own country, and attached himself, first as a "groom," then as a "squire," to King Alphonso V. and his successor John II. On the 7th of May 1487, he was despatched, in company with Alphonso de Payva, on a

mission of exploration in the Levant and adjoining regions of Asia and Africa, with the special object of learning where "cinnamon and other spices could be found," as well as of discovering the land of Prester John, by "overland" routes. Bartholomeu Diaz, at this very time, went out to find the Prester's country, as well as the termination of the African continent and the ocean route to India, by sea. Covilham and Payva were provided with a "letter of credence for all the countries of the world" and with a "map for navigating, taken from the map of the world" and compiled by Bishop Calcadilha, and doctors Rodrigo and Moyses. The first two of these were prominent members of the commission which advised the Portuguese government to reject the proposals of Columbus. The explorers started from Santarem and travelled by Barcelona to Naples, where their bills of exchange were paid by the sons of Cosimo de' Medici; thence they passed to Rhodes, where they lodged with two other Portuguese, and so to Alexandria and Cairo, where they posed as merchants. In company with certain Moors from Fez and Tlemçen they now went by way of Tor to Suakin and Aden, where (as it was now monsoon time) they parted, Covilham proceeding to India and Payva to Ethiopia—the two companions agreeing to meet again in Cairo. Covilham thus arrived at Cannanore and Calicut, whence he retraced his course to Goa and Ormuz, the Red Sea and Cairo, making an excursion on his way down the East African coast to Sofala, which he was probably the first European to visit. At Cairo he heard of Payva's death, and met with two Portuguese Jews—Rabbi Abraham of Beja, and Joseph, a shoe-maker of Lamego—who had been sent by King John with letters for Covilham and Payva. By Joseph of Lamego Covilham replied with an account of his Indian and African journeys, and of his observations on the cinnamon, pepper and clove trade at Calicut, together with advice as to the ocean way to India. This he truly represented as quite practicable: "to this they (of Portugal) could navigate by their coast and the seas of Guinea." The first objective in the eastern ocean, he added, was

Sofala or the Island of the Moon, our Madagascar—"from each of these lands one can fetch the coast of Calicut." With this information Joseph returned to Portugal, while Covilham, with Abraham of Beja, again visited Aden and Ormuz. At the latter he left the rabbi; and himself came back to Jidda, the port of the Arabian holy land, and penetrated (as he told Alvarez many years later) even to Mecca and Medina. Finally, by Mount Sinai, Tor and the Red Sea, he reached Zeila, whence he struck inland to the court of Prester John (*i.e.* Abyssinia). Here he was honourably received; lands and lordships were bestowed upon him; but he was not permitted to leave. When the Portuguese embassy under Rodrigo de Lima, including Father Francisco Alvarez, entered Abyssinia in 1520, Covilham wept with joy at the sight of his fellow-countrymen. It was then forty years since he had left Portugal, and over thirty since he had been a prisoner of state in "Ethiopia." Alvarez, who professed to know him well, and to have heard the story of his life, both "in confession and out of it," praises his power of vivid description "as if things were present before him," and his extraordinary knowledge of "all spoken languages of Christians, Moors and Gentiles." His services as an interpreter were valuable to Rodrigo de Lima's embassy; but he never succeeded in escaping from Abyssinia.

See Francisco Alvarez, *Verdadera Informaçam das terras do Preste Joam*, esp. chs. 73, 89, 98, 102-103, 105 (pp. 177, 224, 254, 264, 265-270, 275, of the Hakluyt Society's English edition, *The Portuguese Embassy to Abyssinia ... 1520-1727*, London, 1881); an abstract of this, with some inaccuracies, is given in Major's *Prince Henry the Navigator* (London, 1868), pp. 339-340.

COVIN (from the Fr. *covine*, or *couvine*, from Lat. *convenire*, to come together), an association of persons, so used in the Statute of Labourers of 1360, which, *inter alia*, declared void "all alliances and covins of masons and carpenters." The more common use of the term in English law was for a secret agreement between persons to cheat and defraud, but the word is now obsolete, and has been superseded by "collusion" or "conspiracy to cheat and defraud."

COVINGTON, a city and one of the two county-seats of Kenton county, Kentucky, U.S.A., on the Ohio river opposite Cincinnati, with which it is connected by bridges; and at the mouth of the Licking river (also spanned by bridges), opposite Newport, Ky. Pop. (1890) 37,371; (1900) 42,938, of whom 5223 were foreign-born and 2478 were negroes; (1910) 53,270. In 1900 it ranked second in population among the cities of Kentucky. The city is served by the Chesapeake & Ohio, and the Louisville & Nashville railways, by interurban electric railways, and by steamboat lines to the Ohio river ports. It is built on a plain commanding good views and partly shut in by neighbouring hills. Its streets, mostly named from eminent Kentuckians, are paved chiefly with asphalt, macadam and brick. There are numerous fine residences and several attractive public buildings, including that of the United States government—modern Gothic in style—the court-house and city hall combined, and the public library. Covington is the seat of a Roman Catholic bishopric, and its cathedral, in the flamboyant Gothic style, is one of the finest church buildings in the state. In the city are the Academy of Notre Dame and St Joseph's high school for boys, both Roman Catholic.

The principal charitable institutions are the hospital of Saint Elizabeth, a German orphan asylum, a Protestant children's home, a home for aged women and a Wayfarers' Rest. Covington is the trade centre of an extensive district engaged in agriculture and stock raising, and as a manufacturing centre it ranked second in the state in 1905 (value of factory products $6,099,715), its products including tobacco, cotton goods, structural iron and steel, foundry and machine shop products, liquors and cordage. A settlement was established here in 1812, and three years later a town was laid out and named in honour of Gen. Leonard Covington (1768-1813), who was mortally wounded at Chrystler's Field during the War of 1812. In 1834 Covington was chartered as a city; and in 1908 it annexed Central Covington (pop. in 1900, 2155).

COWARD, a term of contempt for one who, before danger, pain or trouble, shows fear, whether physical or moral. The derivation of the word has been obscured by a connexion in sense with the verb "cow," to instil fear into, which is derived from old Norse *kuga*, a word of similar meaning, and with the verb "cower," to crouch, which is also Scandinavian in origin.[1] The true derivation is from the French *coe*, an old form of *queue*, a tail, from Lat. *cauda*, hence *couart* or *couard*. The reference to "tail" is either to the expression "turn tail" in flight, or to the habit of animals dropping the tail between the legs when frightened; in heraldry, a lion in this position is a "lion coward." In the fable of *Reynard the Fox* the name of the hare is Coart, Kywart, Cuwaert or other variants.

COWBRIDGE, a market town and a municipal and contributory parliamentary borough of Glamorganshire, Wales, with a station on the Taff Vale railway branch from Llantrisant to Aberthaw on the coast, distant by rail 162½ m. from London, 12 m. W. of Cardiff, 7 m. S.E. of Bridgend, and 6 m. S. of Llantrisant station. The population in 1901 was 1202, a decrease of over 12% since 1891. Less than one-third of the number was Welsh-speaking. The town mainly consists of one long street running east and west, and is in a wide valley through which runs the river Thaw (Welsh, *Ddawan*), here crossed by a stone bridge.

Cowbridge is probably situated on the Roman road from Cardiff westwards, which seems to have kept nearly the course of the present main road. Roman coins have been discovered here. It has in fact been suggested, mainly on etymological grounds, that the town occupies the site of the Roman *Bovium*: the modern Welsh name, y Bontfaen ("stone bridge") is probably a corruption of the medieval, Pont y fôn, the precise equivalent of "Cowbridge," which is first found in documents of the second half of the 13th century as Covbruge and Cubrigg. Others place Bovium on a vicinal road, at Boverton near Llantwit Major, about 6 m. to the south near the coast, though the most likely site is near Ewenny, 5 m. to the west of Cowbridge. After the Norman conquest of Glamorgan, the town grew up as an appanage of the castle of St Quentin, which occupies a commanding position half a mile south-west of the town. It was walled round before the 13th century. A tower is mentioned in 1487 when it was granted away by the burgesses. Leland in his itinerary (c. 1535) describes the town wall as three-quarters of a mile round and as having three gates. There was even then a considerable suburb on the west bank of the river and outside the walls. The south wall and gateway are still standing.

The town was a borough by prescription until 1682, when it received a charter of incorporation from Charles II. confirming its previous privileges.

Under the Unreformed Corporations Act of 1883 the corporation was dissolved, but on the petition of the inhabitants a new charter was granted in March 1887. During the Tudor and Stuart periods Cowbridge was almost if not quite the chief town of Glamorgan, its importance being largely due to its central and accessible position in a rich agricultural district where a large number of the county gentry lived. The great sessions were held here alternately with Cardiff and Swansea from 1542 till their abolition in 1830, and the quarter sessions were held here once a year down to 1850. From 1536 to 1832 it was one of the eight contributory boroughs within the county which returned a member to parliament, but since 1832 it has been contributory with Cardiff and Llantrisant in returning a member. It has a separate commission of the peace. Sir Edward Stradling (1529-1609) established a grammar school here, but died before endowing it; it was refounded in 1685 by Sir Leoline Jenkins, who provided that it should be administered by Jesus College, Oxford, which body erected the present buildings in 1847. It has throughout its existence been one of the leading schools in Wales. An intermediate school for girls was established here by the county in 1896. The church of St Mary (formerly chapelry to Llanblethian) is of early English style and has a fine embattled tower, of the same military type as the towers of Llamblethian and Ewenny. There are three Nonconformist chapels. There are a town hall and market place. The town is now wholly dependent on agriculture, and has good markets and cattle fairs, that on the 4th of May being a charter fair.

---

1 A connexion has also been imagined with cow (O. Eng. *cu*; common in Scandinavian languages, and of similar root to Skr. *go*, whence also Gr. βοῦς, Lat. *bos*), the female bovine animal, on account of its timidity.

COWDENBEATH, a police burgh, Fifeshire, Scotland, 5¾ m. N.E. of Dunfermline by the North British railway. Pop. (1891) 4249; (1901) 7908. The principal industry is coal-mining, and the public buildings include churches, schools and a hall. Meetings in connexion with the adoption and promulgation of the Covenant were held in the old parish church of Beath.

COWELL, JOHN (1554-1611), English jurist, was born at Ernsborough, Devonshire. He was educated at Eton, and King's College, Cambridge, ultimately becoming professor of civil law in that university, and master of Trinity Hall. In 1607 he compiled a law dictionary, *The Interpreter*, in which he exalted the king's prerogative so much that he was prosecuted before the House of Commons by Sir Edward Coke, and saved from imprisonment only by the interposition of James I. His book was burnt by order of the House of Commons. Dr Cowell also wrote a work entitled *Institutiones Juris Anglicani*. He died at Oxford on the 11th of October 1611.

COWEN, FREDERIC HYMEN (1852-), English musical composer, was born at Kingston, Jamaica, on the 29th of January 1852. At four years old he was brought to England, where his father became treasurer to the opera at Her Majesty's theatre, and private secretary to the earl of

Dudley. His first teacher was Henry Russell, and his first published composition appeared when he was but six years old. He studied the piano with Benedict, and composition with Goss; in 1865 he was at Leipzig under Hauptmann, Moscheles, Reinecke and Plaidy. Returning home on the outbreak of the Austro-Prussian War, he appeared as a composer for the orchestra in an overture played at the Promenade Concerts at Covent Garden in September 1866. In the following autumn he went to Berlin, where he was under Kiel, at Stern's conservatorium. A symphony and a piano concerto were given in St James's Hall in 1869, and from that time Cowen has been recognized as primarily a composer, his talents as a pianist being subordinate, although his public appearances were numerous for some time afterwards. His cantata, *The Rose Maiden*, was given in London in 1870, his second symphony by the Liverpool Philharmonic Society in 1872, and his first festival work, *The Corsair*, in 1876 at Birmingham. In that year his opera, *Pauline*, was given by the Carl Rosa Company with moderate success. In 1884 he conducted five concerts of the Philharmonic Society, and in 1888, on the resignation of Arthur Sullivan, became the regular conductor of the society, resigning the post in 1892. In the year of his appointment, 1888, he went to Melbourne as the conductor of the daily concerts given in connexion with the Exhibition there. In 1896 Cowen was appointed conductor of the Liverpool Philharmonic Society and of the Manchester orchestra, in succession to Sir Charles Hallé. In 1899 he was reappointed conductor of the Philharmonic Society. His works include:— Operettas: *Garibaldi* (1860) and *One Too Many* (1874); operas: *Pauline* (1876), *Thorgrim* (1890), *Signa* (Milan, 1893), and *Harold* (1895); oratorios: *The Deluge* (1878), *St Ursula* (1881), *Ruth* (1887), *Song of Thanksgiving* (1888), *The Transfiguration* (1895); cantatas: *The Rose Maiden* (1870), *The Corsair* (1876), *The Sleeping Beauty* (1885), *St John's Eve* (1889), *The Water Lily* (1893), *Ode to the Passions* (1898), besides short cantatas for female voices; a large number of songs, ranging from the

popular “ballad” to more artistic lyrics, anthems, part-songs, duets, &c.; six symphonies, among which No 3, the “Scandinavian,” has had the greatest success; four overtures; suites, *The Language of Flowers* (1880), *In the Olden Times* (1883), *In Fairyland* (1896); four English dances (1896); a concerto for piano and orchestra, and a fantasia for the same played by M. Paderewski (1900); a quartet in C minor, and a trio in A minor, both early works; pianoforte pieces, &c. Cowen is never so happy as when treating of fantastic or fairy subjects; and whether in his cantatas for female voices, his charming *Sleeping Beauty*, his *Water Lily* or his pretty overture, *The Butterfly’s Ball* (1901), he succeeds wonderfully in finding graceful expression for the poetical idea. His dance music, such as is to be found in various orchestral suites, is refined, original and admirably instrumented; and if he is seldom as successful in portraying the graver aspects of emotion, the vogue of his semi-sacred songs has been widespread.

COWEN, JOSEPH (1831-1900), English politician and journalist, son of Sir Joseph Cowen, a prominent citizen and mine-owner of Newcastle-on-Tyne, was born in 1831, and was educated at Edinburgh University. In 1874 he was elected member of parliament for the borough on the death of his father, who had held the seat as a Liberal since 1865. Joseph Cowen was at that time a strong Radical on domestic questions, an advocate of co-operation, an admirer of Garibaldi, Mazzini and Kossuth, a sympathizer with Irish Nationalism, and one who in speech, dress and manner identified himself with the North-country mining class. Short in stature and uncouth in appearance, his individuality first shocked and then by its earnestness

impressed the House of Commons; and his sturdy independence of party ties, combined with a gift of rough but genuine eloquence (of which his speech on the Royal Title Bill of 1876 was an example), rapidly made him one of the best-known public men in the country. He was, moreover, an Imperialist and a Colonial Federationist at a time when Liberalism was tied and bound to the Manchester traditions; and, to the consternation of the official wire-pullers, he vigorously supported Disraeli's foreign policy, and in 1881 opposed the Gladstonian settlement with the Boers. His independence (which his detractors attributed in some degree to his alleged susceptibility to Tory compliments) brought him into collision both with the Liberal caucus and with the party organization in Newcastle itself, but Cowen's personal popularity and his remarkable powers as an orator triumphed in his own birthplace, and he was again elected in 1885 in spite of Liberal opposition. Shortly afterwards, however, he retired both from parliament and from public life, professing his disgust at the party intrigues of politics, and devoted himself to conducting his newspaper, the *Newcastle Daily Chronicle*, and to his private business as a mine-owner. In this capacity he exercised a wide influence on local opinion, and the revolt of the Newcastle electorate in later years against doctrinaire Radicalism was largely due to his constant preaching of a broader outlook on national affairs. He continued behind the scenes to play a powerful part in forming North-country opinion until his death on the 18th of February 1900.

His letters were published by his daughter in 1909.

COWES, a seaport and watering-place in the Isle of Wight, England, 12 m. S.S.E. of Southampton. West Cowes is separated from East Cowes by the picturesque estuary of the river Medina, the two towns (each of which is an urban district) lying on opposite sides of its mouth at the apex of the northern coast of the island. Pop. (1901) West Cowes, 8652; East Cowes, 3196. The port between them is the chief on the island, and is the headquarters of the Royal Yacht Squadron (founded in 1812); it is in regular steamship communication with Southampton and Portsmouth. West Cowes is served by the Isle of Wight Central railway. A steam ferry and a floating bridge across the Medina, here 600 yds. broad, unite the towns. Behind the harbour the houses rise picturesquely on gentle wooded slopes, and numerous villas adorn the vicinity. The towns owe their origin to two forts or castles, built on each side of the mouth of the Medina by Henry VIII. in 1540, for the defence of the coast; the eastern one has disappeared, but the west castle remains and is used as the club-house of the Yacht Squadron. The marine parade of West Cowes, and the public promenade called the Green, are close to the castle. The industrial population is chiefly employed in the shipbuilding yards, in the manufacture of ships' fittings, and in engineering works. The harbour is under an elective body of commissioners. On the opposite side of the Medina a broad carriageway leads to East Cowes Castle, a handsome edifice built by John Nash, the favourite architect of George IV., in 1798, and immediately beyond it are the grounds surrounding Osborne House (see OSBORNE), built in 1845 after the property had been purchased by Queen Victoria, the church of St Mildred, Whippingham, lying a mile to the south.

COWL (through Fr. *coule*, from Lat. *cucullus* or *cuculla*, a covering; the word is found in various forms in most European languages, cf. Ger. *Kugel* or *Kigel*, Dutch *kovel*, Irish *cochal* or *cochull*; the ultimate origin may be the root *kal*, found in Lat. *clam*, secretly, and Gr. καλύπτειν, to hide, cover up), an outer garment worn by both sexes in the middle ages; a part of the monastic dress, hence the phrase "to take the cowl," signifying entry upon the religious life. The *cucullus* worn by the early Egyptian anchorites was a hood covering the head and neck. Later generations lengthened the garment until it reached to the heels, and St Benedict issued a rule restricting its length to two cubits. Chapter 55 of his *Institute* prescribes the following dress in temperate climates: a cowl and tunic, thick in winter and thin in summer, with a scapular for working hours and shoes and stockings, all of simple material and make. In the 14th century the cowl and the frock were frequently confounded, but the council of Vienne defined the former as "a habit long and full without sleeves," and the latter as "a long habit with long and wide sleeves." While the term thus seems strictly to imply a hooded gown it is often applied to the hood alone. It is also used to describe a loose vestment worn over the frock in the winter season and during the night office.

The word "cowl" is also applied to a hood-shaped covering to a chimney or ventilating shaft, to help down-draught, and to clear the up-current of foul air (see VENTILATION).

COWLEY, ABRAHAM (1618-1667), English poet, was born in the city of London late in 1618. His father, a wealthy citizen, who died shortly

before his birth, was a stationer. His mother was wholly given to works of devotion, but it happened that there lay in her parlour a copy of *The Faery Queen*. This became the favourite reading of her son, and he had twice devoured it all before he was sent to school. As early as 1628, that is, in his tenth year, he composed his *Tragicall History of Piramus and Thisbe*, an epical romance written in a six-line stanza, of his own invention. It is not too much to say that this work is the most astonishing feat of imaginative precocity on record; it is marked by no great faults of immaturity, and possesses constructive merits of a very high order. Two years later the child wrote another and still more ambitious poem, *Constantia and Philetus*, being sent about the same time to Westminster school. Here he displayed the most extraordinary mental precocity and versatility, and wrote in his thirteenth year yet another poem, the *Elegy on the Death of Dudley, Lord Carlton*. These three poems of considerable size, and some smaller ones, were collected in 1633, and published in a volume entitled *Poetical Blossoms*, dedicated to the head master of the school, and prefaced by many laudatory verses by schoolfellows. The author at once became famous, although he had not, even yet, completed his fifteenth year. His next composition was a pastoral comedy, entitled *Love's Riddle*, a marvellous production for a boy of sixteen, airy, correct and harmonious in language, and rapid in movement. The style is not without resemblance to that of Randolph, whose earliest works, however, were at that time only just printed. In 1637 Cowley was elected into Trinity College, Cambridge, where he betook himself with enthusiasm to the study of all kinds of learning, and early distinguished himself as a ripe scholar. It was about this time that he composed his scriptural epic on the history of King David, one book of which still exists in the Latin original, the rest being superseded in favour of an English version in four books, called the *Davideis*, which he published a long time after. This his most grave and important work is remarkable as having suggested to Milton several points which he

afterwards made use of. The epic, written in a very dreary and turgid manner, but in good rhymed heroic verse, deals with the adventures of King David from his boyhood to the smiting of Amalek by Saul, where it abruptly closes. In 1638 *Love's Riddle* and a Latin comedy, the *Naufragium Joculare*, were printed, and in 1641 the passage of Prince Charles through Cambridge gave occasion to the production of another dramatic work, *The Guardian*, which was acted before the royal visitor with much success. During the civil war this play was privately performed at Dublin, but it was not printed till 1650. It is bright and amusing, in the style common to the "sons" of Ben Jonson, the university wits who wrote more for the closet than the public stage.

The learned quiet of the young poet's life was broken up by the Civil War; he warmly espoused the royalist side. He became a fellow of Trinity College, Cambridge, but was ejected by the Parliamentarians in 1643. He made his way to Oxford, where he enjoyed the friendship of Lord Falkland, and was tossed, in the tumult of affairs, into the personal confidence of the royal family itself. After the battle of Marston Moor he followed the queen to Paris, and the exile so commenced lasted twelve years. This period was spent almost entirely in the royal service, "bearing a share in the distresses of the royal family, or labouring in their affairs. To this purpose he performed several dangerous journeys into Jersey, Scotland, Flanders, Holland, or wherever else the king's troubles required his attendance. But the chief testimony of his fidelity was the laborious service he underwent in maintaining the constant correspondence between the late king and the queen his wife. In that weighty trust he behaved himself with indefatigable integrity and unsuspected secrecy; for he ciphered and deciphered with his own hand the greatest part of all the letters that passed between their majesties, and managed a vast intelligence in many other parts, which for some years together took up all his days, and two or three nights every week." In spite of these labours he did not refrain from literary industry.

During his exile he met with the works of Pindar, and determined to reproduce their lofty lyric passion in English. At the same time he occupied himself in writing a history of the Civil War, which he completed as far as the battle of Newbury, but unfortunately afterwards destroyed. In 1647 a collection of his love verses, entitled *The Mistress*, was published, and in the next year a volume of wretched satires, *The Four Ages of England*, was brought out under his name, with the composition of which he had nothing to do. In spite of the troubles of the times, so fatal to poetic fame, his reputation steadily increased, and when, on his return to England in 1656, he published a volume of his collected poetical works, he found himself without a rival in public esteem. This volume included the later works already mentioned, the *Pindarique Odes*, the *Davideis*, the *Mistress* and some *Miscellanies*. Among the latter are to be found Cowley's most vital pieces. This section of his works opens with the famous aspiration—

"What shall I do to be for ever known,
And make the coming age my own?"

It contains elegies on Wotton, Vandyck, Falkland, William Hervey and Crashaw, the last two being among Cowley's finest poems, brilliant, sonorous and original; the amusing ballad of *The Chronicle*, giving a fictitious catalogue of his supposed amours; various gnomic pieces; and some charming paraphrases from Anacreon. The *Pindarique Odes* contain weighty lines and passages, buried in irregular and inharmonious masses of moral verbiage. Not more than one or two are good throughout, but a full posy of beauties may easily be culled from them. The long cadences of the Alexandrines with which most of the strophes close, continued to echo in English poetry from Dryden down to Gray, but the *Odes* themselves, which were found to be obscure by the poet's contemporaries, immediately fell into disesteem. *The Mistress* was the most popular poetic reading of the age,

and is now the least read of all Cowley's works. It was the last and most violent expression of the amatory affectation of the 17th century, an affectation which had been endurable in Donne and other early writers because it had been the vehicle of sincere emotion, but was unendurable in Cowley because in him it represented nothing but a perfunctory exercise, a mere exhibition of literary calisthenics. He appears to have been of a cold, or at least of a timid, disposition; in the face of these elaborately erotic volumes, we are told that to the end of his days he never summoned up courage to speak of love to a single woman in real life. The "Leonora" of *The Chronicle* is said to have been the only woman he ever loved, and she married the brother of his biographer, Sprat.

Soon after his return to England he was seized in mistake for another person, and only obtained his liberty on a bail of £1000. In 1658 he revised and altered his play of *The Guardian*, and prepared it for the press under the title of *The Cutter of Coleman Street*, but it did not appear until 1663. Late in 1658 Oliver Cromwell died, and Cowley took advantage of the confusion of affairs to escape to Paris, where he remained until the Restoration brought him back in Charles's train. He published in 1663 *Verses upon several occasions*, in which *The Complaint* is included.

Wearied with the broils and fatigues of a political life, Cowley obtained permission to retire into the country; through his friend, Lord St Albans, he obtained a property near Chertsey, and here, devoting himself to the study of botany, and buried in his books, he lived in comparative solitude until his death. He took a great and practical interest in experimental science, and he was one of those who were most prominent in advocating the foundation of an academy for the protection of scientific enterprise. Cowley's pamphlet on *The Advancement of Experimental Philosophy*, 1661, led directly to the foundation of the Royal Society, to which body Cowley, in March 1667, at the suggestion of Evelyn, addressed an ode which is the latest and one of

the strongest of his poems. He died in the Porch House, in Chertsey, on the 28th of July 1667, in consequence of having caught a cold while superintending his farm-labourers in the meadows late on a summer evening. On the 3rd of August Cowley was buried in Westminster Abbey beside the ashes of Chaucer and Spenser, where in 1675 the duke of Buckingham erected a monument to his memory. His *Poëmata Latina*, including six books "Plantarum," were printed in 1668.

Throughout their parallel lives the fame of Cowley completely eclipsed that of Milton, but posterity instantly and finally reversed the judgment of their contemporaries. The poetry of Cowley rapidly fell into a neglect as unjust as the earlier popularity had been. As a prose writer, especially as an essayist, he holds, and will not lose, a high position in literature; as a poet it is hardly possible that he can enjoy more than a very partial revival. The want of nature, the obvious and awkward art, the defective melody of his poems, destroy the interest that their ingenuity and occasional majesty would otherwise excite. He had lofty views of the mission of a poet and an insatiable ambition, but his chief claim to poetic life is the dowry of sonorous lyric style which he passed down to Dryden and his successors of the 18th century.

The works of Cowley were collected in 1668, when Thomas Sprat, afterwards bishop of Rochester, brought out a splendid edition in folio, to which he prefixed a graceful and elegant life of the poet. There were many reprints of this collection, which formed the standard edition till 1881, when it was superseded by A. B. Grosart's privately printed edition in two volumes, for the Chertsey Worthies library. The Essays have frequently been revived with approval.

(E. G.)

COWLEY, HANNAH (1743-1809), English dramatist and poet, daughter of Philip Parkhouse, a bookseller at Tiverton, Devonshire, was born in 1743. When about twenty-five years old she married Mr Cowley, of the East India Company's service, who died in 1797. Some years after her marriage, being at the theatre with her husband, she expressed the opinion that she could write as good a piece as the one being performed, and within a fortnight she had written her first play, *The Runaway*. She sent it to Garrick, who produced it at Drury Lane in 1776. Between then and 1795 she wrote twelve more plays, all of which (with one exception) were produced at Drury Lane or Covent Garden; and *The Belle's Stratagem* (1782), with one or two others, still survives in the list of acting plays. Among other, pieces were *Albina*, *Countess Raimond*, *A Bold Stroke for a Husband*, *More Ways than One*, and *A School for Greybeards, or The Mourning Bride*. Mrs Cowley was the author of a number of indifferent poems, mainly historical, and under the name of "Anna Matilda," which has since become proverbial, she carried on a sentimental correspondence in the *World* with Robert Merry. She died at Tiverton on the 11th of March 1809.

COWLEY, HENRY RICHARD CHARLES WELLESLEY, 1ST EARL (1804-1884), British diplomatist, was the eldest son of Henry Wellesley, 1st Baron Cowley (1773-1847), and Charlotte, daughter of Charles, 1st Earl Cadogan, and was consequently a nephew of the duke of Wellington and of the marquess Wellesley. Born on the 17th of June 1804, he entered the diplomatic service in 1824, receiving his first important appointment in 1848, when he became minister plenipotentiary to the Swiss cantons; and in

the same year he was sent to Frankfort to watch the proceedings of the German parliament. This was followed by his appointment as envoy extraordinary to the new Germanic confederation, a position which he only held for a short time, as he was chosen in 1852 to succeed the 1st marquess of Normanby as the British ambassador in Paris. Baron Cowley, as Wellesley had been since his father's death in 1847, held this important post for fifteen years, and the story of his diplomatic life in Paris cannot be separated from the general history of England and France. As minister during the greater part of the reign of Napoleon III., he conducted the delicate negotiations between the two countries during the time of those eastern complications which preceded and followed the Crimean War, and also during the excitement and unrest produced by the attempt made in 1858 by Felice Orsini to assassinate the emperor of the French; while his diplomatic skill was no less in evidence during the war between France and Austria and the subsequent course of events in Italy. In 1857 he had been created Earl Cowley and Viscount Dangan; in 1866 he was made a knight of the Garter; and having assisted Richard Cobden to conclude the commercial treaty between Great Britain and France in 1860, he retired in 1867 from a position which he had filled with distinction to himself and with benefit to his country. In 1863 Cowley had inherited the estate of Draycot in Wiltshire from his kinsman the 5th earl of Mornington, and he lived in retirement until his death on the 15th of July 1884. He had married in 1833 Olivia Cecilia (d. 1885), daughter of Charlotte, baroness de Ros and Lord Henry Fitzgerald, by whom he had three sons and two daughters, and was succeeded in his titles by his eldest son, William Henry, 2nd Earl Cowley (1834-1895), father of Henry Arthur Mornington, 3rd earl (b. 1866).

COWLEY FATHERS, the name commonly given to the members of the Society of Mission Priests of St John the Evangelist, an Anglican religious community, the headquarters of which are in England, at Cowley St John, close to Oxford. The society was founded in 1865 by the Rev. R. M. Benson "for the cultivation of a life dedicated to God according to the principles of poverty, chastity and obedience." The society, which is occupied both with educational and missionary work, has a house in London and branch houses at Bombay and Poona in India, at Cape Town and at St Cuthbert's, Kaffraria, in South Africa; and at Boston in the United States of America. The costume of the Cowley Fathers consists of a black frock or cassock confined by a black cord and a long black cloak.

COWPENS, a town of Spartanburg county, South Carolina, U.S.A., in the N. part of the state. Pop. (1900) 692; (1910) 1101. It is served by the Southern railway. In colonial days cattle were rounded up and branded here —whence the name. Seven miles N. of the town is the field of the battle of Cowpens, fought on the 17th of January 1781, during the War of American Independence, between the Americans under Gen. Daniel Morgan and the British under Gen. Banastre Tarleton, the British being defeated. A monument was erected on the battlefield in 1859, but was much defaced during the Civil War. The town of Cowpens was founded in 1876, and was incorporated in 1880.

COWPER, WILLIAM COWPER, 1ST EARL (c. 1665-1723), lord chancellor of England, was the son of Sir William Cowper, Bart., of Ratling Court, Kent, a Whig member of parliament of some mark in the two last Stuart reigns. Educated at St Albans school, Cowper was called to the bar in 1688; having promptly given his allegiance to the prince of Orange on his landing in England, he was made recorder of Colchester in 1694, and in 1695 entered parliament as member for Hertford. He enjoyed a large practice at the bar, and had the reputation of being one of the most effective parliamentary orators of his generation. He lost his seat in parliament in 1702 owing to the unpopularity caused by the trial of his brother Spencer on a charge of murder. In 1705 he was appointed lord keeper of the great seal, and took his seat on the woolsack without a peerage. In the following year he conducted the negotiations between the English and Scottish commissioners for arranging the union with Scotland. In November of the same year (1706) he succeeded to his father's baronetcy; and on the 14th of December he was raised to the peerage as Baron Cowper of Wingham, Kent.

When the union with Scotland came into operation in May 1707 the queen in council named Cowper lord high chancellor of Great Britain, he being the first to hold this office. He presided at the trial of Dr Sacheverell in 1710, but resigned the seal when Harley and Bolingbroke took office in the same year. On the death of Queen Anne, George I. appointed Cowper one of the lords justices for governing the country during the king's absence, and a few weeks later he again became lord chancellor. A paper which he drew up for the guidance of the new king on constitutional matters, entitled *An Impartial History of Parties*, marks the advance of English opinion towards party government in the modern sense. It was published by Lord Campbell in his *Lives of the Lord Chancellors*. Cowper supported the impeachment of Lord Oxford for high treason in 1715, and in 1716 presided as lord high steward at the trials of the peers charged with

complicity in the Jacobite rising, his sentences on whom have been censured as unnecessarily severe. He warmly supported the septennial bill in the same year. On the 18th of March 1718 he was created Viscount Fordwich and Earl Cowper, and a month later he resigned office on the plea of ill-health, but probably in reality because George I. accused him of espousing the prince of Wales's side in his quarrel with the king. Taking the lead against his former colleagues, Cowper opposed the proposal brought forward in 1719 to limit the number of peers, and also the bill of pains and penalties against Atterbury in 1723. In his last years he was accused, but probably without reason, of active sympathy with the Jacobites. He died at his residence, Colne Green, built by himself on the site of the present mansion of Panshanger on the 10th of October 1723.

Cowper was not a great lawyer, but Burnet says that "he managed the court of chancery with impartial justice and great despatch"; the most eminent of his contemporaries agreed in extolling his oratory and his virtues. He was twice married—first, about 1686, to Judith, daughter and heiress of Sir Robert Booth, a London merchant; and secondly, in 1706, to Mary, daughter of John Clavering, of Chopwell, Durham. Swift (*Examiner*, xvii., xxii.) alludes to an allegation that Cowper had been guilty of bigamy, a slander for which there appears to have been no solid foundation. His younger brother, Spencer Cowper (1669-1728), was tried for the murder of Sarah Stout in 1699, but was acquitted; the lady, who had fallen in love with Cowper, having in fact committed suicide on account of his inattention. He was one of the managers of the impeachment of Sacheverell; was attorney-general to the prince of Wales (1714), chief justice of Chester (1717), and judge of the common pleas (1727). He was grandfather of William Cowper, the poet.

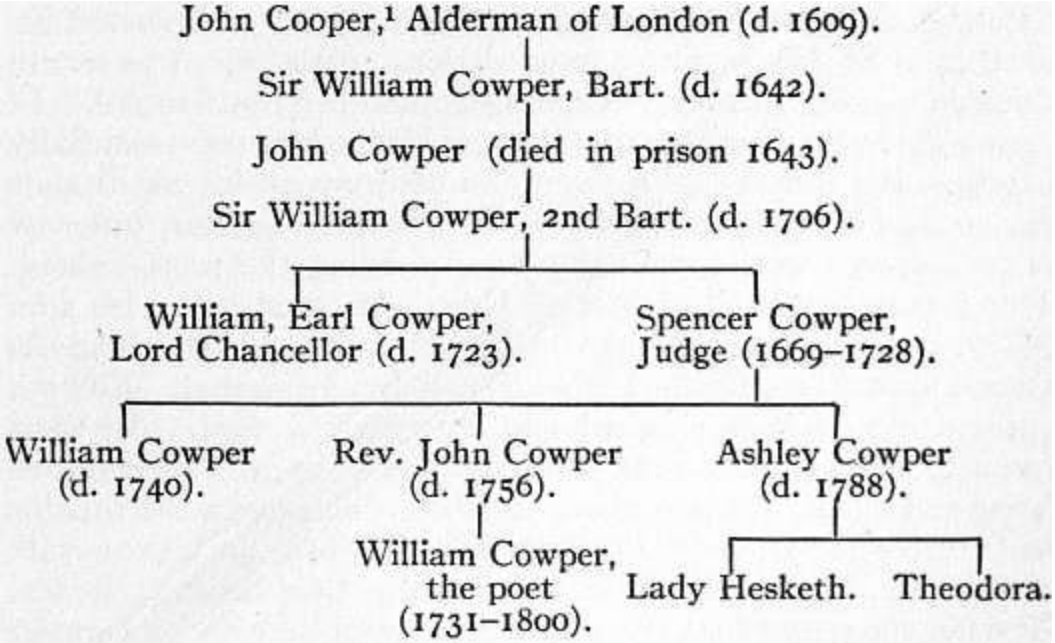
The 1st earl left two sons and two daughters by his second wife. The eldest son, William (1709-1764), who succeeded to the title, assumed the

name of Clavering in addition to that of Cowper on the death of his maternal uncle. His wife was a daughter of the earl of Grantham, and granddaughter of the earl of Ossory. The son of this marriage, George Nassau, 3rd Earl Cowper (1738-1789), inherited the estates of the earl of Grantham; and in 1778 he was created by the emperor Joseph II. a prince of the Holy Roman Empire. The 5th earl (1778-1837) married a daughter of Lord Melbourne, the prime minister, by whom he had two sons; and his widow married as her second husband Lord Palmerston, who devised his property of Broadlands to her second son, William Francis Cowper-Temple (1811-1888), who was created Baron Mount Temple in 1880. The elder son, George Augustus Frederick (1806-1856), 6th Earl Cowper, married Anne Florence, daughter of Thomas Philip, earl de Grey; and this lady at her father's death became *suo jure* baroness Lucas of Cradwell. Francis Thomas de Grey, 7th Earl Cowper (1834-1905), in addition to the other family titles, became in 1871 10th Baron Dingwall in the peerage of Scotland, and 8th Baron Butler of Moore Park in the peerage of Ireland as heir-general of Thomas, earl of Ossory, son of the 1st duke of Ormonde; the attainder of 1715 affecting those titles having been reversed in July 1871. On the death of his mother he also inherited the barony of Lucas of Cradwell. On the death without issue in 1905 of the 7th earl, who was lord lieutenant of Ireland 1880-1882, the earldom and barony of Cowper, together with the viscountcy of Fordwich, became extinct; the barony of Butler fell into abeyance among his sisters and their heirs, and the baronies of Lucas and Dingwall devolved on his nephew, Auberon Thomas Herbert (b. 1876).

See *Private Diary of Earl Cowper*, edited by E. C. Hawtrey for the Roxburghe Club (Eton, 1833); *The Diary of Mary, Countess Cowper*, edited by the Hon. Spencer Cowper (London, 1864); Lord Campbell, *Lives of the Lord Chancellors and Keepers of the Great Seal* (8 vols., London, 1845-1869); Edward Foss, *The Judges of England* (9 vols., London, 1848-1864); Gilbert Burnet, *History of his Own Time* (6 vols.,

Oxford, 1833); T. B. Howell, *State Trials*, vol. xii.-xv. (33 vols., London, 1809-1828); G. E. C., *Complete Peerage* (London, 1889). (R. J. M.)

COWPER, WILLIAM (1731-1800), English poet, was born in the rectory (now rebuilt) of Great Berkhampstead, Hertfordshire, on the 26th of November (O.S. 15th) 1731, his father the Rev. John Cowper being rector of the parish as well as a chaplain to George II. On both the father's and the mother's side he was of ancient lineage. The father could trace his family back to the time of Edward IV. when the Cowpers were Sussex landowners, while his mother, Ann, daughter of Roger Donne of Ludham Hall, Norfolk, was of the same race as the poet Donne, and the family claimed to have Plantagenet blood in its veins. Of more human interest were Cowper's immediate predecessors. His grandfather was that Spencer Cowper who, after being tried for his life on a charge of murder, lived to be a judge of the court of common pleas, while his elder brother became lord chancellor and Earl Cowper, a title which became extinct in 1905. Here is the poet's genealogical tree.



The Rev. John Cowper was twice married. Cowper's mother, to whom the memorable lines were written beginning "Oh that these lips had language," was his first wife. She died in 1737 at the age of thirty-four, when the poet was but six years old, and she is buried in Berkhampstead church. Cowper's stepmother is buried in Bath, and a tablet on the walls of the cathedral commemorates her memory. The father, who appears to have been a conscientious clergyman with no special interest in his sons, died in 1756 and was buried in the Cowper tomb at Panshanger. Only one other of his seven children grew to manhood—John, who was born in 1737.

The poet appears to have attended a dame's school in earliest infancy, but on his mother's death, when he was six years old, he was sent to boarding-school, to a Dr Pitman at Markyate, a village 6 m. from Berkhampstead. From 1738 to 1741 he was placed in the care of an oculist, as he suffered from inflammation of the eyes. In the latter year he was sent to Westminster school, where he had Warren Hastings, Impey, Lloyd, Churchill and Colman for schoolfellows. It was at the Markyate school that he suffered the tyranny that he commemorated in *Tirocinium*. His days at Westminster,

Southey thinks, were "probably the happiest in his life," but a boy of nervous temperament is always unhappy at school. At the age of eighteen Cowper entered a solicitor's office in Ely Place, Holborn. Here he had Thurlow, the future lord chancellor, as a fellow-clerk, and it is stated that Thurlow promised to help his less pushful comrade in the days of realized ambition. Three years in Ely Place were rendered happy by frequent visits to his uncle Ashley's house in Southampton Row, where he fell deeply in love with his cousin Theodora Cowper. At twenty-one years of age he took chambers in the Middle Temple, where we first hear of the dejection of spirits that accompanied him periodically through manhood. He was called to the bar in 1754. In 1759 he removed to the Inner Temple and was made a commissioner of bankrupts. His devotion to his cousin, however, was a source of unhappiness. Her father, possibly influenced by Cowper's melancholy tendencies, perhaps possessed by prejudices against the marriage of cousins, interposed, and the lovers were separated—as it turned out for ever. During three years he was a member of the Nonsense Club with his two schoolfellows from Westminster, Churchill and Lloyd, and he wrote sundry verses in magazines and translated two books of Voltaire's *Henriade*. A crisis occurred in Cowper's life when his cousin Major Cowper nominated him to a clerkship in the House of Lords. It involved a preliminary appearance at the bar of the house. The prospect drove him insane, and he attempted suicide; he purchased poison, he placed a penknife at his heart, but hesitated to apply either measure of self-destruction. He has told, in dramatic manner, of his more desperate endeavour to hang himself with a garter. Here he all but succeeded. His friends were informed, and he was sent to a private lunatic asylum at St Albans, where he remained for eighteen months under the charge of Dr Nathaniel Cotton, the author of *Visions*. Upon his recovery he removed to Huntingdon in order to be near his brother John, who was a fellow of St Benet's College, Cambridge. John had visited his brother at St Albans and arranged this. An attempt to secure

suitable lodgings nearer to Cambridge had been ineffectual. In June 1765 he reached Huntingdon, and his life here was essentially happy. His illness had broken him off from all his old friends save only his cousin Lady Hesketh, Theodora's sister, but new acquaintances were made, the Unwins being the most valued. This family consisted of Morley Unwin (a clergyman), his wife Mary, and his son (William) and daughter (Susannah). The son struck up a warm friendship which his family shared. Cowper entered the circle as a boarder in November (1765). All went serenely until in July 1767 Morley Unwin was thrown from his horse and killed. A very short time before this event the Unwins had received a visit from the Rev. John Newton (*q.v.*), the curate of Olney in Buckinghamshire, with whom they became friends. Newton suggested that the widow and her children with Cowper should take up their abode in Olney. This was achieved in the closing months of 1767. Here Cowper was to reside for nineteen years, and he was to render the town and its neighbourhood memorable by his presence and by his poetry. His residence in the Market Place was converted into a Cowper Museum a hundred years after his death, in 1900. Here his life went on its placid course, interrupted only by the death of his brother in 1770, until 1773, when he became again deranged. It can scarcely be doubted that this second attack interrupted the contemplated marriage of Cowper with Mary Unwin, although Southey could find no evidence of the circumstance and Newton was not informed of it. J. C. Bailey brings final evidence of this (*The Poems of Cowper*, page 15). The fact was kept secret in later years in order to spare the feelings of Theodora Cowper, who thought that her cousin had remained as faithful as she had done to their early love.

It was not until 1776 that the poet's mind cleared again. In 1779 he made his first appearance as an author by the *Olney Hymns*, written in conjunction with Newton, Cowper's verses being indicated by a "C." Mrs Unwin suggested secular verse, and Cowper wrote much, and in 1782 when he was fifty-one years old there appeared *Poems of William Cowper of the*

Inner Temple, Esq.: London, Printed for J. Johnson, No. 72 St Paul's Churchyard. The volume contained "Table Talk," "The Progress of Error," "Truth," "Expostulation" and much else that survives to be read in our day by virtue of the poet's finer work. This finer work was the outcome of his friendship with Lady Austen, a widow who, on a visit to her sister, the wife of the vicar of the neighbouring village of Clifton, made the acquaintance of Cowper and Mrs Unwin. The three became great friends. Lady Austen determined to give up her house in London and to settle in Olney. She suggested *The Task* and inspired *John Gilpin* and *The Royal George*. But in 1784 the friendship was at an end, doubtless through Mrs Unwin's jealousy of Lady Austen. Cowper's second volume appeared in 1785;—*The Task: A Poem in Six Books. By William Cowper of the Inner Temple, Esq.; To which are added by the same author An Epistle to Joseph Hill, Esq., Tirocinium or a Review of Schools, and the History of John Gilpin: London, Printed for J. Johnson, No. 72 St Paul's Church Yard; 1785.* His first book had been a failure, one critic even declaring that "Mr Cowper was certainly a good, pious man, but without one spark of poetic fire." This second book was an instantaneous success, and indeed marks an epoch in literary history. But before its publication—in 1784—the poet had commenced the translation of Homer. In 1786 his life at Olney was cheered by Lady Hesketh taking up a temporary residence there. The cousins met after an interval of twenty-three years, and Lady Hesketh was to be Cowper's good angel to the end, even though her letters disclose a considerable impatience with Mrs Unwin. At the end of 1786 a removal was made to Weston Underwood, the neighbouring village which Cowper had frequently visited as the guest of his Roman Catholic friends the Throckmortons. This was to be his home for yet another ten years. Here he completed his translation of Homer, materially assisted by Mr Throckmorton's chaplain Dr Gregson. There are six more months of insanity to record in 1787. In 1790, a year before the *Homer* was published, commenced his friendship with his cousin John

Johnson, known to all biographers of the poet as “Johnny of Norfolk.” Johnson also aspired to be a poet, and visited his cousin armed with a manuscript. Cowper discouraged the poetry, but loved the writer, and the two became great friends. New friends were wanted, for in 1792 Mrs Unwin had a paralytic stroke, and henceforth she was a hopeless invalid. A new and valued friend of this period was Hayley, famous in his own day as a poet and in history for his association with Romney and Cowper. He was drawn to Cowper by the fact that both were contemplating an edition of “Milton,” Cowper having received a commission to edit, writing notes and translating the Latin and Italian poems. The work was never completed. In 1794 Cowper was again insane and his lifework was over. In the following year a removal took place into Norfolk under the loving care of John Johnson. Johnson took Cowper and Mary Unwin to North Tuddenham, thence to Mundesley, then to Dunham Lodge, near Swaffham, and finally in October 1796 they moved to East Dereham. In December of that year Mrs Unwin died. Cowper lingered on, dying on the 25th of April 1800. The poet is buried near Mrs Unwin in East Dereham church.

Cowper is among the poets who are epoch-makers. He brought a new spirit into English verse, and redeemed it from the artificiality and the rhetoric of many of his predecessors. With him began the “enthusiasm of humanity” that was afterwards to become so marked in the poetry of Burns and Shelley, Wordsworth and Byron. With him began the deep sympathy with nature, and love of animal life, which was to characterize so much of later poetry.

Although Cowper cannot rank among the world’s greatest poets or even among the most distinguished of poets of his own country, his place is a very high one. He had what is a rare quality among English poets, the gift of humour, which was very singularly absent from others who possessed many other of the higher qualities of the intellect. Certain of his poems,

moreover,—for example, “To Mary,” “The Receipt of my Mother’s Portrait,” and the ballad “On the Loss of the Royal George,”—will, it may safely be affirmed, continue to be familiar to each successive generation in a way that pertains to few things in literature. Added to this, one may note Cowper’s distinction as a letter-writer. He ranks among the half-dozen greatest letter-writers in the English language, and he was perhaps the only great letter-writer with whom the felicity was due to the power of what he has seen rather than what he has read.

BIBLIOGRAPHY.—The first important life of Cowper was by Hayley in 1803. In its complete form it appeared in 4 volumes in 1806 and was reprinted in 1809 and 1812. It was reprinted again by the Rev. T. S. Grimshawe with the Correspondence in 8 volumes in 1835. Robert Southey's much more valuable *Life and Letters* appeared also in 15 volumes in 1834-1837. The *Private Correspondence*, edited by John Johnson, appeared in 2 volumes in 1824 and again in 1835. The *Complete Correspondence*, edited by Thomas Wright, was published in 1904, but more correspondence appeared in *Notes and Queries*, July, August and September 1904, and in *The Poems of William Cowper*, edited by J. C. Bailey (1905). Edward Dowden unearthed new correspondence with William Hayley in *The Atlantic Monthly* (1907). Short lives of Cowper have appeared in many quarters, from Thomas Taylor's (1833) to Goldwin Smith's in the "English Men of Letters" series (1880). Another brief biography of great merit is attached to the Globe edition of Cowper's *Works*. Essays by Leslie Stephen, Stopford Brooke, Whitwell Elwin, George Eliot and Walter Bagehot deserve attention. See also St Beuve's *Causeries du Lundi* (1868), vol. xi.; *Letters of Lady Hesketh to John Johnson* (1901); *John Newton*, by the Rev. Josiah Bull (1868); *Cowper and Mary Unwin*, by Caroline Gearey (1900); and *A Concordance to the Poetic Works of William Cowper*, by John Neave (1887).

(C. K. S.)

1 Alderman Cooper thus spelt his name and all the family from that day to this, including the poet, have so pronounced it.

COWRY, the popular name of the shells of the *Cypraeida*, a family of mollusks. Upwards of 100 species are recognized, and they are widely distributed over the world—their habitat being the shallow water along the sea-shore. The best known is the money cowry or *Cypraea moneta*, a small shell about half an inch in length, white and straw-coloured without and blue within, which derives its distinctive name from the fact that in various countries it has been employed as a kind of currency. (See SHELL-MONEY.) In Africa among those tribes, such as the Niam-Niam, who do not recognize their monetary value, the shells are in demand as fashionable decorations, just as in Germany they were in use as an ornament for horses' harness, and were popular enough to acquire several native names, such as *Brustharnisch* or breastplates, and *Otterköpfchen* or little adders' heads. Besides the *Cypraea moneta* various species are employed in this decorative use. The *Cypraea aurora* is a mark of chieftainship among the natives of the Friendly Islands; the *Cypraea annulus* is a favourite with the Asiatic islanders; and several of the larger kinds have been used in Europe for the carving of cameos. The tiger cowry, *Cypraea tigris*, so well known as a mantelpiece ornament in England and America, is commonly used by the natives of the Sandwich Islands to sink their nets; and they have also an ingenious plan of cementing portions of several shells into a smooth oval ball which they then employ as a bait to catch the cuttle-fish. While the species already mentioned occur in myriads in their respective habitats, the *Cypraea princeps* and the *Cypraea umbilicata* are extremely rare.

COW-TREE, or MILK-TREE, *Brosimum Galactodendron* (natural order Moraceae), a native of Venezuela. As in other members of the order, the stem contains a milky latex, which flows out in considerable quantities when a notch is cut in it. The "milk" is sweet and pleasant tasting. Another species, *B. Alicastrum*, the bread-nut tree, a native of central America and Jamaica, bears a fruit which is cooked and eaten. The bread-fruit (*Artocarpus*) is an allied genus of the same natural order.

COX, DAVID (1783-1859), English painter, was born on the 29th of April 1783, in a small house attached to the forge of his father, a hardworking master smith, in a mean suburb of Birmingham. Turning his hand to what he could get to do, Joseph Cox, the father, was both blacksmith and whitesmith, and when the war with France began took to the making of bayonets and horse shoes, on wholesale commission, and immediately the boy David was thought able to assist he was taken from the poor elementary school in the neighbourhood, and set to the anvil. The attempt to turn the boy to this kind of labour had, however, been made too early; it was too heavy for his strength, and he was sent to what was called by the cyclops of Birmingham a "toy trade," making lacquered buckles, painted lockets, tin snuff-boxes and other "fancy" articles. Here David very soon acquired some power of painting miniatures, and his talents might have been misdirected had his master, Fieldler by name, not released him from his apprenticeship by dying by his own hand; and David found an opening as colour-grinder and scene-painter's fag in the theatre then leased, with several others, by the father of Macready, the tragedian.

This obscure step, not one of promotion at the time, was really the most important incident in the uneventful career of Cox. The boy, who had inherited a rather weakly body, and had been trained with care by a pious mother, while intellectually negative and unable to cope with any kind of learning whatever, had endless perseverance, great strength of application, and all through life remained genial, gentle, simple-minded and modest, his penetration and self-reliance being wholly professional, inspired by his love of nature and his knowledge of his subject. Not very quick, and with little versatility, he went step by step in one line of study from the time he began to get the smallest remuneration for his pictures to the age of seventy-five, when he painted large in oil very much the same class of subjects he had of old produced small in water-colours, with the same impressive and unaffectedly noble sentiment, only increased by the mastery of almost infinite practice. He was never led astray by fictitious splendour of any kind, except once indeed in 1825, when he imitated Turner, and produced a classic subject he called "Carthage, Aeneas, and Achates." He never visited Venice or Egypt, or crossed the Channel except for a week or two in Belgium and Paris, and never even went to Scotland for painting purposes. Bettws-y-Coed and its neighbourhood was everything to him, and characteristics most truly English were beloved by him with a sort of filial instinct. So completely did he love the country, that even London, where it was his interest to live, had few attractions, and did not retain him long.

This residence in the metropolis which began in 1804 was, however, of the most essential educational advantage to him. The Water-Colour Society was established the year after he arrived, and was mainly supported by landscape-painters. He was not, of course, admitted at first into membership, not till 1813, before which time an attempt to establish a rival exhibition had been made. In this Cox joined, the result being very serious to him, an entire failure entailing the seizure and forced sale of all the pictures. At that time the tightest economy was the rule with him, and to save the trifling cost of new strainers or stretching boards, he covered up one picture by another. When these works were prepared for re-sale, fifty years afterwards, some of them yielded picture after picture, peeled off the boards like the waistcoats from the body of the gravedigger in Hamlet!

While lodging near Astley's Circus he married his landlady's daughter, and then took a modest cottage at Dulwich, where he gradually left off scene-painting and became teacher, giving lessons at ten shillings a lesson. This entailed walking to the pupils' homes, and the gift of the paintings done before the pupils. These have since been frequently sold for large sums, but his own price, when lucky enough to sell his best works, was never over a few pounds, and more frequently about fifteen shillings. Sometimes, indeed, he sold them in quantities at two pounds a dozen to be resold to country teachers. By and by he resisted the leaving of the work done to the pupil, but with little advantage to himself, as he saw no end to the accumulation of his own productions, and actually tore them up, and threw them into areas, or pushed them into drains during his trudge homeward. A number of years after he pointed out a particular drain to a friend, and said, "Many a work of mine has gone down that way to the Thames!"

Shortly after he had turned thirty, his stay in London suddenly ended. He was offered the enormous sum of £100 per annum, by a ladies' college in Hereford, and thither he went. This sum he supplemented by teaching in the Hereford grammar school for many years, at six guineas a year, and in other schools at better pay, but still, and up to his fortieth year, we find his prices for pictures from eight to twenty-five shillings. Cox has no history apart from his productions, and these particulars as to his remuneration possess an interest almost dramatic when we contrast them with the enormous sums realized by his later works, and with the "honours and observance, troops of friends," that accompanied old age with him, when settled down in his own home at Harborne, near his native town, where he died on the 7th of June 1859.

Cox's second short residence in London, dating from 1835 to 1840, marks the period of his highest powers. During those years, and for twelve years after, his productiveness kept pace with his mastery, and it would be difficult to overrate the impressiveness of effect, and high feeling, within the narrow range of subject displayed by many of these works. He was now surrounded by dealers, and wealth flowed in upon him. Still he remained the same, a man with few wants and scarcely any enjoyments except those furnished by his brush and his colours. The home at Harborne was a pleasant one, but the approach to the front was useless as the door was kept fastened up, the only entrance being through the garden at the back, and the principal room appropriated as his studio he was content to reach by a narrow stair from the kitchen. Neither in it nor elsewhere was there any luxury or even taste visible:—no *bric-à-brac*, no objects of interest, few or no books, no pictures except landscapes by his friends. When in winter, after his wife's death, the fire went out, and the cold at last surprised him, he lifted his easel into the little dining-room and began again. A union of his friends was formed in 1855 to procure a portrait of him, which was painted by Sir J. Watson Gordon; and an exhibition of his works was opened in London in 1858 and again another in 1859. This was actually open when the news of his death arrived.

The number of David Cox's works, great and small, is enormous. He produced hundreds annually for perhaps forty-five years. Before his death and for ten years thereafter, their prices were remarkable, as witness the following obtained at auction—"Going to the Mill," £1575; "Old Mill at Bettws-y-Coed," £1575; "Outskirts of a Wood, with Gipsies," £2305; "Peace and War," £3430.

See Hall, *Biography of David Cox* (1881).

(W. B. Sc.)

COX, SIR GEORGE WILLIAM (1827-1902), English divine and scholar, was born on the 10th of January 1827, at Benares, India, and was educated at Rugby and Trinity College, Oxford. In 1850 he was ordained, and in 1860 took a mastership at Cheltenham College, which he held for only a year. He had already contributed to the *Edinburgh Review*, and had published in 1850 *Poems, Legendary and Historical* (with E. A. Freeman), and in 1853 a *Life of St Boniface*. From 1861 he devoted himself entirely to literary work, chiefly in connexion with history and comparative mythology. Many of his works were avowedly popular in character, and the most important, the *History of Greece*, has been superseded and is now of little value. His studies in mythology were inspired by Max Müller, but his treatment of the subjects was his own. He was an extreme supporter of the solar and nebular theory as the explanation of myths. He also edited (with W. T. Brande) *A Dictionary of Science, Literature and Art* (1875). Sir George Cox (who succeeded to the baronetcy in 1877) was a Broad Churchman, and a prominent supporter of Bishop Colenso in 1863-1865; and five years after Colenso's death he published (1888) his *Life* of the bishop. He was himself nominated to the see of Natal, but was refused consecration. In 1881 he was made vicar of Scrayingham, York, but resigned the living in 1897. In 1896 he was given a civil list pension. He died at Walmer on the 9th of February 1902.

WORKS.—*Tales from Greek Mythology* (1861); *A Manual of Mythology* (1867); *Latin and Teutonic Christendom* (1870); *The Mythology of the Aryan Nations* (1870, new ed., 1882); *History of Greece* (1874); *General History of Greece* (1876); *History of the Establishment of British Rule in India*, and *An Introduction to the Science of Comparative Mythology* (1881); *Lives of Greek Statesmen* (1885); *Concise History of England* (1887).

COX, JACOB DOLSON (1828-1900), American general, political leader and educationalist, was born on the 27th of October 1828 in Montreal, Canada. His father, a shipbuilder of German descent (Koch), and his mother, a descendant of William Brewster, were natives of New York City, where the boy grew up, studying law in an office in 1842-1844, and working in a broker's office in 1844-1846, and where, under the influence of Charles G. Finney (1792-1875), whose daughter he afterwards married, he prepared himself for the ministry. He graduated at Oberlin College in 1851, having in the meantime given up his theological studies in rebellion at Finney's dogmatism. In 1851-1853 he was superintendent of schools at Warren, Ohio; in 1853 was admitted to the Ohio bar, being at that time an anti-slavery Whig; and in 1859 was elected to the state senate, in which with Garfield and James Monroe (1821-1898) he formed the "Radical Triumvirate," Cox himself presenting a petition for a personal liberty law and urging woman's rights, especially larger property rights to married women. Appointed by Governor Dennison one of three brigadiers-general of militia in 1860, he eagerly undertook the study of tactics, strategy and military history. He rendered great assistance in raising troops for the Union service in 1861, enlisted himself in spite of poor health and a family of six small children, and in April was commissioned a brigadier-general, U.S.V. He took part in the West Virginia campaign of 1861, served in the Kanawha region, in supreme command after Rosecrans's relief in the spring, until August 1862, when his troops were ordered to join Burnside's 9th Corps in Virginia. After the death at his side of General Reno in the battle of South Mountain, and during Antietam, Cox commanded the corps, and at the close of the campaign (6th Oct. 1862) he was appointed major-general, U.S.V., but the appointment was not confirmed. In April-December 1863 he was head of the department of Ohio. In 1864 he took part in the Atlanta campaign under Sherman, as a divisional and subsequently corps-commander: at the battle of Franklin he commanded the 23rd Corps, and he served at Nashville also. He led an expedition following Sherman

into the Carolinas and fought two successful actions with Bragg at Kinston, N.C. He was governor of Ohio in 1866-1867, and as such advocated the colonization of the freedmen in a restricted area, and sympathized with President Johnson's programme of Reconstruction and worked for a compromise between Johnson and his opponents, although he finally deserted Johnson. In 1868 he was chairman of the Republican national convention which nominated Grant. He was secretary of the interior in 1869-1870; opposed the confirmation of the treaty for the annexation of Santo Domingo, negotiated by O. E. Babcock and urged by President Grant; introduced the merit system in his department, and resigned in October 1870 because of pressure put on him by politicians piqued at his prohibition of campaign levies on his clerks, and because of the interference of Grant in favour of William McGarrahan's attempt by legal proceedings to obtain from Cox a patent to certain California mining lands. He took up legal practice in Cincinnati, became president in 1873, and until 1877 was receiver, of the Toledo & Wabash & Western. In 1877-1879 he was a representative in Congress. From 1881 to 1897 he was dean of the Cincinnati law school, and from 1885 to 1889 president of the University of Cincinnati. He died at Magnolia, Massachusetts, on the 4th of August 1900. A successful lawyer, and in his later years a prominent microscopist, who won a gold medal of honour for microphotography at the Antwerp Exposition of 1891, he is best known as one of the greatest "civilian" generals of the Civil War, and, with the possible exception of J. C. Ropes, the highest American authority of his time on military history, particularly the history of the American Civil War. He wrote *Atlanta* (New York, 1882) and *The March to the Sea, Franklin and Nashville* (New York, 1882), both in the series *Campaigns of the Civil War*; *The Second Battle of Bull Run, as Connected with the Fitz-John Porter Case* (Cincinnati, 1882); and the valuable *Military Reminiscences of the Civil War* (2 vols., New York, 1900) published posthumously.

See J. R. Ewing, *Public Services of Jacob Dolson Cox* (Washington, 1902), a Johns Hopkins University dissertation; and W. C. Cochran, "Early Life and Military Services of General Jacob Dolson Cox," in *Bibliotheca Sacra*, vol. 58 (Oberlin, Ohio, 1901).

COX, KENYON (1856-), American painter, was born at Warren, Ohio, on the 27th of October 1856, being the son of Gen. Jacob Dolson Cox. He was a pupil of Carolus-Duran and of J. L. Gérôme in Paris from 1877 to 1882, when he opened a studio in New York, subsequently teaching with much success in the Art Students' League. His earlier work was mainly of the nude drawn with great academic correctness in somewhat conventional colour. Receiving little encouragement for such pictures, he turned to mural decorative work, in which he achieved prominence. Among his better-known examples are the frieze for the court room of the Appellate Court, New York, and decorations for the Walker Art Gallery, Bowdoin College; for the Capitol at Saint Paul, Minnesota, and for other public and private buildings. He wrote with much authority on art topics, and is the author of the critical reviews, *Old Masters and New* (1905) and *Painters and Sculptors* (1907), besides some poems. He became a National Academician in 1903. His wife, *née* Louise H. King (b. 1865), whom he married in 1892, also became a figure and portrait-painter of note.

COX, RICHARD (1500?-1581), dean of Westminster and bishop of Ely, was born of obscure parentage at Whaddon, Buckinghamshire, in 1499 or 1500. He was educated at the Benedictine priory of St Leonard Snelshall near Whaddon, at Eton, and at King's College, Cambridge, where he graduated B.A. in 1524. At Wolsey's invitation he became a member of the cardinal's new foundation at Oxford, was incorporated B.A. in 1525, and created M.A. in 1526. In 1530 he was engaged in persuading the more unruly members of the university to approve of the king's divorce. A premature expression of Lutheran views is said to have caused his departure from Oxford and even his imprisonment, but the records are silent on these sufferings which do not harmonize with his appointment as master of the royal foundation at Eton. In 1533 he appears as author of an ode on the coronation of Anne Boleyn, in 1535 he graduated B.D. at Cambridge, proceeding D.D. in 1537, and in the same year subscribing the Institution of a Christian Man. In 1540 he was one of the fifteen divines to whom were referred crucial questions on the sacraments and the seat of authority in the Church; his answers (printed in Pocock's *Burnet*, iii. 443-496) indicate a mind tending away from Catholicism, but susceptible to "the king's doctrine"; and, indeed, Cox was one of the divines by whom Henry said the "King's Book" had been drawn up when he wished to impress upon the Regent Arran that it was not exclusively his own doing. Moreover, he was present at the examination of Barnes, subscribed the divorce of Anne of Cleves, and in that year of reaction became archdeacon and prebendary of Ely and canon of Westminster. He was employed on other royal business in 1541, was nominated to the projected bishopric of Southwell, and was made king's chaplain in 1542. In 1543 he was employed to ferret out the "Prebendaries' Plot" against Cranmer, and became the archbishop's chancellor. In December he was appointed dean of Oseney (afterwards Christ Church) Oxford, and in July was made almoner to Prince Edward, in whose education he took an active part. He was present at Dr Crome's recantation in 1546, denounced it as insincere and insufficient, and severely handled him before the privy council.

After Edward's accession, Cox's opinions took a more Protestant turn, and he became one of the most active agents of the Reformation. He was consulted on the compilation of the Communion office in 1548, and the first and second books of Common Prayer, and sat on the commission for the reform of the canon law. As chancellor of the university of Oxford (1547-1552) he promoted foreign divines such as Peter Martyr, and was a moving spirit of the two commissions which sought with some success to eradicate everything savouring of popery from the books, MSS., ornaments and endowments of the university, and earned Cox the sobriquet of its cancellor rather than its chancellor. He received other rewards, a canonry of Windsor (1548), the rectory of Harrow (1547) and the deanery of Westminster (1549). He lost these preferments on Mary's accession, and was for a fortnight in August 1553 confined to the Marshalsea. He was not of the stuff of which martyrs are made; he remained in obscurity until after the failure of Wyatt's rebellion, and then in May 1554 escaped in the same ship as the future archbishop Sandys, to Antwerp. Thence in March 1555 he made his way to Frankfort, where he played an important part in the first struggle between Anglicanism and Puritanism. The exiles had, under the influence of Knox and Whittingham, adopted Calvinistic doctrine and a form of service far more Puritanical than the Prayer-Book of 1552. Cox stood up for that service, and the exiles were divided into Knoxians and Coxians. Knox attacked Cox as a pluralist, Cox accused Knox of treason to the emperor Charles V. This proved the more dangerous charge: Knox and his followers were expelled, and the Prayer-Book of 1552 was restored.

In 1559 Cox returned to England, and was elected bishop of Norwich, but the queen changed her mind and Cox's destination to Ely, where he remained twenty-one years. He was an honest, but narrow-minded ecclesiastic, who held what views he did hold intolerantly, and was always wanting more power to constrain those who differed from him (see his letter in *Hatfield MSS.* i. 308). While he refused to minister in the queen's chapel because of the crucifix and lights there, and was a bitter enemy to the Roman Catholics, he had little more patience with the Puritans. He was grasping, or at least tenacious of his rights in money matters, and was often brought into conflict with courtiers who coveted episcopal lands. The queen herself intervened, when he refused to grant Ely House to her favourite, Sir Christopher Hatton; but the well-known letter beginning "Proud Prelate" and threatening to

unfrock him seems to be an impudent forgery which first saw the light in the *Annual Register* for 1761. It hardly, however, misrepresents the queen's meaning, and Cox was forced to give way. These and other trials led him to resign his see in 1580, and it is significant that it remained vacant for nineteen years. Cox died on the 22nd of July 1581: a monument erected to his memory twenty years later in Ely cathedral was defaced, owing, it was said, to his evil repute. Strype (Whitgift, i. 2) gives Cox's hot temper and marriage as reasons why he was not made archbishop in 1583 in preference to Whitgift, who had been his chaplain; but Cox had been dead two years in 1583. His first wife's name is unknown; she was the mother of his five children, of whom Joanna married the eldest son of Archbishop Parker. His second wife was the widow of William Turner (d. 1568), the botanist and dean of Wells.

Voluminous details about Cox's life are given in Strype's Works, Parker Soc. Publ., and Cooper's *Athenae Cantab.* i. 437-445. See also Letters and Papers of Henry VIII.; Acts of the Privy Council; Cal. Dom. State Papers; Cal. Hatfield MSS.; Lit. Rem. of Edward VI.; Whittingham's *Troubles at Frankfort*; Machyn's *Diary*; Pocock's *Burnet*; Bentham's *Ely*; Willis's *Cathedrals*; Le Neve's *Fasti*; R. W. Dixon's *Church History*.

(A. F. P.)

COX, SAMUEL (1826-1893), English nonconformist divine, was born in London on the 19th of April 1826. For some years he worked as an apprentice in the London docks, and then entered the Baptist College at Stepney. In 1851 he became pastor of a Baptist church at Southsea, removing in 1855 to Ryde, and in 1863 to Nottingham. He was president of the Baptist Association in 1873 and received the degree of D.D. from St Andrews in 1882. Cox had distinct gifts as a biblical expositor and was the founder and first editor of a monthly journal *The Expositor* (1875-1884). Among the best known of his numerous theological publications are *Salvator Mundi* (1877), *A Commentary on the Book of Job* (1880), *The Larger Hope* (1883).

COX, SAMUEL HANSON (1793-1880), American Presbyterian divine, was born at Rahway, N.J., on the 25th of August 1793, of Quaker stock. He was pastor of the Presbyterian church at Mendham, N.J., in 1817-1821, and of two churches in New York from 1821 to 1834. He helped to found the University of the City of New York, and from 1834 to 1837 was professor of pastoral theology at Auburn. The next seventeen years were passed in active ministry at Brooklyn, whence in 1854, owing to a throat affection, he removed to Owego, N.Y. He died at Bronxville, N.Y., on the 2nd of October 1880. Cox was a fine orator, and a speech made in Exeter Hall in 1833, in which he put the responsibility for slavery in America on the British government, made a great impression. It was he who described the appellation D.D. as a couple of "semi-lunar fardels."

His son, Arthur Cleveland Coxe (1818-1896), who changed the spelling of the family name, graduated at the University of the City of New York in 1838 and at the General Theological Seminary in 1841. He was rector of St John's Church, Hartford, in 1843-1854, of Grace Church, Baltimore, in 1854-1863, and of Calvary Church, New

York City, in 1863. In 1863 he became assistant bishop and in 1865 bishop of western New York. He was strongly influenced by the Oxford Movement. Bishop Coxe wrote spirited defences of Anglican orders and published several volumes of verse, notably *Christian Ballads* (1845).

COXCIE, MICHAEL (1499-1592), Flemish painter, was born at Malines, and studied under Bernard van Orley, who probably induced him to visit Italy. At Rome in 1532 he painted the chapel of Cardinal Enckenvoort in the church of Santa Maria dell' Anima; and Vasari, who knew him, says with truth "that he fairly acquired the manner of an Italian." But Coxcie's principal occupation was designing for engravers; and the fable of Psyche in thirty-two sheets by Agostino Veneziano and the Master of the Die are favourable specimens of his skill. During a subsequent residence in the Netherlands Coxcie greatly extended his practice in this branch of art. But his productions were till lately concealed under an interlaced monogram M.C.O.K.X.I.N. Coxcie returned in 1539 to Malines, where he matriculated, and painted for the chapel of the gild of St Luke the wings of an altarpiece now in Sanct Veit of Prague. The centre of this altarpiece, by Mabuse, represents St Luke portraying the Virgin; the side pieces contain the Martyrdom of St Vitus and the Vision of St John in Patmos. At van Orley's death in 1541 Coxcie succeeded to the office of court painter to the regent Mary of Hungary, for whom he decorated the castle of Binche. He was subsequently patronized by Charles V., who often coupled his works with those of Titian; by Philip II., who paid him royally for a copy of van Eyck's "Agnus Dei"; and by the duke of Alva, who once protected him from the insults of Spanish soldiery at Malines. There are large and capital works of his (1587-1588) in St Rombaud of Malines, in Ste Gudule of Brussels, and in the museums of Brussels and Antwerp. His style is Raphaelesque grafted on the Flemish, but his imitation of Raphael, whilst it distantly recalls Giulio Romano, is never free from affectation and stiffness. He died at Malines on the 5th of March 1592.

COXE, HENRY OCTAVIUS (1811-1881), English librarian and scholar, was born at Bucklebury, in Berkshire, on the 20th of September 1811. He was educated at Westminster school and Worcester College, Oxford. Immediately on taking his degree in 1833, he began work in the manuscript department of the British Museum, became in 1838 sub-librarian of the Bodleian, at Oxford, and in 1860 succeeded Dr Bandinel as head librarian, an office he held until his death in 1881. Having proved himself an able palaeographer, he was sent out by the British government in 1857 to inspect the libraries in the monasteries of the Levant. He discovered some valuable manuscripts, but the monks were too wise to part with their treasures. One valuable result of his travels was the detection of the forgery attempted by Constantine Simonides. He was the author of various catalogues, and under his direction that of the Bodleian, in more than 720 volumes, was completed. He published *Rogeri de Wendover Chronica*, 5 vols. (1841-1844); the *Black Prince, an historical poem written in French by Chandos Herald* (1842); and *Report on the Greek Manuscripts yet remaining in the Libraries of the Levant* (1858). He was not only an accurate librarian but an active and hardworking clergyman, and was for the last twenty-five years of his life in charge of the parish of Wytham, near Oxford. He was likewise honorary fellow of Worcester and Corpus Christi Colleges. He died on the 8th of July 1881.

COXE, WILLIAM (1747-1828), English historian, son of Dr William Coxe, physician to the royal household, was born in London on the 7th of March 1747. Educated at Marylebone grammar school and at Eton College, he proceeded to King's College, Cambridge, and was elected a fellow of this society in 1768. In 1771 he took holy orders, and afterwards visited many parts of Europe as tutor and travelling companion to various noblemen and gentlemen. In 1786 he was appointed vicar of Kingston-on-Thames, and in 1788 rector of Bemerton, Wiltshire. He also held the rectory of Stourton from 1801 to 1811 and that of Fovant from 1811 until his death. In 1791 he was made prebendary of Salisbury, and in 1804 archdeacon of Wiltshire. He married in 1803 Eleanora, daughter of William Shairp, consul-general for Russia, and widow of Thomas Yeldham of St Petersburg. He died on the 8th of June 1828.

During a long residence at Bemerton Coxe was mainly occupied in literary work. His *Memoirs of Sir Robert Walpole* (London, 1798), *Memoirs of Horatio, Lord Walpole* (London, 1802), *Memoirs of John, duke of Marlborough* (London, 1818-1819), *Private and Original Correspondence of Charles Talbot, duke of Shrewsbury* (London, 1821), *Memoirs of the Administrations of Henry Pelham* (London, 1829), are very valuable for the history of the 18th century. His *History of the House of Austria* (London, 1807, new ed. 1853 and 1873), and *Memoirs of the Bourbon Kings of Spain* (London, 1813), give evidence of careful and painstaking work on the part of the author. The style, however, as in all his works, is remarkably dull. His other works are mainly accounts of his travels: *Sketches of the Natural, Political and Civil State of Switzerland* (London, 1779), *Account of the Russian Discoveries between Asia and America* (London, 1780), *Account of Prisons and Hospitals in Russia, Sweden and Denmark* (London, 1781), *Travels into Poland, Russia, Sweden and Denmark* (London, 1784), *Travels in Switzerland* (London, 1789), *Letter on Secret Tribunals of Westphalia* (London, 1796), *Historical Tour in Monmouthshire* (London, 1801). He also edited Gay's *Fables*, and wrote a *Life of John Gay* (Salisbury, 1797), *Anecdotes of G. F. Handel and J. C. Smith* (London, 1798), and a few other works of minor importance. Some of his books have been translated into French, and several have gone through two or more editions.

COXSWAIN (properly "cockswain," and pronounced *cox'n*, usually shortened to "cox"; from "cock," a small boat, and *swain*, a servant), in the navy, a petty officer in charge of a ship's boat and its crew, who steers; the coxswain of the captain's gig takes a special rank among petty officers. In the National Lifeboat Institution of Great Britain the "coxswain" is a paid permanent official on each station, who has charge of the lifeboat and house, is responsible for its care, and steers and takes command when afloat. The word is also used, generally, of any one who steers a boat.

COXWELL, HENRY TRACEY (1819-1900), English aeronaut, was born at Wouldham, Kent, on the 2nd of March 1819, the son of a naval officer. He was educated for the army, but became a dentist. From a boy he had been greatly interested in ballooning, then in its infancy, but his own first ascent was not made until 1844. In 1848 he became a professional aeronaut, making numerous public ascents in the chief continental cities. Returning to London, he gave exhibitions from the Cremorne and subsequently from the Surrey Gardens. By 1861 he had made over 400 ascents. In 1862 in company with Dr James Glaisher, he attained the greatest height on record, about 7 m. His companion became insensible, and he himself, unable to use his frost-bitten hands, opened the gas-valve with his teeth, and made an extremely rapid but safe descent. The result of this and other aerial voyages by Coxwell and Glaisher was the making of some important contributions to the science of meteorology. Coxwell was most pertinacious in urging the practical utility of employing balloons in time of war. He says: "I had hammered away in *The Times* for little less than a decade before there was a real military trial of ballooning for military purposes at Aldershot." His last ascent was made in 1885, and he died on the 5th of January 1900.

See his *My Life and Balloon Experiences* (1887).

COYOTE, the Indian name for a North American member of the dog family, also known as the prairie-wolf, and scientifically as *Canis latrans*. Ranging from Canada in the north to Guatemala in the south, and chiefly frequenting the open plains on both sides of the chain of the Rocky Mountains, the coyote, under all its various local phases, is a smaller animal than the true wolf, and may apparently be regarded as the New World representative of the jackals, or perhaps, like the Indian wolf (*C. pallipes*), as a type intermediate between wolves and jackals. In addition to its inferior size, the coyote is also shorter in the leg than the wolf, and carries a more luxuriant coat of hair. The average length is about 40 in., and the general tone of colour tawny mingled with black and white above and whitish below, the tail having a black tip and likewise a dark gland-patch near the root of the upper surface. There is, however, considerable local variation both in the matter of size and of colour from the typical coyote of Iowa, which measures about 50 in. in total length and is of a full rich tint. The coyote of the deserts of eastern California, Nevada and Utah is, for instance, a smaller and paler-coloured animal, whose length is usually about 42 in. On this and other local variations a number of nominal species have been founded; but it is preferable to regard them in the light of geographical phases or races, such as the above-mentioned *C. latrans estor* of Nevada and Utah, *C. l. mearnsi* of Arizona and Sonora, and *C. l. frustor* of Oklahoma and the Arkansas River district.

It is to distinguish them from the grey, or timber, wolves that coyotes have received the name of "prairie-wolves"; the two titles indicating the nature of the respective habitats of the two species. Coyotes are creatures of slinking and stealthy habits, living in burrows in the plains, and hunting in packs at night, when they utter yapping cries and blood-curdling yells as they gallop. Hares ("jack-rabbits"), chipmunks or ground-squirrels, and mice form a large portion of their food; but coyotes also kill the fawns of deer and prongbuck, as well as sage-hens and other kinds of game-birds. "In the flat lands," write Messrs Witmer Stone and W. E. Cram, in their *American Animals* (1902), "they dig burrows for themselves or else take possession of those already made by badgers and prairie-dogs. Here in the spring the half-dozen or more coyote pups are brought forth; and it is said that at this season the old ones systematically drive any large game they may be chasing as near to their burrow, where the young coyotes are waiting to be fed, as possible before killing it, in order to save the labour of dragging it any great distance. When out after jack-rabbits two coyotes usually work together. When a jack-rabbit starts up before

them, one of the coyotes bounds away in pursuit while the other squats on his haunches and waits his turn, knowing full well that the hare prefers to run in a circle, and will soon come round again, when the second wolf takes up the chase and the other rests in his turn.... When hunting antelope (prongbuck) and deer the coyotes spread out their pack into a wide circle, endeavouring to surround their game and keep it running inside their ring until exhausted. Sage-hens, grouse and small birds the coyote hunts successfully alone, quartering over the ground like a trained pointer until he succeeds in locating his bird, when he drops flat in the grass and creeps forward like a cat until close enough for the final spring."

When hard put to it for food, coyotes will, it is reported, eat hips, juniper-berries and other wild fruits.

(R. L.*)

COYPEL, the name of a French family of painters. Noel Coypel (1628-1707), also called, from the fact that he was much influenced by Poussin, COYPEL LE POUSSIN, was the son of an unsuccessful artist. Having been employed by Charles Errard to paint some of the pictures required for the Louvre, and having afterwards gained considerable fame by other pictures produced at the command of the king, in 1672 he was appointed director of the French Academy at Rome. After four years he returned to France; and not long after he became director of the Academy of Painting. The Martyrdom of St James in Notre Dame is perhaps his finest work.

His son, ANTOINE COYPEL (1661-1772), was still more celebrated than his father. Antoine studied under his father, with whom he spent four years at Rome. At the age of eighteen he was admitted into the Academy of Painting, of which he became professor and rector in 1707, and director in 1714. In 1716 he was appointed king's painter, and he was ennobled in the following year. Antoine Coypel received a careful literary education, the effects of which appear in his works; but the graceful imagination displayed by his pictures is marred by the fact that he was not superior to the artificial taste of his age. He was a clever etcher, and engraved several of his own works. His *Discours prononcés dans les conférences de l'Académie royale de Peinture, &c.*; appeared in 1741.

Antoine's half-brother, NOEL NICHOLAS COYPEL (1692-1734), was also an exceedingly popular artist; and his son, Charles Antoine (1694-1752), was painter to the king and director of the Academy of Painting. The latter published interesting academical lectures in *Le Mercure* and wrote several plays which were acted at court, but were never published.

COYPU, the native name of a large South American aquatic rodent mammal, known very generally among European residents in the country as nutria (the Spanish word for otter) and scientifically as *Myocastor* (or *Myopotamus*) *coypu*. Its large size, aquatic habits, partially webbed hind-toes, and the smooth, broad, orange-coloured incisors, are sufficient to distinguish this rodent from the other members of the family *Capromyidae*. Coypu are abundant in the fresh waters of South America, even small ponds being often tenanted by one or more pairs. Should the water dry up, the coypu seek fresh homes. Although subsisting to a considerable extent on aquatic plants, these rodents frequently come ashore to feed, especially in the evening. Several young are produced

at a birth, which are carried on their mother's back when swimming. The fur is of some commercial value, although rather stiff and harsh; its colour being reddish-brown. (See RODENTIA.)

COYSEVOX, CHARLES ANTOINE (1640-1720), French sculptor, was born at Lyons on the 29th of September 1640, and belonged to a family which had emigrated from Spain. The name should be pronounced Coëzevo. He was only seventeen when he produced a statue of the Madonna of considerable merit; and having studied under Lerambert and trained himself by taking copies in marble from the Greek masterpieces (among others from the Venus de Medici and the Castor and Pollux), he was engaged by the bishop of Strassburg, Cardinal Fürstenberg, to adorn with statuary his château at Saverne (Zabern). In 1666 he married Marguerite Quillerier, Lerambert's niece, who died a year after the marriage. In 1671, after four years spent on Saverne, which was subsequently destroyed by fire in 1780, he returned to Paris. In 1676 his bust of the painter Le Brun obtained admission for him to the Académie Royale. A year later he married Claude Bourdict.

In consequence of the influence exercised by Le Brun between the years 1677 and 1685, he was employed by Louis XIV. in producing much of the decoration and a large number of statues for Versailles; and he afterwards worked, between 1701 and 1709, with no less facility and success, for the palace at Marly, subsequently destroyed in the Revolution.

Among his works are the "Mercury and Fame," first at Marly and afterwards in the gardens of the Tuileries; "Neptune and Amphitrite," in the gardens at Marly; "Justice and Force," at Versailles; and statues, in which the likenesses are said to have been remarkably successful, of most of the celebrated men of his age, including Louis XIV. and Louis XV. at Versailles, Colbert (at Saint-Eustache), Mazarin (in the church des Quatre-Nations), Condé the Great (in the Louvre), Maria Theresa of Austria, Turenne, Vauban, Cardinals de Bouillon and de Polignac, Fénelon, Racine, Bossuet (in the Louvre), the comte d'Harcourt, Cardinal Fürstenberg and Charles Le Brun (in the Louvre). Coysevox died in Paris on the 10th of October 1720.

Besides the works given above he carved about a dozen memorials, including those to Colbert (at Saint-Eustache), to Cardinal Mazarin (in the Louvre), and to the painter Le Brun (in the church of Saint Nicholas-du-Chardon).

Among the pupils of Coysevox were Nicolas and Guillaume Coustou.

See Henry Jouin, *A. Coysevox, sa vie, son œuvre* (1883); Jean du Seigneur, *Revue universelle des arts*, vol. i. (1855), pp. 32 et seq.

CRAB (Ger. *Krabbe*, *Krebs*), a name applied to the Crustacea of the order *Brachyura*, and to other forms, especially of the order *Anomura*, which resemble them more or less closely in appearance and habits.

The *Brachyura*, or true crabs, are distinguished from the long-tailed lobsters and shrimps which form the order *Macrura*, by the fact that the abdomen or tail is of small size and is carried folded up under the body. In most of them the body is transversely oval or triangular in outline and more or less flattened, and is covered by a hard shell, the carapace. There are five pairs of legs. The first pair end in nippers or chelae and are usually much more massive than the others which are used in walking or swimming. The eyes are set on movable stalks and can be withdrawn into sockets in the front part of the carapace. There are six pairs of jaws and foot-jaws (maxillipeds) enclosed within a "buccal cavern," the opening of which is covered by the broad and flattened third pair of foot-jaws. The abdomen is usually narrow and triangular in the males, but in the females it is broad and rounded and bears appendages to which the eggs are attached after spawning (fig. 1).

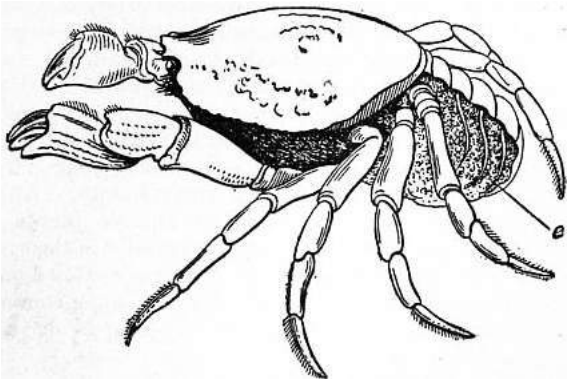


FIG. 1.—Side view of Crab (Morse), the abdomen extended and carrying a mass of eggs beneath it; e, eggs.

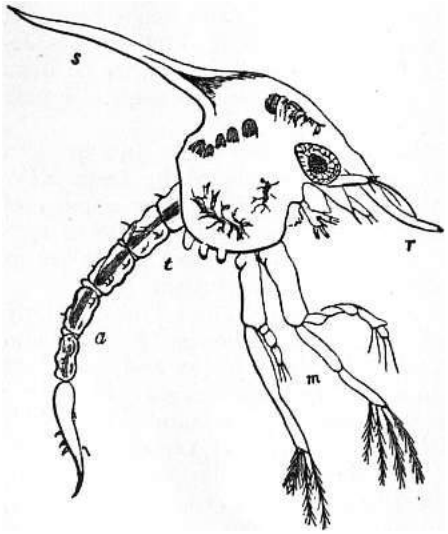


FIG. 2.—Zoëa of Common Shore-Crab in its second stage. r, Rostral spine; s, Dorsal spine; m, Maxillipeds; t, Buds of thoracic feet; a, Abdomen. (Spence Bate.)

As in most Crustacea, the young of nearly all crabs, when newly hatched, are very different from their parents. The first larval stage is known as a Zoëa, this name having been given to it when it was believed by naturalists to be a distinct and independent species of animal. The Zoëa is a minute transparent organism, swimming at the surface of the sea. It has a rounded body, armed with long spines, and a long segmented tail. The eyes are large but not set on stalks, the legs are not yet developed, and the foot-jaws form swimming paddles. After casting its skin several times as it grows in size, the young crab passes into a stage known as the *Megalopa* (fig. 2), also formerly regarded as an independent animal, in which the body and limbs are more crab-like, but the abdomen is large and not filled up. After a further moult the animal assumes a form very similar to that of the adult. There are a few crabs, living on land or in fresh water, which do not pass through a metamorphosis but leave the egg as miniature adults.

Most crabs live in the sea, and even the land-crabs, which are abundant in tropical countries, nearly all visit the sea occasionally and pass through their early stages in it. Many shore-crabs living between tide-marks are more or less amphibious, and the river-crab of southern Europe or Lenten crab (*Potamon edule*, better known as *Thelphusa fluviatilis*) is an example of the freshwater crabs which are abundant in most of the warmer regions of the world. As a rule, crabs breathe by gills, which are lodged in a

pair of cavities at the sides of the carapace, but in the true land-crabs the cavities become enlarged and modified so as to act as lungs for breathing air.

Walking or crawling is the usual mode of locomotion, and the peculiar sidelong gait familiar to most people in the common shore-crab, is characteristic of most members of the group. The crabs of the family *Portunidae*, and some others, swim with great dexterity by means of their flattened paddle-shaped feet.

Like many other Crustacea, crabs are often omnivorous and act as the scavengers of the sea, but many are predatory in their habits and some are content with a vegetable diet.

Though no crab, perhaps, is truly parasitic, some live in relations of "commensalism" with other animals. The best known examples of this are the little "mussel-crabs" (*Pinnotheridae*) which live within the shells of mussels and other bivalve mollusca and probably share the food of their hosts. Some crabs live among corals, and one species at least gives rise to hollow swellings on the branches of a coral like the "galls" which are formed on plants by certain insects. Another crab (*Melia tesselata*) carries in each of its claws a living sea-anemone which it uses as an animated weapon of defence and an implement for the capture of prey. Many of the sluggish spider-crabs (*Maiidae*) have their shells covered by a forest of growing sea-weeds, zoophytes and sponges, which are "planted" there by the crab itself, and which afford it a very effective disguise.

Many of the larger crabs are sought for as food by man. The most important and valuable are the edible crab of British and European coasts (*Cancer pagurus*) and the blue crab of the Atlantic coast of the United States (*Callinectes sapidus*).

Among the *Anomura*, the best known are the hermit-crabs, which live in the empty shells of Gasteropod Mollusca, which they carry about with them as portable dwellings. In these, the abdomen is soft-skinned and spirally twisted so as to fit into the shells which they inhabit. The common hermit-crab of the British coasts (*Pagurus* or *Eupagurus Bernhardus*) is sometimes called the soldier-crab from its pugnacity. Small specimens are found between tide-marks inhabiting the shells of periwinkles and other small molluscs, but the full-grown specimens live in deeper water and are usually found in the shell of the whelk (*Buccinum*). As the crab grows it changes its dwelling from time to time, often having to fight with its fellows for the possession of an empty shell. Sometimes an annelid worm lives inside the shell along with the hermit and often the outside is covered with zoophytes. In some species, as in the British *Eupagurus prideauxi*, a sea-anemone is constantly found attached to the shell, profiting by the active locomotion of the crab and probably sharing the crumbs of its food, while it affords its host protection by its stinging powers.

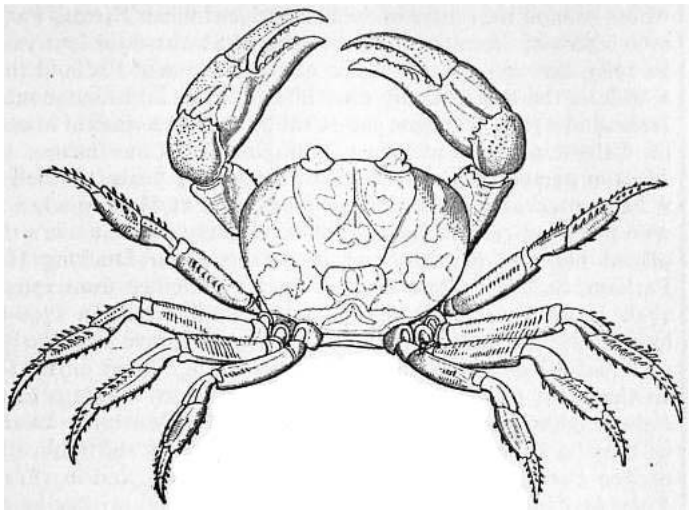


FIG. 3.—*Gecarcinus ruricola* (Violet Land Crab).

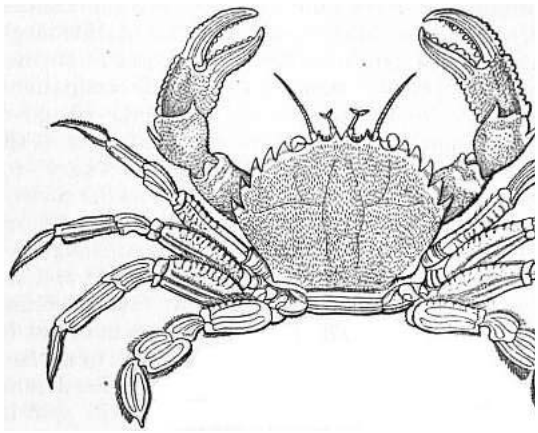


FIG. 4.—*Portunus puber* (Velvet Swimming Crab)

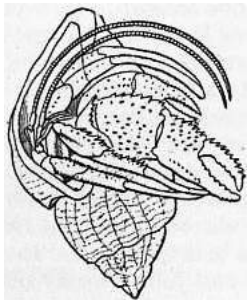


FIG. 6.—*Eupagurus Bernhardus* (Soldier Crab).

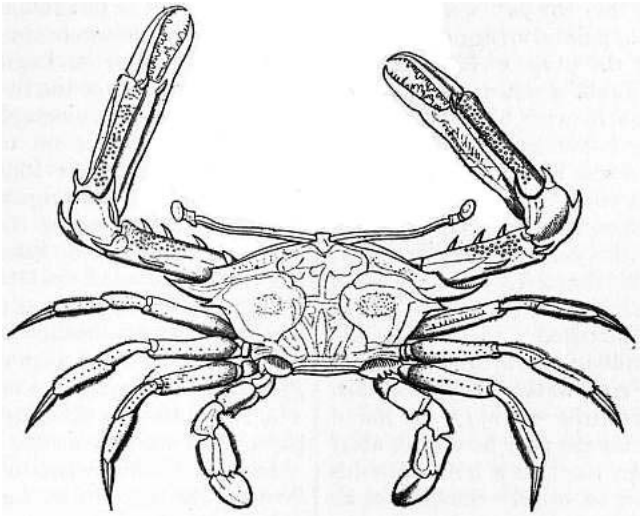


FIG. 5. *Podophthalmus vigil* (Sentinel Spinous Crab).

FIG. 7.—*Pinnotheres pisum* (Pea Crab).

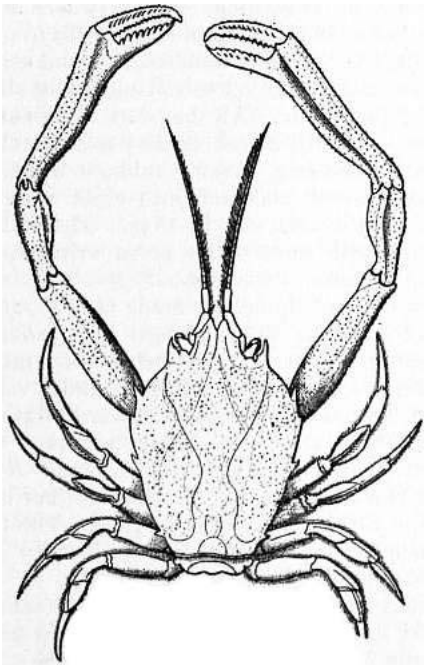


FIG. 8.—*Corystes Cassivelaunus* (Masked Crab).

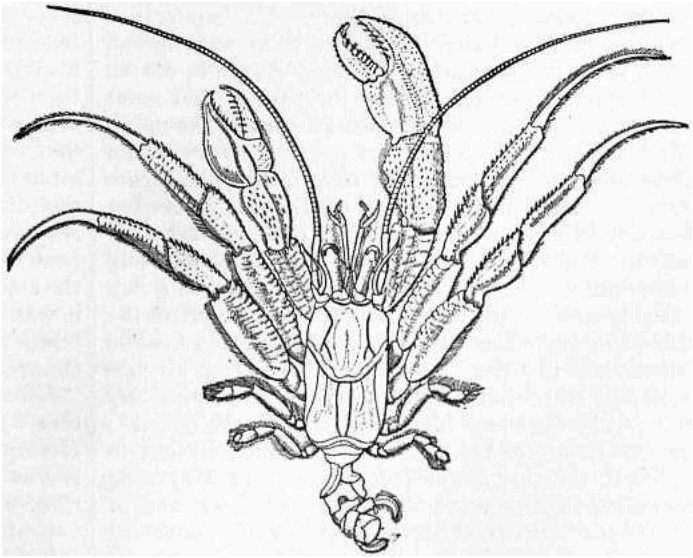


FIG. 9.—*Eupagurus angulatus* (a Hermit Crab).

In tropical countries the hermit-crabs of the family *Coenobitidae* live on land, often at considerable distances from the sea, to which, however, they return for the purpose of hatching out their spawn. The large robber-crab or cocoa-nut crab of the Indo-Pacific islands (*Birgus latro*), which belongs to this family, has given up the habit of carrying a portable dwelling, and the upper surface of its abdomen has become covered by shelly plates. The stories of its climbing palm-trees to get the fruit were long doubted, but it has been seen, and even photographed in the act.

(W. T. CA.)

CRABBE, GEORGE (1754-1832), English poet, was born at Aldeburgh in Suffolk on the 24th of December 1754. His family was partly of Norfolk, partly of Suffolk origin, and the name was doubtless originally derived from “crab.” His grandfather, Robert Crabbe, was the first of the family to settle at Aldeburgh, where he held the appointment of collector of customs. He died in 1734, leaving one son, George, who practised many occupations, including that of a schoolmaster, in the adjoining village of Orford. Finally the poet’s father obtained a small post in the customs of Aldeburgh, married Mary Lodwick, the widow of a publican, and had six children, of whom George was the eldest.

The sea has swept away the small cottage that was George Crabbe’s birthplace, but one may still visit the quay at Slaughden, some half-mile from the town, where the father worked and the son was at a later date to work with him. At first attending a dame’s school in Aldeburgh, when nine or ten years of age he was sent to a boarding-school at Bungay, and at twelve to a school at Stowmarket, where he remained two years. His father dreamt of the medical profession for his clever boy, and so in 1768 he went to Wickham Brook near Newmarket as an

apothecary's assistant. In 1771 we find him assisting a surgeon at Woodbridge, and it was while here that he met Sarah Elmy. Crabbe was now only eighteen years of age, but he became "engaged" to this lady in 1772. It was not until 1783 that the pair were married. The intervening years were made up of painful struggle, in which, however, not only the affection but the purse of his betrothed assisted him. About the time of Crabbe's return from Woodbridge to Aldeburgh he published at Ipswich his first work, a poem entitled *Inebriety* (1775). He found his father fallen on evil days. There was no money to assist him to a partnership, and surgery for the moment seemed out of the question. For a few weeks Crabbe worked as a common labourer, rolling butter casks on Slaughden quay. Before the year was out, however, the young man bought on credit "the shattered furniture of an apothecary's shop and the drugs that stocked it." This was at Aldeburgh. A year later Crabbe installed a deputy in the surgery and paid his first visit to London. He lodged in Whitechapel, took lessons in midwifery and walked the hospitals. Returning to Aldeburgh after nine months—in 1777—he found his practice gone. Even as a doctor for the poor he was an utter failure, poetry having probably taken too firm a hold upon his mind. At times he suffered hunger, so utterly unable was he to earn a livelihood. After three years of this, in 1780 Crabbe paid his second visit to London, enabled thereto by the loan of five pounds from Dudley Lang, a local magnate. This visit to London, which was undertaken by sea on board the "Unity" smack, made for Crabbe a successful career. His poem *The Candidate*, issued soon after his arrival, helped not at all. For a time he almost starved, and was only saved, it is clear, by gifts of money from his sweetheart Sarah Elmy. He importuned the great, and the publishers also. Everywhere he was refused, but at length a letter which reached Edmund Burke in March 1781 led to the careful consideration on the part of that great man of Crabbe's many manuscripts. Burke advised the publication of *The Library*, which appeared in 1781. He invited him to Beaconsfield, and made interest in the right quarters to secure Crabbe's entry into the church. He was ordained in December 1781 and was appointed curate to the rector of Aldeburgh.

Crabbe was not happy in his new post. The Aldeburgh folk could not reverence as priest a man they had known as a day labourer. Crabbe again appealed to Burke, who persuaded the duke of Rutland to make him his chaplain (1782), and Crabbe took up his residence in Belvoir Castle, accompanying his new patron to London, when Lord Chancellor Thurlow (who told him he was "as like Parson Adams as twelve to the dozen") gave him the two livings of Frome St Quentin and Evershot in Dorsetshire, worth together about £200 a year. In May 1783 Crabbe's poem *The Village* was published by Dodsley, and in December of this year he married Sarah Elmy. Crabbe continued his duties as ducal chaplain, being in the main a non-resident priest so far as his Dorsetshire parishes were concerned. In 1785 he published *The Newspaper*. Shortly after this he moved with his wife from Belvoir Castle to the parsonage of Stathern, where he took the duties of the non-resident vicar Thomas Parke, archdeacon of Stamford. Crabbe was at Stathern for four years. In 1789, through the persuasion of the duchess of Rutland (now a widow, the duke having died in Dublin as lord-lieutenant of Ireland in 1787), Thurlow gave Crabbe the two livings of Muston in Leicestershire and West Allington in Lincolnshire. At Muston parsonage Crabbe resided for twelve years, divided by a long interval. He had been four years at Muston when his wife inherited certain interests in a property of her uncle's that placed her and her husband in possession of Ducking Hall, Parham, Suffolk. Here he took up his residence from 1793 to 1796, leaving curates in charge of his two livings. In 1796 the loss of their son Edmund led the Crabbes to remove from Parham to Great Glemham Hall, Suffolk, where they lived until 1801. In that year Crabbe went to live at Rendham, a village in the same neighbourhood. In 1805 he returned to Muston. In 1807 he broke a silence of more than twenty years by the publication of *The Parish Register*, in 1810 of *The Borough*, and in 1812 of *Tales in Verse*. In 1813 Crabbe's wife died, and in 1814 he was given the living of Trowbridge, Wiltshire, by the duke of Rutland, a son of his early patron, who, it is interesting to recall, wanted the living of Muston for a cousin of Lord Byron. From 1814 to his death in 1832 Crabbe resided at Trowbridge.

These last years were the most prosperous of his life. He was a constant visitor to London, and in friendship with all the literary celebrities of the time. "Crabbe seemed to grow young again," remarks his biographer, M.

René Huchon. He certainly carried on a succession of mild flirtations, and one of his parishioners, Charlotte Ridout, would have married him. The elderly widower had proposed to her and had been accepted in 1814, but he drew out of the engagement in 1816. He proposed to yet another friend, Elizabeth Charter, somewhat later. In his visits to London Crabbe was the guest of Samuel Rogers, in St James's Place, and was a frequent visitor to Holland House, where he met his brother poets Moore and Campbell. In 1817 his *Tales of the Hall* were completed, and John Murray offered £3000 for the copyright, Crabbe's previous works being included. The offer after much negotiation was accepted, but Crabbe's popularity was now on the wane.

In 1822 Crabbe went to Edinburgh on a visit to Sir Walter Scott. The adventure, complicated as it was by the visit of George IV. about the same time, is most amusingly described in Lockhart's biography of Scott, although one episode—that of the broken wine-glass—is discredited by Crabbe's biographer, M. Huchon. Crabbe died at Trowbridge on the 3rd of February 1832, and was buried in Trowbridge church, where an ornate monument was placed over his tomb in August 1833.

Never was any poet at the same time so great and continuous a favourite with the critics, and yet so conspicuously allowed to fall into oblivion by the public. All the poets of his earlier and his later years, Cowper, Scott, Byron, Shelley in particular, have been reprinted again and again. With Crabbe it was long quite otherwise. His works were collected into eight volumes, the first containing his life by his son, in 1832. The edition was intended to continue with some of his prose writings, but the reception of the eight volumes was not sufficiently encouraging. A reprint, however, in one volume was made in 1847, and it has been reproduced since in 1854, 1867 and 1901. The exhaustion of the copyright, however, did no good for Crabbe's reputation, and it was not until the end of the century that sundry volumes of "selections" from his poems appeared; Edward FitzGerald, of Omar Khayyám fame, always a loyal admirer, made a "Selection," privately printed by Quaritch, in 1879. A "Selection" by Bernard Holland appeared in 1899, another by C. H. Herford in 1902 and a third by Deane in 1903. The *Complete Works* were published by the Cambridge University Press in three volumes, edited by A. W. Ward, in 1906.

Crabbe's poems have been praised by many competent pens, by Edward FitzGerald in his *Letters*, by Cardinal Newman in his *Apologia*, and by Sir Leslie Stephen in his *Hours in a Library*, most notably. His verses comforted the last hours of Charles James Fox and of Sir Walter Scott, while Thomas Hardy has acknowledged their influence on the realism of his novels. But his works have ceased to command a wide public interest. He just failed of being the artist in words who is able to make the same appeal in all ages. Yet to-day his poems will well repay perusal. His stories are profoundly poignant and when once read are never forgotten. He is one of the great realists of English fiction, for even considered as a novelist he makes fascinating reading. He is more than this: for there is true poetry in Crabbe, although his most distinctively lyric note was attained when he wrote under the influence of opium, to which he became much addicted in his later years.

Bibliography.—*The Works of Crabbe* (8 vols., Murray, 1834; 1 vol., Murray, 1901), and the *Works* in the Cambridge Press Classics, edited by A. W. Ward (1906), have already been referred to. The life by Crabbe's son in one volume, *The Life of the Rev. George Crabbe, LL.B., by his son the Rev. George Crabbe, A.M.* (1834), has not been separately reprinted as it deserves to be. A recent biography is *George Crabbe and His Times, 1754-1832; A Critical and Biographical Study*, by René Huchon, translated from the French by Frederick Clarke (1907). Brief biographies by T. H. Kebbel ("Great Writers" series) and by Canon Ainger ("English Men of Letters" series) also deserve attention.

(C. K. S.)

CRACKER (from "crack," a common Teutonic word, cf. Ger. *krachen*, Dutch *kraken*, meaning to break with a sharp sound), that which "cracks"; it is, therefore, applied (1) to a firework so constructed that it explodes with several reports and jumps at each explosion, when placed on the ground (see FIREWORKS); (2) to a roll of coloured and ornamented paper containing sweets, small articles of cheap jewelry, paper caps and other trifles, together with a strip of card with a fulminant which explodes with a "crack" on being pulled; (3) to a thin crisp biscuit (*q.v.*); in America the general name for a biscuit. In the southern states of America, "cracker" is a term of contempt for the "poor" or "mean whites," particularly of Georgia and Florida; the term is an old one and dates back to the Revolution, and is supposed to be derived from the "cracked corn" which formed the staple food of the class to whom the term refers.

CRACOW (Pol. *Krakov*; Ger. *Krakau*), a town and episcopal see of Austria, in Galicia, 212 m. W. by N. of Lemberg by rail. Pop. (1900) 91,310, of which 21,000 were Jews, 5000 Germans and the remainder Poles. Although in regard to its population it is only the second place in Galicia, Cracow is the most interesting town in the whole of Poland. No other Polish town possesses so many old and historic buildings, none of them contains so many national relics, or has been so closely associated with the development and destinies of Poland as Cracow. And the ancient capital is still the intellectual centre of the Polish nation.

Cracow is situated in a fertile plain on the left bank of the Vistula (which becomes navigable here) and occupies a position of great strategical importance. It consists of the old inner town and seven suburbs. The only relics of the fortifications of the old town, whose place is now occupied by shady promenades, is the Florian's Gate and the Rondell, a circular structure, built in 1498. Cracow has 39 churches—about half the number it formerly had—and 25 convents for monks and nuns. Of these the most important is the Stanislaus cathedral, in Gothic style, consecrated in 1359, and built on the Wawel, the rocky eminence to the S.W. of the old town. Here the kings of Poland were crowned, and this church is also the Pantheon of the Polish nation, the burial place of its kings and its great men. Here lie the remains of John Sobieski, of Thaddaeus Kosciuszko, of Joseph Poniatowski and of Adam Mickiewicz. Here also are conserved the remains of St Stanislaus, the patron saint of the Poles, who, as bishop of Cracow, was slain before the altar by King Boleslaus in 1079. The cathedral is adorned with many valuable objects of art, paintings and sculptures, by such artists as Veit Stoss, Guido Reni, Peter Vischer, Thorwaldsen, &c. Part of the ancient Polish regalia is also kept here. The Gothic church of St Mary, founded in 1223, rebuilt in the 14th century with several chapels added in the 15th and 16th centuries, was restored in 1889-1893, and decorated with paintings from the designs by Matejko. It contains a huge high altar, the masterpiece of Veit Stoss, who was a native of Cracow, executed in 1477-1489; a colossal stone crucifix, dating from the end of the 15th century, and several sumptuous tombs of noble families from the 16th and 17th centuries. The Dominican church, a Gothic building of the 13th century, but practically rebuilt after a fire in 1850; the Franciscan church, also of the 13th century, also much modernized; the church of St Florian of the 12th century, rebuilt in 1768, which contains the late-Gothic altar by Veit Stoss, executed in 1518, during his last sojourn in Cracow; the church of St Peter, with a colossal dome, built in 1597, after the model of that of St Peter at Rome, and the beautiful Augustinian church in the suburb of Kazimierz, are all worth mentioning. Of the principal secular buildings, the royal castle (*Zamek Królowsk*), a huge building, begun in the 13th century, and successively enlarged by Casimir the Great and by Sigismund I. Jagiello (1510-1533), is situated on the Wawel, and was until 1610 the residence of the Polish kings. It suffered much from fires and other disasters, and from 1846 onward was used as a barracks and a military

hospital; it has now, however, been cleared out and restored. The Jagellonian university, now housed in a magnificent Gothic building erected in 1881-1887, was attended in 1901 by 1255 students, and had 175 professors and lecturers. The language of instruction is Polish. It is the second oldest university in Europe—the oldest being that of Prague—and was famous during the 15th and 16th centuries. It was founded by Casimir the Great in 1364, and completed by Ladislaus Jagiello in 1400. Its rich library is now housed in the old university buildings, erected in the 15th century, in the beautiful Gothic court of which a bronze statue of Copernicus was placed in 1900. The Polish Academy of Science, founded in 1872, is housed in the new university buildings. In the Ring-Platz, or the principal square, opposite the church of St Mary, is the *Tuchhaus* (cloth-hall, Pol. *Sukiennice*), a building erected in 1257, several times renovated and enlarged, most recently in 1879, which contains the Polish national museum of art. Behind it is a Gothic tower, the only relic of the old town hall, demolished in 1820. The Czartoryski museum contains a large collection of objects of art, a rich library and a precious collection of manuscripts, relating to the history of Poland.

Among the manufactures of the town are machinery, agricultural implements, chemicals, soap, tobacco, &c. But Cracow is more important as a trading than as an industrial centre. Its position on the Vistula and at the junction of several railways makes it the natural mart for the exchange of the products of Silesia, Hungary and Russian and Austrian Poland. Its trade in timber, salt, textiles, cattle, wine and agricultural produce of all kinds is very considerable. In the neighbourhood of Cracow there are mines of coal and zinc, and not far away lies the village of Krzeszowice with sulphur baths. About 2½ m. N.W. lies the Kosciuszko Hill, a mound of earth 100 ft. high, thrown up in 1820-1823 on the Borislava hill (1093 ft.), in honour of Thaddaeus Kosciuszko, the hero of Poland. On the opposite bank of the Vistula, united to Cracow by a bridge, lies the town of Podgorze (pop. 18,142); near it is the Krakus Hill, smaller than the Kosciuszko Hill, and a thousand years older than it, erected in honour of Krakus, the founder of Cracow. About 8 m. S.E. of Cracow is situated Wieliczka (*q.v.*), with its famous salt mines.

History.—Tradition assigns the foundation of Cracow to the mythical Krak, a Polish prince who is said to have built a stronghold here about A.D. 700. Its early history is, however, entirely obscure. In the latter part of the 10th century it was annexed to the Bohemian principality, but was recaptured by Boleslaus Chrobry, who made it the seat of a bishopric, and it became the capital of one of the most important of the principalities into which Poland was divided from the 12th century onwards. The city was practically ruined during the first Tatar invasion in 1241, but the introduction of German colonists restored its prosperity, and in 1257 it received "Magdeburg rights," *i.e.* a civic constitution modelled on that of Magdeburg. In this year the *Tuchhalle* was built. The town, however, had yet to pass through many vicissitudes. It suffered again from Tatar invasions; in 1290 it was captured by Wenceslaus II. of Bohemia and was held by the Bohemians until, in 1305, the Polish king Ladislaus Lokietek recovered it from Wenceslaus III. Ladislaus made it his capital, and from this time until 1764 it remained the coronation and burial place of the Polish kings, even after the royal residence had been removed by Siegmund III. (1587-1632) to Warsaw. On the third partition of Poland in 1795 Austria took possession of Cracow; but in 1809 Napoleon wrested it from that power, and incorporated it with the duchy of Warsaw, which was placed under the rule of the king of Saxony. In the campaign of 1812 the emperor Alexander made himself master of this and the other territory which formed the duchy of Warsaw. At the general settlement of the affairs of Europe by the great powers in 1815, it was agreed that Cracow and the adjoining territory should be formed into a free state; and, by the Final Act of the congress signed at Vienna in 1815, "the town of Cracow, with its territory, is declared to be for ever a free, independent and strictly neutral city, under the protection of Russia, Austria and Prussia." In February 1846, however, an insurrection broke out in Cracow, apparently a ramification of a widely spread conspiracy throughout Poland. The senate and the other authorities of Cracow were unable to subdue the rebels or to maintain order, and, at their request, the city was occupied by a corps of Austrian troops for the protection of the inhabitants. The three powers, Russia, Austria and Prussia, made this a pretext for extinguishing this independent state; and as the outcome of a conference at Vienna (November 1846) the three courts, contrary to the assurance previously given,

and in opposition to the expressed views of the British and French governments, decided to extinguish the state of Cracow and to incorporate it with the dominions of Austria.

CRADDOCK, CHARLES EGBERT (1850-), the pen-name of MARY NOAILLES MURFREE, American author, who was born near Murfreesboro, Tennessee, on the 24th of January 1850, the great-granddaughter of Col. Hardy Murfree. She was crippled in childhood by paralysis. She attended school in Nashville and Philadelphia. Spending her summers in the mountains of eastern Tennessee, she came to know the primitive people there with whose life her writings deal. She contributed to *Appleton's Journal*, and, first in 1878, to *The Atlantic Monthly*. No one, apparently, suspected that the author of these stories was a woman, and her identity was not disclosed until 1885, a year after the publication of her first volume of short stories, *In the Tennessee Mountains*. She deals mainly with the narrow, stern life of the Tennessee mountaineers, who, left behind in the advance of civilization, live amid traditions and customs, and speak a dialect, peculiarly their own; and her work abounds in exquisite descriptions of scenery. Among her other books are: *Where the Battle was Fought* (1884), a novel dealing with the old aristocratic southern life; *Down the Ravine* (1885) and *The Story of Keedon Bluffs* (1887) for young people; *The Prophet of the Great Smoky Mountains* (1885), a novel; *In the Clouds* (1886), a novel; *The Despot of Broomsedge Cove* (1888), a novel; *In the "Stranger-People's" Country* (1891); *His Vanished Star* (1894), a novel; *The Mystery of Witch-Face Mountain and Other Stories* (1895); *The Phantoms of the Footbridge and Other Stories* (1895); *The Young Mountaineers* (1897), short stories; *The Juggler* (1897); *The Story of Old Fort Loudon* (1899); *The Bushwhackers and Other Stories* (1899); *The Champion* (1902); *A Spectre of Power* (1903); *The Frontiersman* (1904); *The Storm Centre* (1905); *The Amulet* (1906); *The Windfall* (1907); and *Fair Mississippian* (1908).

CRADLE (of uncertain etymology, possibly connected with "crate" and "creel," *i.e.* basket; the derivation from a Celtic word, with a sense of rocking, is scouted by the *New English Dictionary*), a child's bed of wood, wicker or iron, with enclosed sides, slung upon pivots or mounted on rockers. It is a very ancient piece of furniture, but the date when it first assumed its characteristic swinging or rocking form is by no means clear. A miniature in an illuminated *Histoire de la belle Hélaine* in the Bibliothèque Nationale in Paris (end of the 14th or beginning of the 15th century) shows an infant sleeping in a tiny four-post bed slung upon rockers. In its oldest forms the cradle is an oblong oak box without a lid—originally the rockers appear to have been detachable—but, like all other household appliances, it has been subject to changes of fashion alike in shape and adornment. It has been panelled and carved, supported on Renaissance pillars, inlaid with marqueterie or mounted in gilded bronze. The original simple shape persisted for two or three centuries—even the hood made its appearance very early. In the 18th century, however, cradles were often very elaborate—indeed in France they had begun to be so much earlier, but the richly carved and upholstered examples were used chiefly for purposes of state, being in fact miniature *lits de parade*. In modern times they have become lighter and simpler, the old hood being very often replaced by a draped curtain dependent from a carved or shaped upright. About the middle of the 19th century iron cradles were introduced, along with iron bedsteads. A number of undoubted historic cradles have been preserved, together with

many others with doubtful attributions. Two alleged cradles of Henry V. exist; one which claims to have been used by the unhappy earl of Derwentwater is in the Victoria and Albert Museum in London; the other is at Windsor Castle. That of Henry IV. of France, now in the Château de Pau, is mounted upon a large tortoiseshell. That of the king of Rome ("Napoleon II.") was designed by Prud'hon, and along with that of the comte de Chambord is preserved in the Garde Meuble. In England a cradle is now often called a "bassinet" (*i.e.* little basket), and the "cot" has to some extent taken its place. By analogy, the word "cradle" is also applied to various sorts of framework in engineering, and to a rocking-tool used in engraving.

CRADOCK, a town of South Africa, capital of a division of the Cape province, in the upper valley of the Great Fish river, 181 m. by rail N. by E. of Port Elizabeth. Pop. (1904) 7762. It is one of the chief centres of the wool industry of the Cape, and does also a large trade in ostrich feathers, mohair, &c. The town enjoys a reputation as one of the best health resorts in the province. It stands at an altitude of 2856 ft.; the climate is very dry, the average annual rainfall being 14.50 in. The mean maximum temperature is 77.6° F. Three miles N. of the town are sulphur baths (temp. 100° F.) used for the treatment of rheumatism. In the neighbouring district survive a few herds of zebras, now protected by the game laws. The town dates from the beginning of the 19th century and is named after Sir John Cradock, governor of the Cape 1811-1813. The division has an area of 3048 sq. m. and a pop. (1904) of 18,803, of whom 41% are white.

CRAFT (a word common to Teutonic languages for strength, or power; cf. Ger. *Kraft*), a word confined in English only, of the Teutonic languages in which it occurs, to intellectual power, and used as a synonym of "art." It then means skill or ingenuity, especially in the manual arts, hence its use in the expression "Arts and Crafts" (*q.v.*), and it is thus applied to the trade or profession in which such skill is displayed, to an association of workmen of a particular trade, a trade gild, and in particular to Freemasons, "the craft"; the word appears also in words such as "handicraft" or "craftsman." Skill applied to outwit or deceive gives the common sense of cunning or trickery, and it is this meaning which is implied in such combined words as "priestcraft," "witchcraft" and the like. A more particular use of the word is in the nautical sense of vessels of transport by water; this is probably a colloquially shortened form either of "vessels of a fisherman's, lighterman's &c., craft," *i.e.* "art," or of "vessels of a heavier or lighter craft," *i.e.* burden or capacity; in both cases the qualifying words are dropped and the word comes to be used of vessels in general.

CRAG (a Celtic word, cf. Gael. *creag*, Manx *creg*, and Welsh and modern Scots *craig*), a steep rock. The word appears in many place-names in the north of England and in Scotland, and is also connected with "carrick," a word of similar meaning, also found in place-names. In geology, the term is applied to the strata in which a shelly sand deposit is found, and, in the expression "crag and tail," to a formation of hills, in which one side is precipitous and lofty and the other slopes or "tails" gradually away, as in the Castle Rock in Edinburgh.

CRAGGS, JAMES (1657-1721), English politician, was a son of Anthony Craggs of Holbeck, Durham, and was baptized on the 10th of June 1657. After following various callings in London, Craggs, who was a person of considerable financial ability, entered the service of the duchess of Marlborough, and through her influence became in 1702 member of parliament for Grampound, retaining his seat until 1713. He was in business as an army clothier and held several official positions, becoming joint postmaster-general in 1715; and, making the most of his opportunities in all these capacities, he amassed a great deal of money. Craggs also increased his wealth by mixing in the affairs of the South Sea Company, but after his death an act of parliament confiscated all the property which he had acquired since December 1719. He left an enormous fortune when he died on the 16th of March 1721. It is possible that Craggs committed suicide.

His son, JAMES CRAGGS the younger (1686-1721), was born at Westminster on the 9th of April 1686. Part of his early life was spent abroad, where he made the acquaintance of George Louis, elector of Hanover, afterwards King George I. In 1713 he became member of parliament for Tregoney, in 1717 secretary-at-war, and in the following year one of the principal secretaries of state. Craggs was implicated in the South Sea Bubble, but not so deeply as his father, whom he predeceased, dying on the 16th of February 1721. Among Craggs's friends were Pope, who wrote the epitaph on his monument in Westminster Abbey, Addison and Gay.

CRAIG, JOHN (1512?-1600), Scottish reformer, born about 1512, was the son of Craig of Craigston, Aberdeenshire, who was killed at Flodden in 1513. After an education at St Andrews, and acting as tutor to the children of Lord Darcy, the English warden of the North, he became a Dominican, but was soon in trouble as a heretic. In 1536 he made his way to England, but failing to obtain the preferment he desired at Cambridge, he went on to Italy, where the influence of Cardinal Pole, who was himself accused of heresy, secured him the post of master of the novices in the Dominican convent at Bologna. For some years he was busy travelling in the Levant in the interests of his order, but a perusal of Calvin's *Institutes* revived his heretical tendencies, and he was condemned to be burnt. Like the English scholar and statesman, Thomas Wilson, he owed his escape to the riot which broke out on the death of Paul IV. on the 18th of August 1559, when the mob burst open the prison of the Inquisition. After various adventures he reached Vienna, where he preached, and was protected by the semi-Lutheran archduke (afterwards the emperor) Maximilian II.

In 1560 he returned to Scotland, where in 1561 he was ordained minister of Holyrood, and in 1562 Knox's colleague in the High Church. His defence of church property and privilege against the predatory instincts of the

nobles and the pretensions of the state brought him into conflict with Lethington and others; but he seems to have condoned, if he was not privy to, Riccio's murder. At first he refused to publish the banns of marriage between Mary and Bothwell, though in the end he yielded with a protest that he "abhorred and detested the marriage." He had been associated with Knox in various commissions for the organization of the church, but he wished to compromise between the two extreme parties. From 1571-1579 Craig was in the north, whither he had been sent to "illuminate those dark places in Mar, Buchan and Aberdeen." In 1579 he was appointed chaplain to the young James VI., and returned to Edinburgh. In 1581 episcopacy was abolished as a result of the report of a commission on which Craig had sat; he also assisted at the composition of the *Second Book of Discipline* and the National Covenant of 1580, and in 1581 compiled "Ane Shorte and Generale Confession" called the "King's Confession," which was imposed on all parish ministers and graduates and became the basis of the Covenant of 1638. He approved of the Ruthven raid, and admonished James in terms which made him weep, but produced no alteration in his conduct, and before long Craig was denouncing the supremacy of Arran. But he was averse from the violence of Melville, and was willing to admit the royal supremacy "as far as the word of God allows." James VI., like Henry VIII., accepted this compromise, and the oath in this form was taken by Craig, the royal chaplains and some others. In 1592 was published Craig's *Catechism*. He died on the 12th of December 1600.

See T. G. Law's Pref. to Craig's *Catechism* (1885); Bain's *Cal. Scottish State Papers*; Reg. P. C. Scotl.; Hew Scott's *Fasti Eccles.* Scot.; Knox's, Calderwood's and Grub's *Eccles. Histories*; McCrie's *Life of Melville*; Hay Fleming's *Mary, Queen of Scots*; Bannatyne's *Memorials*.

(A. F. P.)

CRAIG, SIR THOMAS (c. 1538-1608), Scottish jurist and poet, was born about 1538. It is probable that he was the eldest son of William Craig of Craigfintray, or Craigston, in Aberdeenshire, but beyond the fact that he was in some way related to the Craigfintray family nothing regarding his birth is known with certainty. He was educated at St Andrews, where he took the B.A. degree in 1555. From St Andrews he went to France, to study the canon and the civil law. He returned to Scotland about 1561, and was admitted advocate in February 1563. In 1564 he was appointed justice-depute by the justice-general, Archibald, earl of Argyll; and in this capacity he presided at many of the criminal trials of the period. In 1573 he was appointed sheriff-depute of Edinburgh, and in 1606 procurator for the church. He never became a lord of session, a circumstance that was unquestionably due to his own choice. It is said that he refused the honour of knighthood which the king wished to confer on him in 1604, when he came to London as one of the Scottish commissioners regarding the union between the kingdoms—the only political object he seems to have cared about; but in accordance with James's commands he has always been styled and reputed a knight. Craig was married to Helen, daughter of Heriot of Lumphoy in Midlothian, by whom he had four sons and three daughters. His eldest son, Sir Lewis Craig (1569-1622), was raised to the bench in 1604, and among his other descendants are several well-known names in the list of Scottish lawyers. He died on the 26th of February 1608.

Except his poems, the only one of Craig's works which appeared during his lifetime was his *Jus feudale* (1603; ed. R. Burnet, 1655; Leipzig, 1716; ed. J. Baillie 1732). The object of this treatise was to assimilate the laws of England and Scotland, but, instead of this, it was an important factor in building up and solidifying the law of Scotland into a separate system. Other works were *De unione regnorum Britanniae tractatus, De jure successionis regni Angliae* and *De hominio disputatio*. Translations of the last two have been published, and in 1910 an edition

of the *De Unione* appeared, with translation and notes by C. S. Terry. Craig's first poem, an *Epithalamium* in honour of the marriage of Mary queen of Scots and Darnley, appeared in 1565. Most of his poems have been reprinted in the *Delitiae poëtarum Scotorum*.

See P. F. Tytler, *Life of Craig* (1823); Life prefixed to Baillie's edition of the *Jus feudale*.

CRAIGIE, PEARL MARY TERESA (1867-1906), Anglo-American novelist and dramatist, who wrote under the pen-name of "John Oliver Hobbes," was born at Boston, U.S.A., on the 3rd of November 1867. She was the elder daughter of John Morgan Richards, and was educated in London and Paris. When she was nineteen she married Reginald Walpole Craigie, by whom she had one son, John Churchill Craigie: but the marriage proved an unhappy one, and was dissolved on her petition in July 1895. She was brought up as a Nonconformist, but in 1892 was received into the Roman Catholic Church, of which she remained a devout and serious member. Her first little book, the brilliant and epigrammatic *Some Emotions and a Moral*, was published in 1891 in Mr Fisher Unwin's "Pseudonym Library," and was followed by *The Sinner's Comedy* (1892), *A Study in Temptations* (1893), *A Bundle of Life* (1894), *The Gods, Some Mortals, and Lord Wickenham*. *The Herb Moon* (1896), a country love story, was followed by *The School for Saints* (1897), with a sequel, *Robert Orange* (1900). Mrs Craigie had already written a one-act "proverb," *Journeys end in Lovers Meeting*, produced by Ellen Terry in 1894, and a three-act tragedy, "Osbern and Ursyne," printed in the *Anglo-Saxon Review* (1899), when her successful piece, *The Ambassador*, was produced at the St James's Theatre in 1898. *A Repentance* (one act, 1899) and *The Wisdom of the Wise* (1900) were produced at the same theatre, and *The Flute of Pan* (1904) first at Manchester and then at the Shaftesbury theatre; she was also part author of *The Bishop's Move* (Garrick Theatre, 1902). Later books are *The Serious Wooing* (1901), *Love and the Soul Hunters* (1902), *Tales about Temperament* (1902), *The Vineyard* (1904). Mrs Craigie died suddenly of heart failure in London on the 13th of August 1906.

CRAIK, DINAH MARIA (1826-1887), English novelist, better known by her maiden name of Mulock, and still better as "the author of *John Halifax, Gentleman*," was the daughter of Thomas Mulock, an eccentric religious enthusiast of Irish extraction, and was born on the 20th of April 1826 at Stoke-upon-Trent, in Staffordshire, where her father was the minister of a small congregation. She settled in London about 1846, determined to obtain a livelihood by her pen, and, beginning with fiction for children, advanced steadily until *John Halifax, Gentleman* (1857), placed her in the front rank of the women novelists of her day. *A Life for a Life* (1859), though inferior, maintained a high position, but she afterwards wrote little of importance except some very charming tales for children. Her most remarkable novels, after those mentioned above, were *The Ogilvies* (1849), *Olive* (1850), *The Head of the Family* (1851), *Agatha's Husband* (1853). There is much passion and power in these early works, and all that Mrs Craik wrote was characterized by high principle and deep feeling. Some of the short stories in *Avillion and other Tales* also exhibit a fine imagination. She published some poems distinguished by genuine lyrical spirit, narratives of tours in Ireland and Cornwall, and *A Woman's Thoughts about Women*. She married Mr G. L. Craik, a

partner in the house of Macmillan & Company, in 1864, and died at Shortlands, near Bromley, Kent, on the 12th of October 1887.

CRAIK, GEORGE LILLIE (1798-1866), English man of letters, the son of a schoolmaster, was born at Kennoway, Fifeshire, in 1798. He studied at the university of St Andrews with the intention of entering the church, but, altering his plans, became the editor of a local newspaper, and went to London in 1824 to devote himself to literature. He became connected with a short-lived literary paper called the *Verulam*; in 1831 he published his *Pursuit of Knowledge under Difficulties* among the works of the Society for the Diffusion of Useful Knowledge; he contributed a considerable number of biographical and historical articles to the *Penny Cyclopaedia*; and he edited the *Pictorial History of England*, himself writing much of the work. In 1844 he published his *History of Literature and Learning in England from the Norman Conquest to the Present Time*, illustrated by extracts. Craik is best known for his abridged version of this work, *The History of English Literature and the English Language* (1861), which passed through several editions. In the next year appeared his *Spenser and his Poetry*, an abstract of Spenser's poems, with historical and biographical notes and frequent quotations; and in 1847 his *Bacon, his Writings and his Philosophy*, a work of a similar kind. The two last-mentioned works appeared among *Knight's Weekly Volumes*. Two years later Craik obtained the chair of history and English literature at Queen's College, Belfast, a position which he held till his death, which took place on the 25th of June 1866. He had married Miss Jeannette Dempster (d. 1856) in 1826, and his daughter, Georgiana Marion Craik (Mrs A. W. May), wrote over thirty novels, of which *Lost and Won* (1859) was the best. Besides the works already noticed, Craik published the *History of British Commerce from the Earliest Times* (1844), *Romance of the Peerage* (1848-1850) and *The English of Shakespeare* (1856).

CRAIL (formerly KAREL), a royal and police burgh of Fifeshire, Scotland, 2 m. from Fife Ness, the most easterly point of the county, and 11 m. S.E. of St Andrews by the North British railway, but 2 m. nearer by road. Pop. (1901) 1077. It is said to have been a town of some note as early as the 9th century; and its castle, of which there are hardly any remains, was the residence of David I. and other Scottish kings. It was constituted a royal burgh by a charter of Robert Bruce in 1306, and had its privileges confirmed by Robert II. in 1371, by Mary in 1553, and by Charles I. in 1635. Of its priory, dedicated to St Rufus, a few ruins still exist. The church of Maelrubha, the patron saint of Crail, is an edifice of great antiquity. Many of the ordinary houses are massive and quaint. The public buildings include a library and reading-room and town hall. The chief industries comprise fisheries, especially for crabs, shipping and brewing. It is growing in favour as a summer resort. It unites with St Andrews, the two Anstruthers, Kilrenny, Pittenweem and Cupar in returning one member to parliament.

Balcomie Castle, about 2 m. to the N.E., dates from the 14th century. Here Mary of Guise landed in 1538, a few days before her marriage to James V. in St Andrews cathedral. In the 18th century it passed through the hands of various proprietors and was ultimately shorn of much of its original size and grandeur. The East Neuk is a term

applied more particularly to the country round Fife Ness, and more generally to all of the peninsula east of an imaginary line drawn from St Andrews to Elie. For fully half the year the cottages of its villages are damp with the haar, or dense mist, borne on the east wind from the North Sea.

CRAILSHEIM, or KRAILSHEIM, a town of Germany, in the kingdom of Württemberg, on the Jagst, a tributary of the Neckar, at the junction of railways to Heilbronn and Fürth. Pop. (1900) 5251. There are two Evangelical churches and a Roman Catholic church, and a handsome town hall, with a tower 225 ft. high. The industrial establishments include extensive tanneries and machine workshops, and there is a brisk trade in cattle and agricultural produce.

Crailsheim was incorporated as a town in 1338, successfully withstood a siege by the forces of several Swabian imperial cities (1379-1380), a feat which is annually celebrated, passed later into the possession of the burgraves of Nuremberg, and came in 1791 to Prussia, in 1806 to Bavaria and 1810 to Württemberg.

CRAIOVA, or KRAJOVA, the capital of the department of Doljiu, Rumania, situated near the left bank of the river Jiu, and on the main Walachian railway from Verciorova to Bucharest. Pop. (1900) 45,438. A branch railway to Calafat facilitates the export trade with Bulgaria. Craiova is the chief commercial town west of Bucharest; the surrounding uplands are very rich in grain, pasturage and vegetable products, and contain extensive forests. The town has rope and carriage factories, and close by is a large tannery, worked by convict labour, and supplying the army. The principal trade is in cattle, cereals, fish, linen, pottery, glue and leather. In the town, which is the headquarters of the First Army Corps, there are military and commercial academies, an appeal court and a chamber of commerce, besides many churches, Greek Orthodox, Roman Catholic, and Protestant, with synagogues for the Jews.

Craiova, which occupied the site of the Roman Castra Nova, was formerly the capital of Little Walachia. Its ancient *bans* or military governors were, next to the princes, the chief dignitaries of Walachia, and the district is still styled the banat of Craiova. Among the holders of this office were Michael the Brave (1593-1601), and several members of the celebrated Bassarab family (*q.v.*). The bans had the right of coining money stamped with their own effigies, and hence arose the name of *bani* (centimes). The Rumanian franc, or *leu* ("lion"), so called from the image it bore, came likewise from Craiova. In 1397 Craiova was the scene of a victory won by Prince Mircea over Bayezid I. sultan of the Turks; and in October 1853, of an engagement between Turks and Russians.

CRAMBO, an old rhyming game which, according to Strutt (*Sports and Pastimes*), was played as early as the 14th century under the name of the *ABC of Aristotle*. In the days of the Stuarts it was very popular, and is frequently mentioned in the writings of the time. Thus Congreve's *Love for Love*, i. 1, contains the passage, "Get the Maids to Crambo in an Evening, and learn the knack of Rhiming." Crambo, or capping the rhyme, is now played by one player thinking of a word and telling the others what it rhymes with, the others not naming the actual word they guess but its meaning. Thus one says "I know a word that rhymes with *bird*." A second asks "Is it ridiculous?" "No, it is not absurd." "Is it a part of speech?" "No, it is not a word." This proceeds until the right word is guessed.

In *Dumb Crambo* the guessers, instead of naming the word, express its meaning by dumb show, a rhyme being given them as a clue.

CRAMER, JOHANN BAPTIST (1771-1858), English musician, of German extraction, was born in Mannheim, on the 24th of February 1771. He was the son of Wilhelm Cramer (1743-1799). a famous London violinist and musical conductor, one of a numerous family who were identified with the progress of music during the 18th and 19th centuries. Johann Baptist was brought to London as a child, and it was in London that the greater part of his musical efforts was exercised. From 1782 to 1784 he studied the pianoforte under Muzio Clementi, and soon became known as a professional pianist both in London and on the continent; he enjoyed a world-wide reputation, and was particularly appreciated by Beethoven. He died in London on the 16th of April 1858. Apart from his pianoforte-playing Cramer is important as a composer, and as principal founder in 1824 of the London music-publishing house of Cramer & Co. He wrote a number of sonatas, &c., for pianoforte, and other compositions; but his *Études* is the work by which he lives as a composer. These "studies" have appeared in numerous editions, from 1810 onwards, and became the staple pieces in the training of pianists.

CRAMER, JOHN ANTONY (1793-1848), English classical scholar and geographer, was born at Mitlödi in Switzerland. He was educated at Westminster and Christ Church, Oxford. He resided in Oxford till 1844, during which time he held many important offices, being public orator, principal of New Inn Hall (which he rebuilt at his own expense), and professor of modern history. In 1844 he was appointed to the deanery of Carlisle, which he held until his death at Scarborough on the 24th of August 1848. His works are of considerable importance: *A Dissertation on the Passage of Hannibal over the Alps*, published anonymously with H. L. Wickham (2nd ed., 1828), "a scholar-like work of first-rate ability"; geographical and historical descriptions of *Ancient Italy* (1826), *Ancient Greece* (1828), *Asia Minor* (1832); *Travels of Nicander Nucius of Corcyra* [Greek traveller of the 16th century] *in England* (1841); *Catenae Graecorum Patrum in Novum Testamentum* (1838-1844); *Anecdota Graeca* (from the MSS. of the royal library in Paris, 1839-1841).

CRÄMER, KARL VON (1818-1902), Bavarian politician, had a very remarkable career, rising gradually from a mere workman in a factory at Doos near Nuremberg to the post of manager, and finally becoming part proprietor of the establishment. Leaving business in 1870 he devoted his time entirely to politics. From 1848 he had been a member of the Bavarian second chamber, at first representing the district of Erlangen-Fürth, and afterwards Nuremberg, which city also sent him after the war of 1866 as its deputy to the German customs parliament, and from 1871 to 1874 to the first German *Reichstag*. He sat in these bodies as a member of the Progressive party (*Fortschrittspartei*), and in Bavaria was one of the leaders of the Liberal (*Freisinnige*) party. His eloquence had a great hold upon the masses. As a parliamentarian he was very clear-headed, and thoroughly understood how to lead a party. For many years he was the reporter of the finance committee of the chamber. In 1882, on account of his great services in connexion with the Bavarian National Exhibition of Nuremberg, the order of the crown of Bavaria was conferred upon him, carrying with it the honour of nobility. He died at Nuremberg on the 31st of December 1902.

CRAMP, CHARLES HENRY (1828-), American shipbuilder, was born in Philadelphia, Pennsylvania, on the 9th of May 1828, of German descent, his family name having been Krampf. He was the eldest of eleven children of William Cramp (1807-1869), a pioneer American shipbuilder, who in 1830 established shipyards on the Delaware river near Philadelphia. The son was educated at the Philadelphia Central high school, after which he was employed in his father's shipyards and made himself master of every detail of ship construction. He showed especial aptitude as a naval architect and designer, and after becoming his father's partner in 1849 it was to that branch of the work that he devoted himself. His inventive capacity and resourcefulness, together with the complete success of his innovations in naval construction, soon gave him high rank as an authority on shipbuilding, and made his influence in that industry widely felt. In the Mexican War he designed surf boats for the landing of troops at Vera Cruz; during the Civil War he designed and built several ironclads for the United States navy, notably the "New Ironsides" in 1862, and the light-draught monitors used in the Carolina sounds; and after 1887 constructed wholly or in part from his own designs many of the most powerful ships in the "new" navy, including the cruisers "Columbia," "Minneapolis" and "Brooklyn," and the battleships "Indiana," "Iowa," "Massachusetts," "Alabama" and "Maine." In every progressive step in ocean shipbuilding, in the transformation from sail to steam, and from wood to iron and steel, Cramp had a prominent part. His fame as a shipbuilder extended to Europe, and he built warships for several foreign navies, among others the "Retvizan" and the "Variag" for the Russian government. He also constructed a number of freight and passenger steamships for several trans-Atlantic lines.

See A. C. Buel, *Memoirs of C. H. Cramp* (Philadelphia, 1906).

CRAMP, a painful spasmodic contraction of muscles, most frequently occurring in the limbs, but also apt to affect certain internal organs. This disorder belongs to the class of diseases known as local spasms, of which other varieties exist in such affections as spasmodic asthma and colic. The cause of these painful seizures resides in the

nervous system, and operates either directly from the great nerve centres, or, as is generally the case, indirectly by reflex action, as, for example, when attacks are brought on by some derangement of the digestive organs.

In its most common form, that of cramp in the limbs, this disorder comes on suddenly, often during sleep, the patient being aroused by an agonizing feeling of pain in the calf of the leg or back of the thigh, accompanied in many instances with a sensation of sickness or faintness from the intensity of the suffering. During the paroxysm the muscular fibres affected can often be felt gathered up into a hard knot. The attack in general lasts but a few seconds, and then suddenly departs, the spasmodic contraction of the muscles ceasing entirely, or, on the other hand, relief may come more gradually during a period of minutes or even hours. A liability to cramp is often associated with a rheumatic or gouty tendency, but occasional attacks are common enough apart from this, and are often induced by some peculiar posture which a limb has assumed during sleep. Exposure of the limbs to cold will also bring on cramp, and to this is probably to be ascribed its frequent occurrence in swimmers. Cramp of the extremities is also well known as one of the most distressing accompaniments of cholera. It is likewise of frequent occurrence in the process of parturition, just before delivery.

This painful disorder can be greatly relieved and often entirely removed by firmly grasping or briskly rubbing the affected part with the hand, or by anything which makes an impression on the nerves, such as warm applications. Even a sudden and vigorous movement of the limb will often succeed in terminating the attack.

What is termed cramp of the stomach, or gastralgia, usually occurs as a symptom in connexion with some form of gastric disorder, such as aggravated dyspepsia, or actual organic disease of the mucous membrane of the stomach.

The disease known as *Writer's Cramp*, or *Scrivener's Palsy*, is a spasm which affects certain muscles when engaged in the performance of acts, the result of education and long usage, and which does not occur when the same muscles are employed in acts of a different kind. This disorder owes its name to the relative frequency with which it is met in persons who write much, although it is by no means confined to them, but is liable to occur in individuals of almost any handicraft. It was termed by Dr Duchenne *Functional Spasm*.

The symptoms are in the first instance a gradually increasing difficulty experienced in conducting the movements required for executing the work in hand. Taking, for example, the case of writers, there is a feeling that the pen cannot be moved with the same freedom as before, and the handwriting is more or less altered in consequence. At an early stage of the disease the difficulty may be to a large extent overcome by persevering efforts, but ultimately, when the attempt is persisted in, the muscles of the fingers, and occasionally also those of the forearm, are seized with spasm or cramp, so that the act of writing is rendered impossible. Sometimes the fingers, instead of being cramped, move in a disorderly manner and the pen cannot be grasped, while in other rare instances a kind of paralysis affects the muscles of the fingers, and they are powerless to make the movements necessary for holding the pen. It is to be noted that it is only in the act of writing that these phenomena present themselves, and that for all other movements the fingers and arms possess their natural power. The same symptoms are observed and the same remarks apply *mutatis mutandis* in the case of musicians, artists, compositors, seamstresses, tailors and many mechanics in whom this affection may occur. Indeed, although actually a rare disease, no muscle or group of muscles in the body which is specially called into action in any particular occupation is exempt from liability to this functional spasm.

The exact pathology of writer's cramp has not been worked out, but it is now generally accepted that the disease is not a local one of muscles or nerves, but that it is an affection of the central nervous system. The complaint never occurs under thirty years of age, and is more frequent in males than females. Occasionally there is an inherited tendency to the disease, but more usually there is a history of alcoholism in the parents, or some neuropathic heredity. In its treatment the first requisite is absolute cessation from the employment which caused it.

Usually, however, complete rest of the arm is undesirable, and recovery takes place more speedily if other actions of a different kind are regularly practised. If a return to the same work is a necessity, then Sir W. R. Gowers insists on some modification of method in performing the act, as writing from the shoulder instead of the wrist.

CRAMP-RINGS, rings anciently worn as a cure for cramp and "falling-sickness" or epilepsy. The legend is that the first one was presented to Edward the Confessor by a pilgrim on his return from Jerusalem, its miraculous properties being explained to the king. At his death it passed into the keeping of the abbot of Westminster, by whom it was used medically and was known as St Edward's Ring. From that time the belief grew that the successors of Edward inherited his powers, and that the rings blessed by them worked cures. Hence arose the custom for the successive sovereigns of England each year on Good Friday formally to bless a number of cramp-rings. A service was held; prayers and psalms were said; and water "in the name of the Father, Son and Holy Ghost" was poured over the rings, which were always of gold or silver, and made from the metal that the king offered to the Cross on Good Friday. The ceremony survived to the reign of Queen Mary, but the belief in the curative powers of similar circlets of sacred metal has lingered on even to the present day.

For an account of the ceremony see F. G. Waldron, *The Literary Museum* (London, 1792); see also *Notes and Queries*, vol. vii., 1853; vol. ix., 1878.

CRANACH, LUCAS (1472-1553), German painter, was born at Cronach in upper Franconia, and learnt the art of drawing from his father. It has not been possible to trace his descent or the name of his parents. We are not informed as to the school in which he was taught, and it is a mere guess that he took lessons from the south German masters to whom Mathew Grunewald owed his education. But Grunewald practised at Bamberg and Aschaffenburg, and Bamberg is the capital of the diocese in which Cronach lies. According to Gunderam, the tutor of Cranach's children, Cranach signalized his talents as a painter before the close of the 15th century. He then drew upon himself the attention of the elector of Saxony, who attached him to his person in 1504. The records of Wittenberg confirm Gunderam's statement to this extent that Cranach's name appears for the first time in the public accounts on the 24th of June 1504, when he drew 50 gulden for the salary of half a year, as *pictor ducalis*. The only clue to Cranach's settlement previous to his Wittenberg appointment is afforded by the knowledge that he owned a house at Gotha, and that Barbara Brengbier, his wife, was the daughter of a burgher of that city.

Of his skill as an artist we have sufficient evidence in a picture dated 1504. But as to the development of his manner prior to that date we are altogether in ignorance. In contrast with this obscurity is the light thrown upon Cranach after 1504. We find him active in several branches of his profession,—sometimes a mere house-painter, more frequently producing portraits and altar-pieces, a designer on wood, an engraver of copper-plates, and draughtsman for the dies of the electoral mint. Early in the days of his official employment he startled his master's courtiers by the realism with which he painted still life, game and antlers on the walls of the country palaces at Coburg and Lochau; his pictures of deer and wild boar were considered striking, and the duke fostered his passion

for this form of art by taking him out to the hunting field, where he sketched “his grace” running the stag, or Duke John sticking a boar. Before 1508 he had painted several altar-pieces for the Schlosskirche at Wittenberg in competition with Dürer, Burgkmair and others; the duke and his brother John were portrayed in various attitudes and a number of the best woodcuts and copper-plates were published. Great honour accrued to Cranach when he went in 1509 to the Netherlands, and took sittings from the emperor Maximilian and the boy who afterwards became Charles V. Till 1508 Cranach signed his works with the initials of his name. In that year the elector gave him the winged snake as a motto, and this motto or *Kleinod*, as it was called, superseded the initials on all his pictures after that date. Somewhat later the duke conferred on him the monopoly of the sale of medicines at Wittenberg, and a printer’s patent with exclusive privileges as to copyright in Bibles. The presses of Cranach were used by Luther. His chemist’s shop was open for centuries, and only perished by fire in 1871. Relations of friendship united the painter with the Reformers at a very early period; yet it is difficult to fix the time of his first acquaintance with Luther. The oldest notice of Cranach in the Reformer’s correspondence dates from 1520. In a letter written from Worms in 1521, Luther calls him his gossip, warmly alluding to his “Gevatterin,” the artist’s wife. His first engraved portrait by Cranach represents an Augustinian friar, and is dated 1520. Five years later the friar dropped the cowl, and Cranach was present as “one of the council” at the betrothal festival of Luther and Catherine Bora. The death at short intervals of the electors Frederick and John (1525 and 1532) brought no change in the prosperous situation of the painter; he remained a favourite with John Frederick I., under whose administration he twice (1537 and 1540) filled the office of burgomaster of Wittenberg. But 1547 witnessed a remarkable change in these relations. John Frederick was taken prisoner at the battle of Mühlberg, and Wittenberg was subjected to stress of siege. As Cranach wrote from his house at the corner of the market-place to the grand-master Albert of Brandenburg at Königsberg to tell him of John Frederick’s capture, he showed his attachment by saying, “I cannot conceal from your Grace that we have been robbed of our dear prince, who from his youth upwards has been a true prince to us, but God will help him out of prison, for the Kaiser is bold enough to revive the Papacy, which God will certainly not allow.” During the siege Charles bethought him of Cranach, whom he remembered from his childhood and summoned him to his camp at Pistritz. Cranach came, reminded his majesty of his early sittings as a boy, and begged on his knees for kind treatment to the elector. Three years afterwards, when all the dignitaries of the Empire met at Augsburg to receive commands from the emperor, and when Titian at Charles’s bidding came to take the likeness of Philip of Spain, John Frederick asked Cranach to visit the Swabian capital; and here for a few months he was numbered amongst the household of the captive elector, whom he afterwards accompanied home in 1552. He died on the 16th of October 1553 at Weimar, where the house in which he lived still stands in the market-place.

The oldest extant picture of Cranach, the “Rest of the Virgin during the Flight into Egypt,” marked with the initials L.C., and the date of 1504, is by far the most graceful creation of his pencil. The scene is laid on the margin of a forest of pines, and discloses the habits of a painter familiar with the mountain scenery of Thuringia. There is more of gloom in landscapes of a later time; and this would point to a defect in the taste of Cranach, whose stag hunts are otherwise not unpleasing. Cranach’s art in its prime was doubtless influenced by causes which but slightly affected the art of the Italians, but weighed with potent consequence on that of the Netherlands and Germany. The business of booksellers who sold woodcuts and engravings at fairs and markets in Germany naturally satisfied a craving which arose out of the paucity of wall-paintings in churches and secular edifices. Drawing for woodcuts and engraving of copper-plates became the occupation of artists of note, and the talents devoted in Italy to productions of the brush were here monopolized for designs on wood or on copper. We have thus to account for the comparative unproductiveness as painters of Dürer and Holbein, and at the same time to explain the shallowness apparent in many of the later works of Cranach; but we attribute to the same cause also the tendency in Cranach to neglect effective colour and light and shade for strong contrasts of flat tint. Constant attention to mere contour and to black and white appears to have affected his sight, and caused those curious

transitions of pallid light into inky grey which often characterize his studies of flesh; whilst the mere outlining of form in black became a natural substitute for modelling and chiaroscuro. There are, no doubt, some few pictures by Cranach in which the flesh-tints display brightness and enamelled surface, but they are quite exceptional. As a composer Cranach was not greatly gifted. His ideal of the human shape was low; but he showed some freshness in the delineation of incident, though he not unfrequently bordered on coarseness. His copper-plates and woodcuts are certainly the best outcome of his art; and the earlier they are in date the more conspicuous is their power. Striking evidence of this is the "St Christopher" of 1506, or the plate of "Elector Frederick praying before the Madonna" (1509). It is curious to watch the changes which mark the development of his instincts as an artist during the struggles of the Reformation. At first we find him painting Madonnas. His first woodcut (1505) represents the Virgin and three saints in prayer before a crucifix. Later on he composes the marriage of St Catherine, a series of martyrdoms, and scenes from the Passion. After 1517 he illustrates occasionally the old gospel themes, but he also gives expression to some of the thoughts of the Reformers. In a picture of 1518 at Leipzig, where a dying man offers "his soul to God, his body to earth, and his worldly goods to his relations," the soul rises to meet the Trinity in heaven, and salvation is clearly shown to depend on faith and not on good works. Again sin and grace become a familiar subject of pictorial delineation. Adam is observed sitting between John the Baptist and a prophet at the foot of a tree. To the left God produces the tables of the law, Adam and Eve partake of the forbidden fruit, the brazen serpent is reared aloft, and punishment supervenes in the shape of death and the realm of Satan. To the right, the Conception, Crucifixion and Resurrection symbolize redemption, and this is duly impressed on Adam by John the Baptist, who points to the sacrifice of the crucified Saviour. There are two examples of this composition in the galleries of Gotha and Prague, both of them dated 1529. One of the latest pictures with which the name of Cranach is connected is the altarpiece which Cranach's son completed in 1555, and which is now in the *Stadtkirche* (city church) at Weimar. It represents Christ in two forms, to the left trampling on Death and Satan, to the right crucified, with blood flowing from the lance wound. John the Baptist points to the suffering Christ, whilst the blood-stream falls on the head of Cranach, and Luther reads from his book the words, "The blood of Christ cleanseth from all sin." Cranach sometimes composed gospel subjects with feeling and dignity. "The Woman taken in Adultery" at Munich is a favourable specimen of his skill, and various repetitions of Christ receiving little children show the kindliness of his disposition. But he was not exclusively a religious painter. He was equally successful, and often comically naïve, in mythological scenes, as where Cupid, who has stolen a honeycomb, complains to Venus that he has been stung by a bee (Weimar, 1530; Berlin, 1534), or where Hercules sits at the spinning-wheel mocked by Omphale and her maids. Humour and pathos are combined at times with strong effect in pictures such as the "Jealousy" (Augsburg, 1527; Vienna, 1530), where women and children are huddled into telling groups as they watch the strife of men wildly fighting around them. Very realistic must have been a lost canvas of 1545, in which hares were catching and roasting sportsmen. In 1546, possibly under Italian influence, Cranach composed the "Fons Juventutis" of the Berlin Gallery, executed by his son, a picture in which hags are seen entering a Renaissance fountain, and are received as they issue from it with all the charms of youth by knights and pages.

Cranach's chief occupation was that of portrait-painting, and we are indebted to him chiefly for the preservation of the features of all the German Reformers and their princely adherents. But he sometimes condescended to depict such noted followers of the papacy as Albert of Brandenburg, archbishop elector of Mainz, Anthony Granvelle and the duke of Alva. A dozen likenesses of Frederick III. and his brother John are found to bear the date of 1532. It is characteristic of Cranach's readiness, and a proof that he possessed ample material for mechanical reproduction, that he received payment at Wittenberg in 1533. for "sixty pairs of portraits of the elector and his brother" in one day. Amongst existing likenesses we should notice as the best that of Albert, elector of Mainz, in the Berlin museum, and that of John, elector of Saxony, at Dresden.

Cranach had three sons, all artists:—John Lucas, who died at Bologna in 1536; Hans Cranach, whose life is obscure; and Lucas, born in 1515, who died in 1586.

See Heller, *Leben und Werke Lukas Cranachs* (2nd ed., Bamberg, 1844); Chr. Schuchard, *Lukas Cranachs des älteren Leben und Werke* (3 vols., Leipzig, 1851-1871); Warnecke, *Cranach der ältere* (Görlitz, 1879); M. B. Lindau, *Lucas Cranach* (1883); Lippmann, *Lukas Cranach, Sammlung, &c.* (Berlin, 1895), reproductions of his most notable woodcuts and engravings; Woermann, *Verzeichnis der Dresdener Cranach-Ausstellung von 1899* (Dresden, 1899); Flechsig, *Tafelbilder Cranach's des ältern und seiner Werkstatt* (Leipzig, 1900); Muther, *Lukas Cranach* (Berlin, 1902); Michaelson, *L. Cranach der ältere* (Leipzig, 1902).

(J. A. C.)

CRANBERRY, the fruit of plants of the genus *Oxycoccus*, (natural order Vacciniaceae), often considered part of the genus *Vaccinium. O. palustris* (or *Vaccinium Oxycoccus*), the common cranberry plant, is found in marshy land in northern and central Europe and North America. Its stems are wiry, creeping and of varying length; the leaves are evergreen, dark and shining above, glaucous below, revolute at the margin, ovate, lanceolate or elliptical in shape, and not more than half an inch long; the flowers, which appear in May or June, are small and stalked, and have a four-lobed, rose-tinted corolla, purplish filaments, and anther-cells forming two long tubes. The berries ripen in August and September; they are pear-shaped and about the size of currants, are crimson in colour and often spotted, and have an acid and astringent taste. The American species, *O. macrocarpus*, is found wild from Maine to the Carolinas. It attains a greater size than *O. palustris*, and bears bigger and finer berries, which are of three principal sorts, the *cherry* or round, the *bugle* or oblong, and the *pear* or bell-shaped, and vary in hue from light pink to dark purple, or may be mottled red and white. *O. erythrocarpus* is a species indigenous in the mountains from Virginia to Georgia, and is remarkable for the excellent flavour of its berry.

Air and moisture are the chief requisites for the thriving of the cranberry plant. It is cultivated in America on a soil of peat or vegetable mould, free from loam and clay, and cleared of turf, and having a surface layer of clean sand. The sand, which needs renewal every two or three years, is necessary for the vigorous existence of the plants, and serves both to keep the underlying soil cool and damp, and to check the growth of grass and weeds. The ground must be thoroughly drained, and should be provided with a supply of water and a dam for flooding the plants during winter to protect them from frost, and occasionally at other seasons to destroy insect pests; but the use of spring water should be avoided. The flavour of the fruit is found to be improved by growing the plants in a soil enriched with well-rotted dung, and by supplying them with less moisture than they obtain in their natural habitats. Propagation is effected by means of cuttings, of which the wood should be wiry in texture, and the leaves of a greenish-brown colour. In America, where, in the vicinity of Cape Cod, Massachusetts, the cultivation of the cranberry commenced early in the last century, wide tracts of waste land have been utilized for that purpose—low, easily flooded, marshy ground, worth originally not more than from $10 to $20 an acre, having been made to yield annually $200 or $300 worth of the fruit per acre. The yield varies between 50 and 400 bushels an acre, but 100 bushels, or about 35 barrels, is estimated to be the average production when the plants have begun to bear well. The approximate cranberry crop of the United States from 1890 to 1899 varied from 410,000 to 1,000,000 bushels.

Cranberries should be gathered when ripe and dry, otherwise they do not keep well. The darkest-coloured berries are those which are most esteemed. The picking of the fruit begins in New Jersey in October, at the close of the

blackberry and whortleberry season, and often lasts until the coming in of cold weather. From 3 to 4 bushels a day may be collected by good workers. New York, Philadelphia, Boston and Baltimore are the leading American markets for cranberries, whence they are exported to the West Indies, England and France in great quantities. England was formerly supplied by Lincolnshire and Norfolk with abundance of the common cranberry, which it now largely imports from Sweden and Russia. The fruit is much used for pies and tarts, and also for making an acid summer beverage. The cowberry, or red whortleberry, *Vaccinium Vitis-Idaea*, is sometimes sold for the cranberry. The Tasmanian and the Australian cranberries are the produce respectively of *Astroloma humifusum* and *Lissanthe sapida*, plants of the order *Epacridaceae*.

For literature of the subject see the *Proceedings of the American Cranberry Growers' Association* (Trenton, N. J.). There is a good article on the American cranberry in L. H. Bailey's *Cyclopaedia of American Horticulture* (1900).

CRANBROOK, GATHORNE GATHORNE-HARDY, 1ST EARL OF (1814-1906), British statesman, was born at Bradford on the 1st of October 1814, the son of John Hardy, and belonged to a Yorkshire family. Entering upon active political life in 1847, eleven years after his graduation at Oxford, and nine years after his call to the bar, he offered himself as a candidate for Bradford, but was unsuccessful. In 1856 he was returned for Leominster, and in 1865 defeated Mr Gladstone at Oxford. In 1866 he became president of the Poor Law Board in Lord Derby's new administration. When in 1867 Mr Walpole resigned, from dissatisfaction with Mr Disraeli's Reform Bill, Mr Hardy succeeded him at the home office. In 1874 he was secretary for war; and when in 1878 Lord Salisbury took the foreign office upon the resignation of Lord Derby, Viscount Cranbrook (as Mr Hardy became within a month afterwards) succeeded him at the India office. At the same time he had assumed the additional family surname of Gathorne, which had been that of his mother. In Lord Salisbury's administrations of 1885 and 1886 Lord Cranbrook was president of the council, and upon his retirement from public life concurrently with the resignation of the cabinet in 1892 he was raised to an earldom. He died on the 30th of October 1906, being succeeded as 2nd earl by his son John Stewart Gathorne-Hardy, previously known as Lord Medway (b. 1839), who from 1868 to 1880 sat in parliament as a conservative for Rye, and from 1884 to 1892 for a division of Kent.

See *Gathorne Hardy, 1st earl of Cranbrook, a memoir with extracts from his correspondence*, edited by the Hon. A. E. Gathorne-Hardy (1910).

CRANBROOK, a market-town in the southern parliamentary division of Kent, England, 45 m. S.E. of London on a branch of the South-Eastern & Chatham railway from Paddock Wood. Pop. (1901) 3949. It lies on the Crane brook, a feeder of the river Beult, in a pleasant district, hilly and well wooded. It has a fine church (mainly Perpendicular) dedicated to St Dunstan, which is remarkable for a baptistery, built in the early part of the 18th century, and some ancient stained glass. As the centre of the agricultural district of the Kentish Weald, it carries on an extensive trade in malt, hops and general goods; but its present condition is in striking contrast to the activity it

displayed from the 14th to the 17th century, when it was one of the principal seats of the broadcloth manufacture. Remains of some of the old factories still exist. The town has a grammar school of Elizabethan foundation, which now ranks as one of the smaller public schools. In the neighbourhood are the ruins of the old mansion house of Sissinghurst, or Saxenhurst, built in the time of Edward VI.

CRANDALL, PRUDENCE (1803-1889), American school-teacher, was born, of Quaker parentage, at Hopkinton, Rhode Island, on the 3rd of September 1803. She was educated in the Friends' school at Providence, R. I., taught school at Plainfield, Conn., and in 1831 established a private academy for girls at Canterbury, Windham county, Connecticut. By admitting a negro girl she lost her white patrons, and in March 1833, on the advice of William Lloyd Garrison and Samuel J. May (1797-1871), she opened a school for "young ladies and little misses of colour." For this she was bitterly denounced, not only in Canterbury but throughout Connecticut, and was persecuted, boycotted and socially ostracized; measures were taken in the Canterbury town-meeting to break up the school, and finally in May 1833 the state legislature passed the notorious Connecticut "Black Law," prohibiting the establishment of schools for non-resident negroes in any city or township of Connecticut, without the consent of the local authorities. Miss Crandall, refusing to submit, was arrested, tried and convicted in the lower courts, whose verdict, however, was reversed on a technicality by the court of appeals in July 1834. Thereupon the local opposition to her redoubled, and she was finally in September 1834 forced to close her school. Soon afterward she married the Rev. Calvin Philleo. She died at Elk Falls, Kansas, on the 28th of January 1889. The Connecticut Black Law was repealed in 1838. Miss Crandall's attempt to educate negro girls at Canterbury attracted the attention of the whole country; and the episode is of considerable significance as showing the attitude of a New England community toward the negro at that time.

See J. C. Kimball's *Connecticut Canterbury Tale* (Hartford, Conn., 1889), and Samuel J. May's *Recollections of Our Anti-Slavery Conflict* (Boston, 1869).

CRANE, STEPHEN (1870-1900), American writer, was born at Newark, New Jersey, on the 1st of November 1870, and was educated at Lafayette College and Syracuse University. His first story, *Maggie, a Girl of the Streets*, was published in 1891, but his greatest success was made with *The Red Badge of Courage* (1896), a brilliant and highly realistic, though of course imaginary, description of the experiences of a private in the Civil War. He was also the author of various other stories, and acted as a war correspondent in the Greco-Turkish War (1897) and the Spanish American War (1898). His health became seriously affected in Cuba, and on his return he settled down in England. He died at Badenweiler, Germany, on the 5th of June 1900.

CRANE, WALTER (1845-), English artist, second son of Thomas Crane, portrait painter and miniaturist, was born in Liverpool on the 15th of August 1845. The family soon removed to Torquay, where the boy gained his early artistic impressions, and, when he was twelve years old, to London. He early came under the influence of the Pre-Raphaelites, and was a diligent student of Ruskin. A set of coloured page designs to illustrate Tennyson's "Lady of Shalott" gained the approval of William James Linton, the wood-engraver, to whom Walter Crane was apprenticed for three years (1859-1862). As a wood-engraver he had abundant opportunity for the minute study of the contemporary artists whose work passed through his hands, of Rossetti, Millais, Tenniel and F. Sandys, and of the masters of the Italian Renaissance, but he was more influenced by the Elgin marbles in the British Museum. A further and important element in the development of his talent, was the study of Japanese colour-prints, the methods of which he imitated in a series of toy-books, which started a new fashion. In 1862 a picture of his, "The Lady of Shalott," was exhibited at the Royal Academy, but the Academy steadily refused his maturer work; and after the opening of the Grosvenor Gallery in 1877 he ceased to send pictures to Burlington House. In 1864 he began to illustrate for Mr Edmund Evans, the colour printer, a series of sixpenny toy-books of nursery rhymes, displaying admirable fancy and beauty of design, though he was limited to the use of three colours. He was allowed more freedom in a delightful series begun in 1873, *The Frog Prince, &c.*, which showed markedly the influence of Japanese art, and of a long visit to Italy following on his marriage in 1871. *The Baby's Opera* was a book of English nursery songs planned in 1877 with Mr Evans, and a third series of children's books with the collective title, *A Romance of the Three R's*, provided a regular course of instruction in art for the nursery. In his early "Lady of Shalott" the artist had shown his preoccupation with unity of design in book illustration by printing in the words of the poem himself, in the view that this union of the calligrapher's and the decorator's art was one secret of the beauty of the old illuminated books. He followed the same course in *The First of May: A Fairy Masque* by his friend John R. Wise, text and decoration being in this case reproduced by photogravure. The "Goose Girl" illustration taken from his beautiful *Household Stories from Grimm* (1882) was reproduced in tapestry by William Morris, and is now in the South Kensington Museum. *Flora's Feast, A Masque of Flowers* had lithographic reproductions of Mr Crane's line drawings washed in with water colour; he also decorated in colour *The Wonder Book* of Nathaniel Hawthorne, and Margaret Deland's *Old Garden*; in 1894 he collaborated with William Morris in the page decoration of *The Story of the Glittering Plain*, published at the Kelmscott press, which was executed in the style of 16th-century Italian and German woodcuts; but in purely decorative interest the finest of his works in book illustration is Spenser's *Faerie Queene* (12 pts., 1894-1896) and the *Shepheard's Calendar*. The poems which form the text of *Queen Summer* (1891), *Renascence* (1891), and *The Sirens Three* (1886) are by the artist himself.

In the early 'eighties under Morris's influence he was closely associated with the Socialist movement. He did as much as Morris himself to bring art into the daily life of all classes. With this object in view he devoted much attention to designs for textile stuffs, for wall-papers, and to house decoration; but he also used his art for the direct advancement of the Socialist cause. For a long time he provided the weekly cartoons for the Socialist organs, *Justice* and *The Commonweal*. Many of these were collected as *Cartoons for the Cause*. He devoted much time and energy to the work of the Art Workers' Guild, and to the Arts and Crafts Exhibition Society, founded by him in 1888. His own easel pictures, chiefly allegorical in subject, among them "The Bridge of Life" (1884) and "The Mower" (1891), were exhibited regularly at the Grosvenor Gallery and later at the New Gallery. "Neptune's Horses," which, with many other of Mr Crane's pictures, came into the possession of Herr Ernst Seeger of Berlin, was exhibited at the New Gallery in 1893, and with it may be classed his "The Rainbow and the Wave."

His varied work includes examples of plaster relief, tiles, stained glass, pottery, wall-paper and textile designs, in all of which he applied the principle that in purely decorative design "the artist works freest and best without direct reference to nature, and should have learned the forms he makes use of by heart." An exhibition of his work of different kinds was held at the Fine Art Society's galleries in Bond Street in 1891, and taken over to the United

States in the same year by the artist himself. It was afterwards exhibited in the chief German, Austrian and Scandinavian towns, arousing great interest throughout the continent.

Mr Crane became an associate of the Water Colour Society in 1888; he was an examiner of the science and art department at South Kensington; director of design at the Manchester Municipal school (1894); art director of Reading College (1896); and in 1898 for a short time principal of the Royal College of Art. His lectures at Manchester were published with illustrated drawings as *The Bases of Design* (1898) and *Line and Form* (1900). *The Decorative Illustration of Books, Old and New* (2nd ed., London and New York, 1900) is a further contribution to theory.

A well-known portrait of Mr Crane by G. F. Watts, R.A., was exhibited at the New Gallery in 1893. There is a comprehensive and sumptuously illustrated book on *The Art of Walter Crane*, by P. G. Konody; a monograph (1902) by Otto von Schleinitz in the *Künstler Monographien* series (Bielefeld and Leipzig); and an account of himself by the artist in the Easter number of 1898 of the *Art Journal*.

CRANE, WILLIAM HENRY (1845-), American actor, was born on the 30th of April 1845, in Leicester, Massachusetts, and made his first appearance at Utica, New York, in Donizetti's *Daughter of the Regiment* in 1863. Later he had a great success as Le Blanc the Notary, in the burlesque *Evangeline* (1873). He made his first hit in the legitimate drama with Stuart Robson (1836-1903), in *The Comedy of Errors* and other Shakespearian plays, and in *The Henrietta* (1881) by Bronson Howard (1842-1908). This partnership lasted for twelve years, and subsequently Crane appeared in various eccentric character parts in such plays as *The Senator* and *David Harum*. In 1904 he turned to more serious work and played Isidore Izard in *Business is Business*, an adaptation from Octave Mirbeau's *Les Affaires sont les affaires*.

CRANE (in Dutch, *Kraan*; O. Ger. *Kraen*; cognate, as also the Lat. *grus*, and consequently the Fr. *grue* and Span. *grulla*, with the Gr. γέρανος), the *Grus communis* or *G. cinerea* of ornithologists, one of the largest wading-birds, and formerly a native of England, where William Turner, in 1544, said that he had very often seen its young ("*earum pipiones saepissime vidi*"). Notwithstanding the protection afforded it by sundry acts of parliament, it has long since ceased from breeding in England. Sir T. Browne (ob. 1682) speaks of it as being found in the open parts of Norfolk in winter. In Ray's time it was only known as occurring at the same season in large flocks in the fens of Lincolnshire and Cambridgeshire; and though mention is made of cranes' eggs and young in the fen-laws passed at a court held at Revesby in 1780, this was most likely but the formal repetition of an older edict; for in 1768 Pennant wrote that after the strictest inquiry he found the inhabitants of those counties to be wholly unacquainted with the bird. The crane, however, no doubt then appeared in Britain, as it does now, at uncertain intervals and in unwonted places, having strayed from the migrating bands whose movements have been remarked from almost the earliest ages. Indeed, the crane's aerial journeys are of a very extended kind; and on its way from beyond the borders of the Tropic of Cancer to within the Arctic Circle, or on the return voyage, its flocks may be descried passing overhead at a marvellous height, or halting for rest and refreshment on the wide meadows that border some great river, while the seeming order with which its ranks are marshalled during flight has long attracted attention. The crane takes up its winter quarters under the burning sun of Central Africa and India, but early in spring returns northward. Not a few examples reach the chill polar soils of Lapland and Siberia, but some tarry in the south of Europe and breed in Spain, and, it is supposed, in Turkey. The greater number, however, occupy the intermediate zone and pass the summer in Russia, north Germany, and Scandinavia. Soon after their arrival in these countries the flocks break up into pairs, whose nuptial ceremonies are accompanied by loud and frequent trumpetings, and the respective breeding-places of each are chosen.

The nest is formed with little art on the ground in large open marshes, where the herbage is not very high—a tolerably dry spot being selected and used apparently year after year. Here the eggs, which are of a rich brown colour with dark spots, and always two in number, are laid. The young are able to run soon after they are hatched, and are at first clothed with tawny down. In the course of the summer they assume nearly the same grey plumage that their parents wear, except that the elongated plumes, which in the adults form a graceful covering of the hinder parts of the body, are comparatively undeveloped, and the clear black, white and red (the last being due to a patch of papillose skin of that colour) of the head and neck are as yet indistinct. During this time they keep in the marshes, but as autumn approaches the different families unite by the rivers and lakes, and ultimately form the enormous bands which after much more trumpeting set out on their southward journey.

The crane's power of uttering its sonorous and peculiar trumpet-like notes is commonly ascribed to the formation of its trachea, which on quitting the lower end of the neck passes backward between the branches of the furcula and is received into a hollow space formed by the bony walls of the carina or keel of the sternum. Herein it makes three turns, and then runs upwards and backwards to the lungs. The apparatus on the whole much resembles that found in the whooping swans (*Cygnus musicus*, *C. buccinator* and others), though differing in some not unimportant details; but at the same time somewhat similar convolutions of the trachea occur in other birds which do not possess, so far as is known, the faculty of trumpeting. The crane emits its notes both during flight and while on the ground. In the latter case the neck and bill are uplifted and the mouth kept open during the utterance of the blast, which may be often heard from birds in confinement, especially at the beginning of the year.

As usually happens in similar cases, the name of the once familiar British species is now used in a general sense, and applied to all others which are

allied to it. Though by former systematists placed near or even among the herons, there is no doubt that the cranes have only a superficial resemblance and no real affinity to the *Ardeidae*. In fact the *Gruidae* form a somewhat isolated group. Huxley included them together with the *Rallidae* in his *Geranomorphae*; but a more extended view of their various characters would probably assign them rather as relatives of the Bustards—not that it must be thought that the two families have not been for a very long time distinct. *Grus*, indeed, is a very ancient form, its remains appearing in the Miocene of France and Greece, as well as in the Pliocene and Post-pliocene of North America. In France, too, during the "Reindeer Period" there existed a huge species—the *G. primigenia* of Alphonse Milne-Edwards—which has doubtless been long extinct. At the present time cranes inhabit all the great zoogeographical regions of the earth, except the Neotropical, and some sixteen or seventeen species are discriminated. In Europe, besides the *G. communis* already mentioned, the Numidian or demoiselle-crane (*G. virgo*) is distinguished from every other by its long white ear-tufts. This bird is also widely distributed throughout Asia and Africa, and is said to have occurred in Orkney as a straggler. The eastern part of the Palaearctic Region is inhabited by four other species that do not frequent Europe (*G. antigone*, *G. japonensis*, *G. monachus*, and *G. leucogeranus*), of which the last is perhaps the finest of the family, with nearly the whole plumage of a snowy white. The Indian Region, besides being visited in winter by four of the species already named, has two that are peculiar to it (*G. torquata* and *G. indica*, both commonly confounded under the name of *G. antigone*). The Australian Region possesses a large species known to the colonists as the "native companion" (*G. australis*), while the Nearctic is tenanted by three species (*G. americana*, *G. canadensis* and *G. fraterculus*), to say nothing of the possibility of a fourth (*G. schlegeli*), a little-known and somewhat obscure bird, finding its habitat here. In the Ethiopian Region are two species (*G. paradisea* and *G. carunculata*), which do not occur out of Africa, as well as three others forming the group known as "crowned cranes"—differing much from other members of the family, and

justifiably placed in a separate genus, *Balearica*. One of these (*B. pavonina*) inhabits northern and western Africa, while another (*B. regulorum*) is confined to the eastern and southern parts of that continent. The third (*B. ceciliae*), from the White Nile, has been described by Dr P. Chalmers Mitchell (*P.Z.S.*, 1904).

With regard to the literature of this species, a paper "On the Breeding of the Crane in Lapland" (*Ibis*, 1859, p. 191), by John Wolley, is one of the most pleasing contributions to natural history ever written, and an admirably succinct account of all the different species was communicated by Blyth to *The Field* in 1873 (vol. xl. p. 631, vol. xli. pp. 7, 61, 136, 189, 248, 384, 408, 418). A beautiful picture representing a flock of cranes resting by the Rhine during one of their annual migrations is to be found in Wolf's *Zoological Sketches*.

(A. N.)

CRANES (so called from the resemblance to the long neck of the bird, cf. Gr. γέρανος, Fr. *grue*), machines by means of which heavy bodies may be lifted, and also displaced horizontally, within certain defined limits. Strictly speaking, the name alludes to the arm or jib from which the load to be moved is suspended, but it is now used in a wider sense to include the whole mechanism by which a load is raised vertically and moved horizontally. Machines used for lifting only are not called cranes, but winches, lifts or hoists, while the term elevator or conveyor is commonly given to appliances which continuously, not in separate loads, move materials like grain or coal in a vertical, horizontal or diagonal direction (see CONVEYORS). The use of cranes is of great antiquity, but it is only since the great industrial development of the 19th century, and the introduction of other motive powers

than hand labour, that the crane has acquired the important and indispensable position it now occupies. In all places where finished goods are handled, or manufactured goods are made, cranes of various forms are in universal use.

Classification.

Cranes may be divided into two main classes—revolving and non-revolving. In the first the load can be lifted vertically, and then moved round a central pivot, so as to be deposited at any convenient point within the range. The type of this class is the ordinary jib crane. In the second class there are, in addition to the lifting motion, two horizontal movements at right angles to one another. The type of this class is the overhead traveller. The two classes obviously represent respectively systems of polar and rectangular coordinates. Jib cranes can be subdivided into fixed cranes and portable cranes; in the former the central-post or pivot is firmly fixed in a permanent position, while in the latter the whole crane is mounted on wheels, so that it may be transported from place to place.

Motive powers.

The different kinds of motive power used to actuate cranes—manual, steam, hydraulic, electric—give a further classification. Hand cranes are extremely useful where the load is not excessive, and the quantities to be dealt with are not great; also where speed is not important, and first cost is an essential consideration. The net effective work of lifting that can be performed by a man turning a handle may be taken, for intermittent work, as being on an average about 5000 foot-lb per minute; this is equivalent to 1 ton lifted about 2¼ ft. per minute, so that four men can by a crane raise 1 ton 9 ft. in a minute or 9 tons 1 ft. per minute. It is at once evident that hand power is only suitable for cranes of moderate power, or in cases where heavy loads have to be lifted only very occasionally. This point is dwelt upon, because the speed limitations of the hand-crane are often overlooked by engineers. Steam is an extremely useful motive power for all cranes that are not worked off a central power station. The steam crane has the immense advantage of being completely self-

contained. It can be moved (by its own locomotive power, if desired) long distances without requiring any complicated means of conveying power to it; and it is rapid in work, fairly economical, and can be adapted to the most varying circumstances. Where, however, there are a number of cranes all belonging to the same installation, and these are placed so as to be conveniently worked from a central power station, and where the work is rapid, heavy and continuous, as is the case at large ports, docks and railway or other warehouses, experience has shown that it is best to produce the power in a generating station and distribute it to the cranes. Down to the closing decades of the 19th century hydraulic power was practically the only system available for working cranes from a power station. The hydraulic crane is rapid in action, very smooth and silent in working, easy to handle, and not excessive in cost or upkeep,—advantages which have secured its adoption in every part of the world. Electricity as a motive power for cranes is of more recent introduction. The electric transmission of energy can be performed with an efficiency not reached by any other method, and the electric motor readily adapts itself to cranes. When they are worked from a power station the great advantage is gained that the same plant which drives them can be used for many other purposes, such as working machine tools and supplying current for lighting. For dock-side jib cranes the use of electric power is making rapid strides. For overhead travellers in workshops, and for most of the cranes which fall into our second class, electricity as a motive power has already displaced nearly every other method. Cranes driven by shafting, or by mechanical power, have been largely superseded by electric cranes, principally on account of the much greater economy of transmission. For many years the best workshop travellers were those driven by quick running ropes; these performed admirable service, but they have given place to the more modern electric traveller.

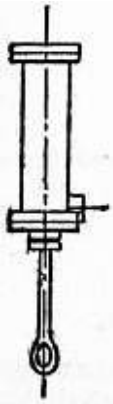


FIG. 1.

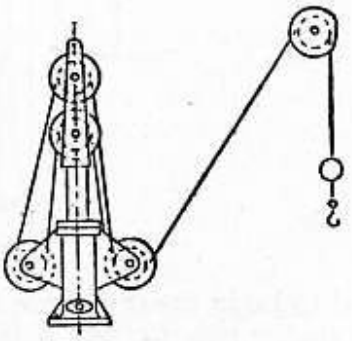


FIG. 2.

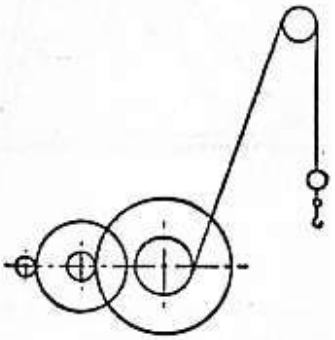


FIG. 3.

Lifting mechanisms.

The principal motion in a crane is naturally the hoisting or lifting motion. This is effected by slinging the load to an eye or hook, and elevating the hook vertically. There are three typical methods: (1) A direct pull may be applied to the hook, either by screws, or by a cylinder fitted with piston and rod and actuated by direct hydraulic or other pressure, as shown diagrammatically in fig. 1. These methods are used in exceptional cases, but present the obvious difficulty of giving a very short range of lift. (2) The hook may be attached to a rope or chain, and the pulling cylinder connected with a system of pulleys around which the rope is led; by these means the lift can be very largely increased. Various arrangements are adopted; the one indicated in fig. 2 gives a lift of load four times the stroke of the cylinder. This second method forms the basis of the lifting gear in all hydraulic cranes. (3) The lifting rope or chain is led over pulley to a lifting barrel, upon which it is coiled as the barrel is rotated by the source of power (fig. 3). Sometimes, especially in the case of overhead travelling cranes for very heavy loads, the chain is a special pitch chain, formed of flat links pinned together, and the barrel is reduced to a wheel provided with teeth, or “sprockets,” which engage in the links. In this case the chain is not coiled, but simply passes over the lifting wheel, the free end hanging loose. All the methods in this third category

require a rotating lifting or barrel shaft, and this is the important difference between them and the hydraulic cranes mentioned above. Cranes fitted with rotating hydraulic engines may be considered as coming under the third category.

When the loads are heavy the above mechanisms are supplemented by systems of purchase blocks suspended from the jib or the traveller crab; and in barrel cranes trains of rotating gearing are interposed between the motor, or manual handle, and the barrel (fig. 3).

Brakes.

When a load is lifted, work has to be done in overcoming the action of gravity and the friction of the mechanism; when it is lowered, energy is given out. To control the speed and absorb this energy, brakes have to be provided. The hydraulic crane has a great advantage in possessing an almost ideal brake, for by simply throttling the exhaust from the lifting cylinder the speed of descent can be regulated within very wide limits and with perfect safety. Barrel cranes are usually fitted with band brakes, consisting of a brake rim with a friction band placed round it, the band being tightened as required. In ordinary cases conduction and convection suffice to dissipate the heat generated by the brake, but when a great deal of lowering has to be rapidly performed, or heavy loads have to be lowered to a great depth, special arrangements have to be provided. An excellent brake for very large cranes is Matthew's hydraulic brake, in which water is passed from end to end of cylinders fitted with reciprocating pistons, cooling jackets being provided. In electric cranes a useful method is to arrange the connexions so that the lifting motor acts as a dynamo, and, driven by the energy of the falling load, generates a current which is converted into heat by being passed through resistances. That the quantity of heat to be got rid of may become very considerable is seen when it is considered that the energy of a load of 60 tons descending through 50 ft. is equivalent to an amount of heat sufficient to

raise nearly 6 gallons of water from 60° F. to boiling point. Crane brakes are usually under the direct control of the driver, and they are generally arranged in one of two ways. In the first, the pressure is applied by a handle or treadle, and is removed by a spring or weight; this is called “braking on.” In the second, or “braking off” method, the brake is automatically applied by a spring or weight, and is released either mechanically or, in the case of electric cranes, by the pull of a solenoid or magnet which is energized by the current passing through the motor. When the motor starts the brake is released; when it stops, or the current ceases, the brake goes on. The first method is in general use for steam cranes; it allows for a far greater range of power in the brake, but is not automatic, as is the second.

In free-barrel cranes the lifting barrel is connected to the revolving shaft by a powerful friction clutch; this, when interlocked with the brake and controller, renders electric cranes exceedingly rapid in working, as the barrel can be detached and lowering performed at a very high speed, without waiting for the lifting motor to come to rest in order to be reversed. This method of working is very suitable for electric dock-side cranes of capacities up to about 5 or 7 tons, and for overhead travellers where the height of lift is moderate. Where high speed lowering is not required it is usual to employ a reversing motor and keep it always in gear.

In steam cranes it is usual to work all the motions from one double cylinder engine. In order to enable two or more motions to be worked together, or independently as required, reversing friction cones are used for the subsidiary motions, especially the slewing motion. With the exception of a few special cranes in which friction wheels are employed, it is universally the practice, in steam cranes, to connect the engine shaft with the barrel shaft by spur toothed gearing, the gear being connected or disconnected by sliding pinions. In electric cranes the motor is connected

to the barrel, either in a similar manner by spur gear or by worm gear. The toothed wheels give a slightly better efficiency, but the worm gear is somewhat smoother in its action and entirely silent; the noise of gearing can, however, be considerably reduced by careful machining of the teeth, as is now always done, and also by the use of pinions made of rawhide leather or other non-resonant material. When quick-running metal pinions are used they are arranged to run in closed oil-baths. Leather pinions must be protected from rats, which eat them freely. Worm wheel gearing is of very high efficiency if made very quick in pitch, with properly formed teeth perfectly lubricated, and with the end thrust of the worm taken on ball bearings. Much attention has been paid to the improvement of the mechanical details of the lifting and other motions of cranes, and in important installations the gearing is now usually made of cast steel. In revolving cranes ease of slewing can be greatly increased by the use of a live ring of conical rollers.

Electric motors for barrel cranes are not essentially different from those used for other purposes, but in proportioning the sizes the intermittent output has to be taken into consideration. This fact has led to the introduction of the "crane rated" motor, with a given "load factor." This latter gives the ratio of the length of the working periods to the whole time; *e.g.* a motor rated for a quarter load factor means that the motor is capable of exerting its full normal horse-power for three minutes out of every twelve, the pause being nine minutes, or one minute out of every four, the pause being three minutes. The actual load factor to be chosen depends on the nature of the work and the kind of crane. A dock-side crane unloading cargo with high lifts following one another in rapid succession will require a higher load factor than a workshop traveller with a very short lift and only a very occasional maximum load; and a traveller with a very long longitudinal travel will require a higher load factor for the travelling motor than for the lifting motor. In practice, the load factor for

Power required.

electric crane motors varies from ⅓ to ⅙. In steam cranes much the same principle obtains in proportioning the boiler; *e.g.* the engines of a 10-ton steam crane have cylinders capable of indicating about 60 horse-power when working at full speed, but it is found that, in consequence of the intermittent working, sufficient steam can be supplied with a boiler whose heating surface is only ⅓ to ¼ of that necessary for the above power, when developed continuously by a stationary engine.

In well-designed, quick-running cranes the mechanical efficiency of the lifting gear may be taken as about 85%; a good electric jib crane will give an efficiency of 72%, *i.e.* when actually lifting at full speed the mechanical work of lifting represents about 72% of the electric energy put into the lifting motor. A very convenient rule is to allow one brake horse-power of motor for every 10 foot-tons of work done at the hook: this is equivalent to an efficiency of 66⅔%, and is well on the safe side.

The motor in most common use for electric cranes is the series wound, continuous current motor, which has many advantages. It has a very large starting torque, which enables it to overcome the inertia of getting the load into motion, and it lifts heavy loads at a slower speed and lighter loads at a quicker one, behaving, under the action of the controller in a somewhat similar manner to that in which the cylinders of the steam crane respond to the action of the stop-valve. Three-phase motors are also much used for crane-driving, and it is probable that improvements in single and two-phase motors will eventually largely increase their use for this class of work.

Tests of the comparative efficiencies of hydraulic and electric cranes tend to show that, although they do not vary to any very considerable extent with full load, yet the efficiency of the hydraulic crane falls away very much more rapidly than that of the electric crane when working on smaller loads. This drawback can be corrected to a slight extent by

furnishing the hydraulic crane with more than one cylinder, and thus compounding it, but the arrangement does not give the same economical range of load as in an electric crane. In first cost the hydraulic crane has the advantage, but the power mains are much less expensive and more convenient to arrange in the electric crane.

Speed.

The limit of speed of lift of hand cranes has already been mentioned; for steam jib cranes average practice is represented by the formula $V = 30 + 200/T$, where V is the speed of lift in feet per minute, and T the load in tons. Where electric or hydraulic cranes are worked from a central station the speed is greater, and may be roughly represented by $V = 5 + 300/T$; *e.g.* a 30-cwt. crane would lift with a speed of about 200 ft. per minute, and 100-ton crane with a speed of about 8 ft. per minute, but these speeds vary with local circumstances. The lifting speed of electric travellers is generally less, because the lift is generally much shorter, and may in ordinary cases be taken as $V = 3 + 85/T$. The cross-traversing speed of travellers varies from 60 to 120 ft. per minute, and the longitudinal from 100 to 300 ft. per minute. The speed of these two motions depends much on the length of the span and of the longitudinal run, and on the nature of the work to be done; in certain cases, *e.g.* foundries, it is desirable to be able to lift, on occasions, at an extremely slow speed. In addition to the brakes on the lifting gear of cranes it is found necessary, especially in quick-running electric cranes, to provide a brake on the subsidiary motions, and also devices to stop the motor at the end of the lift or travel, so as to prevent over-running.

There are many other important points of crane construction too numerous to mention here, but it may be said generally that the advent of electricity has tended to increase speeds, and in consequence great attention is paid to all details that reduce friction and wear, such as roller and ball bearings and improved methods of lubrication; and, as in all

other quick-running machinery, great stress has to be laid on accuracy of workmanship. The machinery, thus being of a higher class, requires more protection, and cranes that work in the open are now fitted with elaborate crane-houses or cabins, furnished with weather-tight doors and windows, and more care is taken to provide proper platforms, hand-rails and ladders of access, and also guards for the revolving parts of gearing.

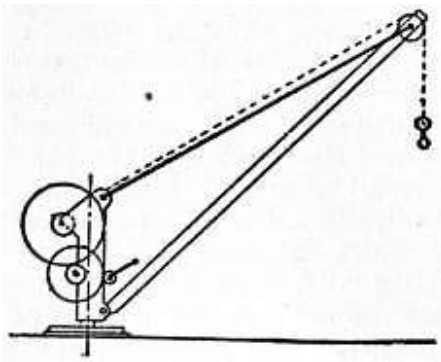


FIG. 4.

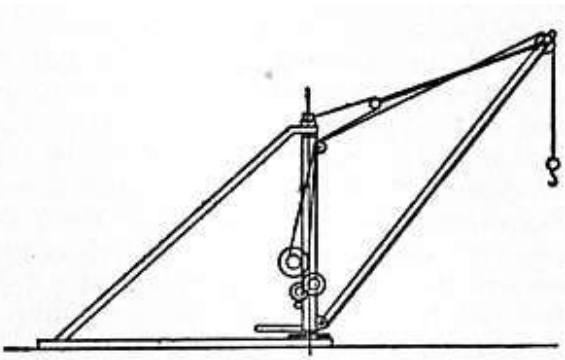


FIG. 5.

Typical Forms of Cranes.—Fig. 4 is a diagram of a fixed hand revolving jib crane, of moderate size, as used in railway goods yards and similar places. It consists of a heavy base, which is securely bolted to the foundation, and which carries the strong crane-post, or pillar, around which the crane revolves. The revolving part is made with two side frames of cast iron or steel plates, and to these the lifting gear is attached. The load is suspended from the crane jib; this jib is attached at the lower end to the side frames, and the upper end is supported by tie-rods, connected to the framework, the whole revolving together. This simple form of crane thus embodies the essential elements of foundation, post, framework, jib, tie-rods and gearing.

Fixed Cranes.

Fig. 5 shows another type of fixed crane, known as a derrick crane. Here the crane-post is extended into a long mast and is furnished with

pivots at the top and bottom; the mast is supported by two “back ties,” and these are connected to the socket of the bottom pivot by the “sleepers.” This is a very good and comparatively cheap form of crane, where a long and variable radius is required, but it cannot slew through a complete circle. Derrick cranes are made of all powers, from the timber 1-ton hand derrick to the steel 150-ton derrick used in shipbuilding yards. The derrick crane introduces a problem for which many solutions have been sought, that of preventing the load from being lifted or lowered when the jib is pivoted up or down to alter the radius. To keep the load level, there are various devices for automatically coupling the jib-raising and the load-lowering motions.

Somewhat allied to the derrick are the sheer legs (fig. 6). Here the place of the jib is taken by two inclined legs joined together at the top and pivoted at the bottom; a third back-leg is connected at the top to the other two, and at the bottom is coupled to a nut which runs on a long horizontal screw. This horizontal movement of the lower end of the back leg allows the whole arrangement to assume the position shown in fig. 7, so that a load can be taken out of a vessel and deposited on a quay wall. The same effect can be produced by shortening the back leg by a screw placed in the direction of its length. Sheer legs are generally built in very large sizes, and their use is practically confined to marine work.

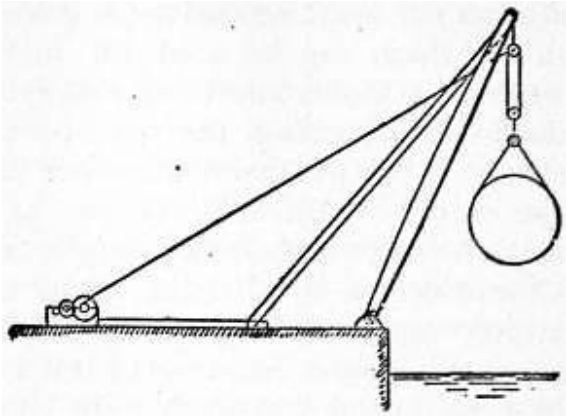


FIG. 6.

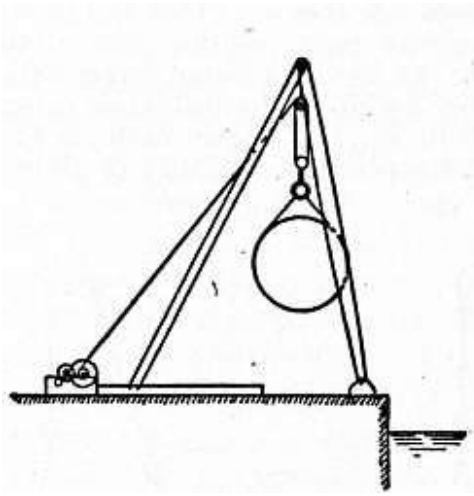


FIG. 7.

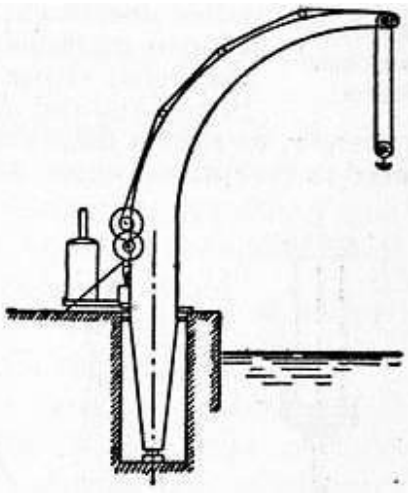


FIG. 8.

Another type of fixed crane is the “Fairbairn” crane, shown in fig. 8. Here the jib, superstructure and post are all united in one piece, which revolves in a foundation well, being supported at the bottom by a toe-step and near the ground level by horizontal rollers. This type of crane used to be in great favour, in consequence of the great clearance it gives under the jib, but it is expensive and requires very heavy foundations.

The so-called “hammer-headed” crane (fig. 9) consists of a steel braced tower, on which revolves a large horizontal double cantilever; the forward part of this cantilever or jib carries the lifting crab, and the jib is extended backwards in order to form a support for the machinery and counter-balance. Besides the motions of lifting and revolving, there is provided a so-called “racking” motion, by which the lifting crab, with the load suspended, can be moved in and out along the jib without altering the level of the load. Such horizontal movement of the load is a marked feature of later crane design; it first became prominent in the so-called “Titan” cranes, mentioned below (fig. 14). Hammer-headed cranes are generally constructed in large sizes, up to 200 tons.

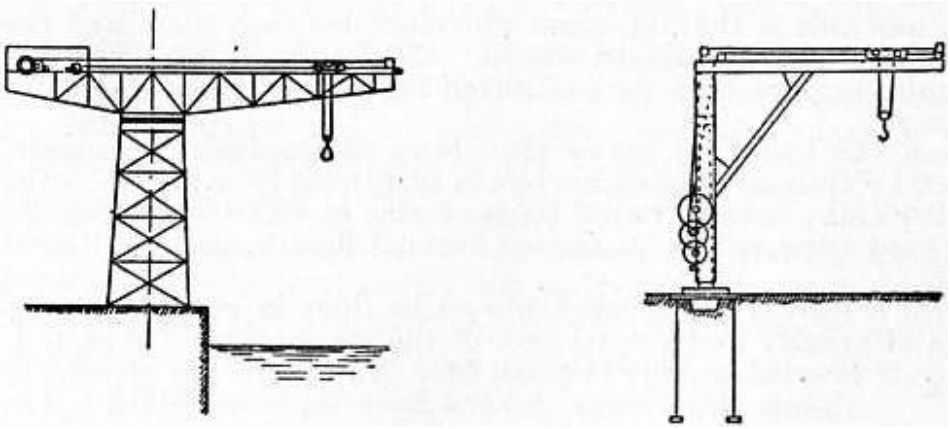


FIG. 9.

FIG. 10.

Another type of fixed revolving crane is the foundry or smithy crane (fig. 10). It has the horizontal racking motion mentioned above, and revolves either on upper and lower pivots supported by the structure of the workshop, or on a fixed pillar secured to a heavy foundation. The type is often used in foundries, or to serve heavy hammers in a smithy, whence the name.

Portable cranes.

Portable cranes are of many kinds. Obviously, nearly every kind of crane can be made portable by mounting it on a carriage, fitted with wheels; it is even not unusual to make the Scottish derrick portable by using three trucks, one under the mast, and the others under the two back legs.

Fig. 11 represents a portable steam jib crane; it contains the same elements as the fixed crane (fig. 4), but the foundation bed is mounted on a truck which is carried on railway or road wheels. With portable cranes means must be provided to ensure the requisite stability against overturning; this is done by weighting the tail of the revolving part with heavy weights, and in steam cranes the boiler is so placed as also to form part of the counterbalance. Where the rail-gauge is narrow and great weight is not desired, blocking girders are provided across the under side

of the truck; these are arranged so that, by means of wedges or screws, they can be made to increase the base. In connexion with the stability of portable cranes, it may be mentioned that accidents more often arise from overturning backwards than forwards. In the latter case the overturning tendency begins as soon as the load leaves the ground, but ceases as soon as the load again touches the ground and thus relieves the crane of the extra weight, whereas overturning backwards is caused either by the reaction of a chain breaking or by excessive counterweight. When portable cranes are fitted with springs and axle-boxes, drawgear and buffers, so that they can be coupled to an ordinary railway train, they are called “breakdown” or “wrecking” cranes.

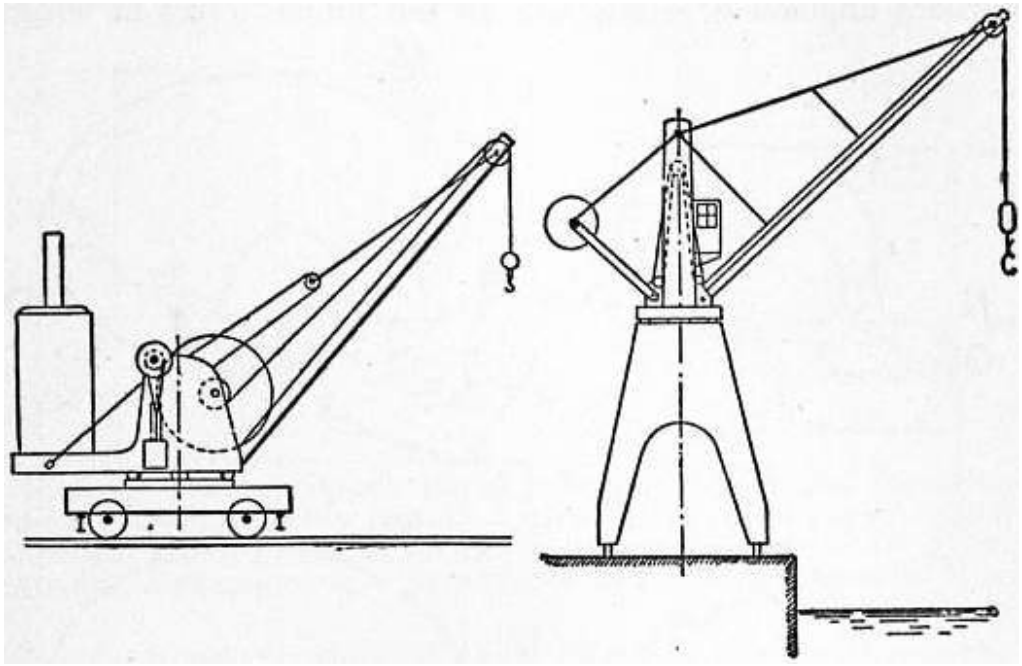


FIG. 11.

FIG. 12.

Dock-side jib cranes for working general cargo are almost always made portable, in order to enable them to be placed in correct position in regard to the hatchways of the vessels which they serve. Fig. 12 shows an ordinary hydraulic dock-side jib crane. This type is usually fitted with a

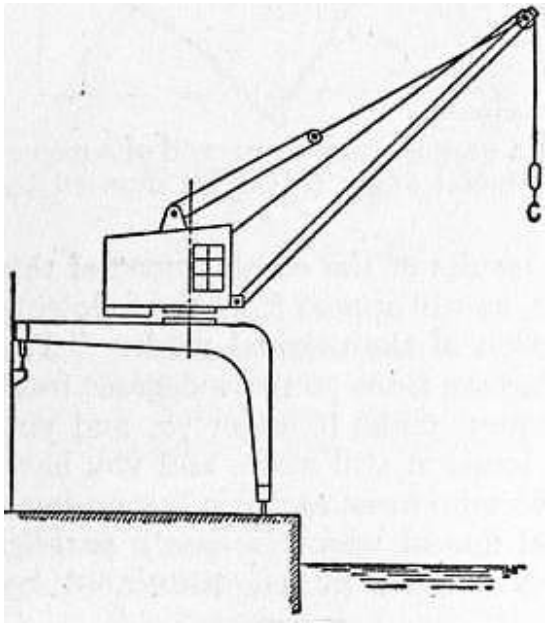


FIG. 13.

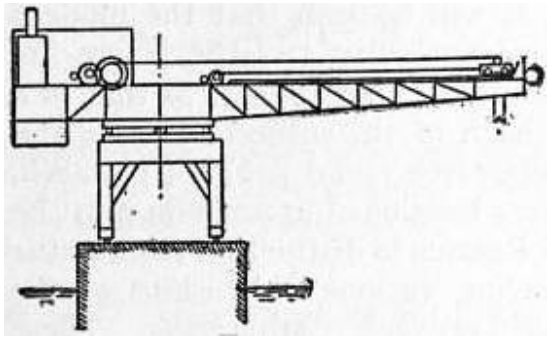


FIG. 14.

very high jib, so as to lift goods in and out of high-sided vessels. The hydraulic lifting cylinders are placed inside the revolving steel mast or post, and the cabin for the driver is arranged high up in the front of the post, so as to give a good view of the work. The pressure is conveyed to the crane by means of jointed "walking" pipes, or flexible hose, connected to hydrants placed at regular intervals along the quay. It is often very desirable to have the quay space as little obstructed by the cranes as possible, so as not to interfere with railway traffic; this has led to the introduction of cranes mounted on high trucks or gantries, sometimes also called "portal" cranes. Where warehouses or station buildings run parallel to the quay line, the high truck is often extended, so as to span the whole quay; on one side the "long leg" runs on a rail at the quay edge, and on the other the "short leg" runs on a runway placed on the building. Cranes of this type are called "half-portal" cranes. Fig. 13 shows an electric crane of this class. They give the minimum of interference with quay space and have rapidly come into favour. Where the face of the warehouse is sufficiently close to the water to permit of

the crane rope plumbing the hatches without requiring a jib of excessive radius, it is a very convenient plan to place the whole crane on the warehouse roof.

A special form of jib crane, designed to meet a particular purpose, is the "Titan" (fig. 14) largely used in the construction of piers and breakwaters. It contains all the essential elements of the hammer-headed crane, of which it may be considered to be the parent; in fact, the only essential difference is that the Titan is portable and the hammer-head crane fixed. The Titan was the first type of large portable crane in which full use was made of a truly horizontal movement of the load; for the purpose for which the type is designed, viz. setting concrete blocks in courses, this motion is almost a necessity.

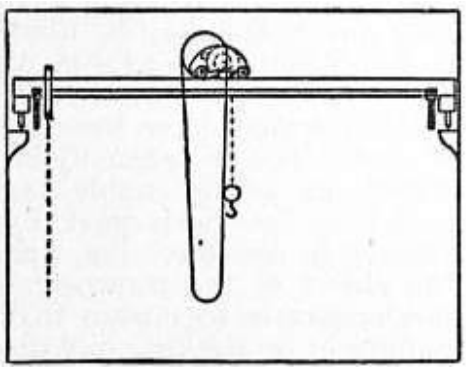


FIG. 15.

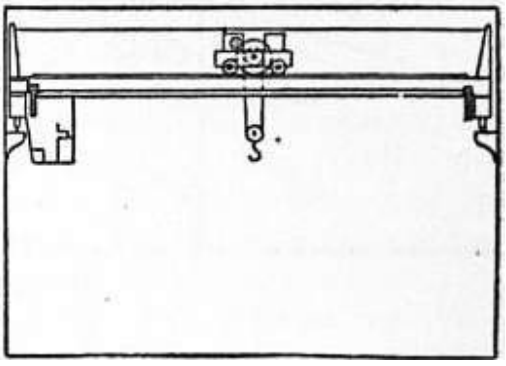


FIG. 16.

As types of non-revolving cranes, fig. 15 shows an overhead traveller worked by hand, and fig. 16 a somewhat similar machine worked by electric power. The principal component parts of a traveller are the main cross girders forming the *bridge*, the two *end carriages* on which the bridge rests, the *running wheels* which enable the end carriages to travel on the longitudinal gantry girders or *runway*, and the *crab* or *jenny*, which carries the hoisting mechanism, and moves across the span

Non-revolving cranes.

on rails placed on the bridge girders. There are numerous and important variations of these two types, but the above contain the elements out of which most cranes of the class are built.

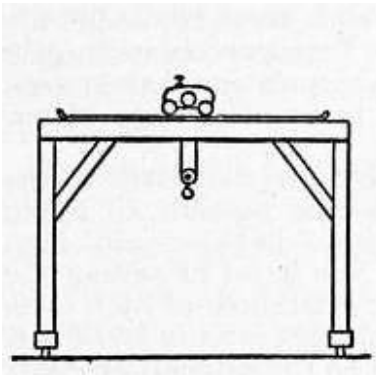


FIG. 17.

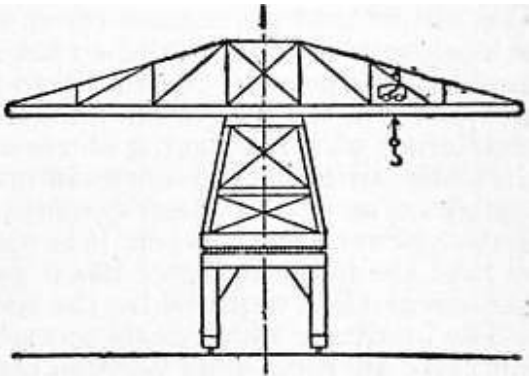


FIG. 18.

One variation is illustrated in fig. 17, and is called a "Goliath" or "Wellington." It is practically a traveller mounted on high legs, so as to permit of its being travelled on rails placed on the ground level, instead of on an elevated gantry. Of other variations and combinations of types, fig. 18 shows a modern design of crane intended to command the maximum of yard space, and having some of the characteristics both of the Goliath and of the revolving jib crane, and fig. 19 depicts

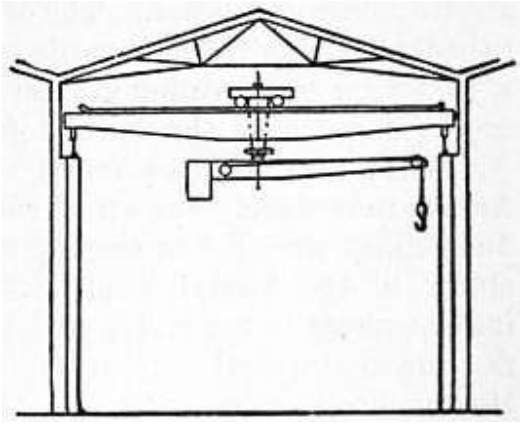


FIG. 19.

a combination of a traveller and a hanging jib crane.

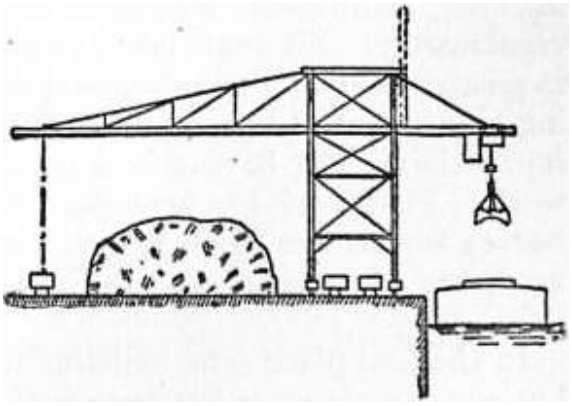


FIG. 20.

When the cross traverse motion of a traveller crab is suppressed, and the longitudinal travelling motion is increased in importance we come to a type of crane, the use of which is rapidly increasing; it goes by the name of "transporter." Transporters can only move the load to any point on a vertical surface (generally a plane surface); they have a lifting motion and a movement of translation. They are of two kinds: (1) those in which the motive power and lifting gear are self-contained on the crab; and (2) those in which the motive power is placed in a fixed position. A transporter of the first class is shown in fig. 20. From the lower flange of a suspended runway, made of a single I section, run wheels, from the axles of which the transporter is suspended. The latter consists of a framework carrying the hoisting barrel, with its driving motor and gearing, and a travelling motor, which is geared to the running wheels in such a manner as to be able to propel the whole machine; a seat is provided for the driver who manipulates the controllers. A transporter of this kind, when fitted with a grab, is a very efficient machine for taking coal from barges and depositing it in a coal store.

Transporters.

In the other class of transporter the load is not usually moved through such long distances. It consists essentially of a jib made of single I-sections, and supported by tie-rods (fig. 21), the load to be lifted being suspended from a small travelling carriage which runs on the lower flange. The lifting gear is located in any convenient fixed position. In

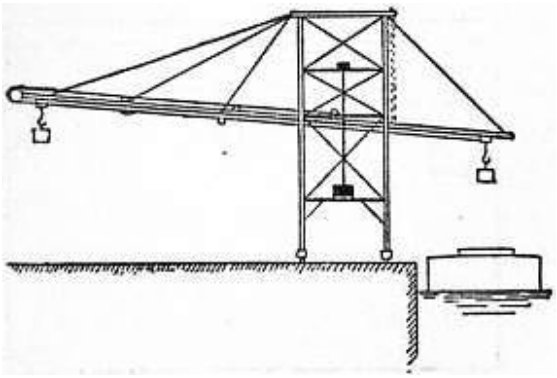


FIG. 21.

order that only one motor may be used, and also that the load may be lifted by a single part of rope, various devices have been invented. The jib is usually inclined, so as to enable the travel to be performed by gravity in one direction, and the object of the transporter mechanism is to ensure that pulling in or slacking out the lifting rope shall perform the cycle of operations in the following order:—Supposing the load is ready to be lifted out of a vessel on to a quay, the pull of the lifting rope raises the load, the travelling jenny being meanwhile locked in position. On arriving at a certain height the lift ceases and the jenny is released, and by the continued pull of the rope, it runs up the jib; on arriving at an adjustable stop, the jenny is again locked, and the load can be lowered out; the hook can then be raised, when the jenny is automatically unlocked, and on paying out the rope the jenny gravitates to its first position, when the load is lowered and the cycle repeated. The jibs of transporters are often made to slide forward, or lift up, so as to be out of the way when not in use. Transporters are largely used for dealing with general cargo between vessels and warehouses, and also for coaling vessels; they have a great advantage in not interfering with the rigging of vessels.

Nearly all recent advances in crane design are the result of the introduction of the electric motor. It is now possible to apply motive power exactly where it is wanted, and to do so economically, so that the crane designer has a perfectly free hand in adding the various motions required by the special circumstances of each case.

The literature which deals specially with cranes is not a large one, but there are some good German text-books on the subject, amongst which may be mentioned *Die Hebezeuge* by Ernst (4th ed., Berlin, 1903), and *Cranes*, by Anton Böttcher, translated with additions by A. Tolhausen (London, 1908).

(W. P.*)

CRANIOMETRY. The application of precise methods of measurement marks a definite phase in the development of most branches of modern science, and thus craniometry, a comprehensive expression for all methods of measuring the skull (cranium), provides a striking landmark in the progress of anthropological studies. The origin of craniometry appears to be twofold. Certain artists made measurements of heads and skulls with a view to attaining greater accuracy in their representation of those parts of the human frame. Bernard de Palissy and A. Dürer may be mentioned as pioneers in such researches. Again, it is clearly shown in the literature of this subject, that anatomists were led to employ methods of measurement in their study of the human skull. The determining cause of this improvement in method is curious, for it appeared at the end of a famous anatomical controversy of the later middle ages, namely the dispute as to whether the Galenic anatomy was based on the study of the human body or upon those of apes. In the description of the dissection of a chimpanzee (in 1680) Tyson explains that the measurements he made of the skull of that animal were devised with a view to exhibiting the difference between this and the human skull.

The artists did not carry their researches very far. The anatomists on the contrary continued to make measurements, and in 1764 Daubenton published a noteworthy contribution to craniometry. Six years later, Pieter Camper,

distinguished both as an artist and as an anatomist, published some lectures containing an account of his craniometrical methods, and these may be fairly claimed as having laid the foundation of all subsequent work. That work has been described above as anthropological, but as the studies thus defined are very varied in extent, it is necessary to consider the subdivisions into which they naturally fall.

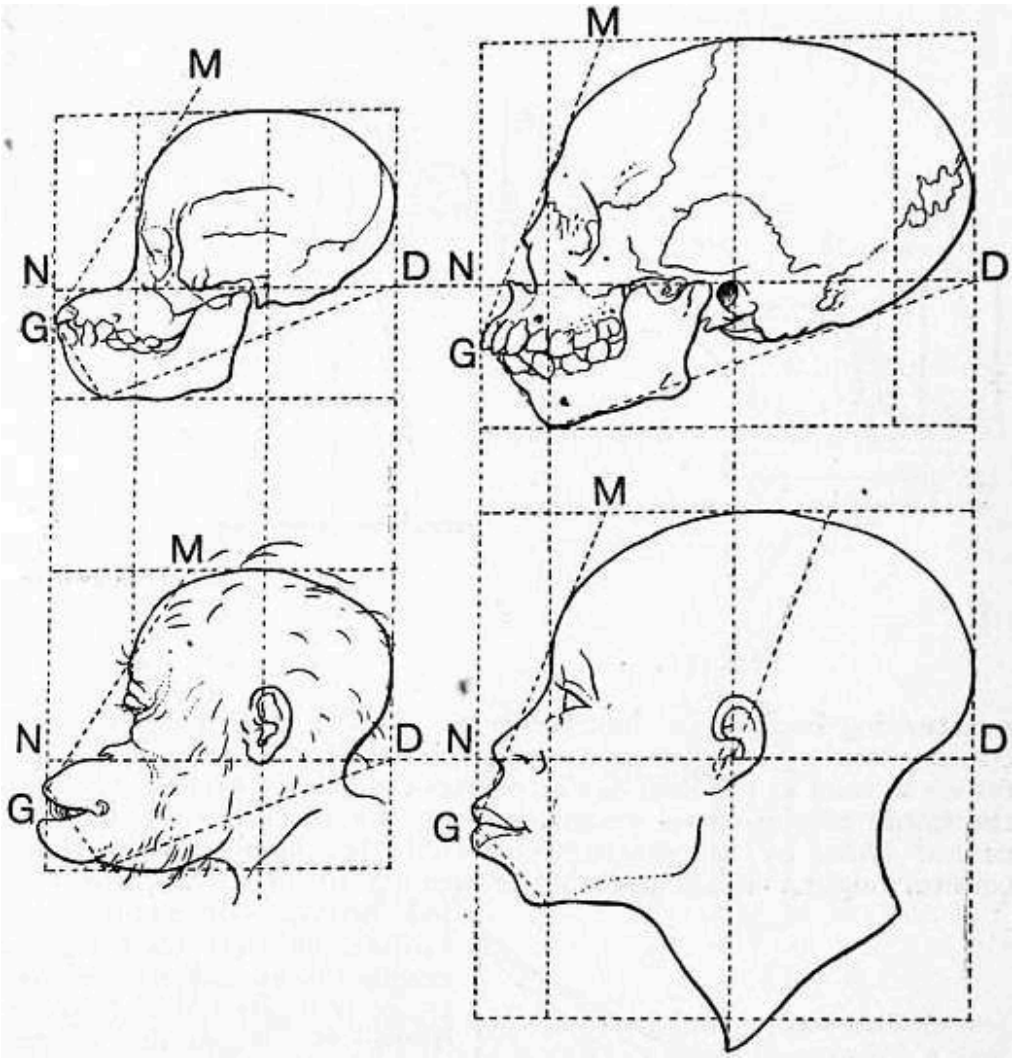


FIG. 1.—The Skull and head of a young orang-utan, and of a negro, showing the lines including the facial angle (MGND) devised by Pieter Camper.

In the first place (and omitting further reference to the contributions of artists), it has been explained that the measurements were first made with a

view to elucidating the comparison of the skulls of men with those of other animals. This wide comparison constitutes the first subdivision of craniometric studies. And craniometric methods have rendered the results of comparison much more clear and comprehensible than was formerly the case. It is further remarkable that among the first measurements employed angular determinations occur, and indeed the name of Camper is chiefly perpetuated in anthropological literature by the "facial angle" invented by that artist-anatomist (fig. 1). It appears impossible to improve on the simple terms in which Camper describes the general results of the employment of this angle for comparative purposes, as will appear from the following brief extract from the translation of the original work: "The two extremities of the facial line are from 70 to 80 degrees from the negro to the Grecian antique: make it under 70, and you describe an ourang or an ape: lessen it still more, and you have the head of a dog. Increase the minimum, and you form a fowl, a snipe for example, the facial line of which is nearly parallel with the horizon." (Camper's Works, p. 42, translated by Cogan, 1821.)

In the 19th century the names of notable contributors to the literature of craniometry quickly increase in number; while it is impossible to analyse each contribution, or even record a complete list of the names of the authors, it must be added that for the purposes of far-reaching comparisons of the lower animals with mankind, craniometric methods were used by P. P. Broca in France and by T. H. Huxley (figs. 2 and 3) in England, with such genius and success as have not yet been surpassed.

The second division of craniometric studies includes those in which the skulls of the higher and lower races of mankind are compared. And in this domain, the advent of accurate numerical methods of recording observations brought about great advances. In describing the facial angle, it will be seen that the modern European, the Greek of classical antiquity and the Negro are compared. Thus it is that Camper's name appears as that of a pioneer in this second main division of the subject. Broca and Huxley cultivated similar

comparative racial fields of research, but to these names that of Anders Retzius of Stockholm must be added here. The chief claim of Retzius to distinction rests on the merits of his system of comparing various dimensions of the skull, and of a classification based on such comparisons. These indices will be further defined below. It is convenient to mention here that the first aim of all these investigators was to obtain from the skull reliable data having reference to the conformation or size of the brain once contained within it. Only in later days did the tendency to overlook this, the fundamental aim and end of craniometry, make its appearance; such nevertheless was the case, much to the detriment of craniometric science, which for a time seems to have become purely empirical.

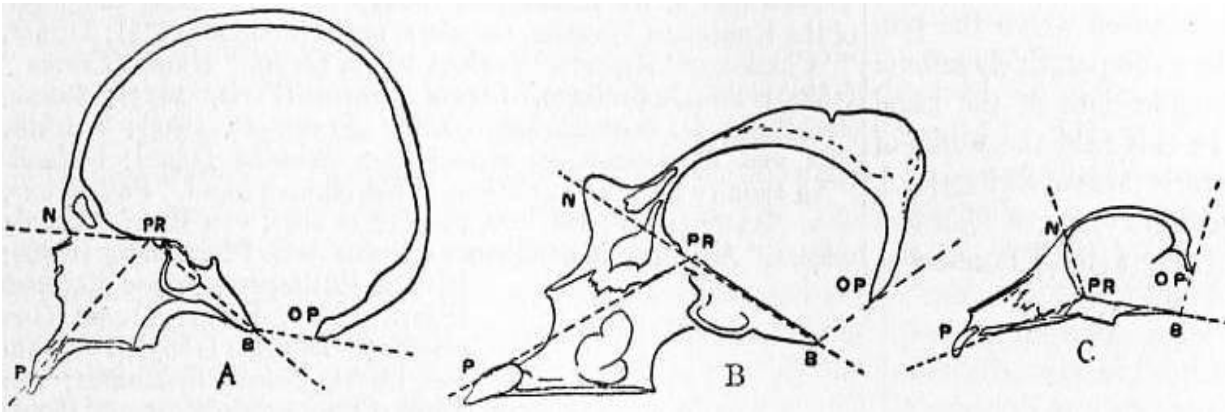


FIG. 2.—The spheno-ethmoidal, spheno-maxillary and foramino-basal angles are shown in the crania of:—A, a New Britain native (male); B, a gorilla (male) C, a dog. *N.Pr.B*, Spheno-ethmoidal angle; *P.Pr.B*, Spheno-maxillary angle; *Pr.B.Op*, Foramino-basal angle. The spheno-ethmoidal and spheno-maxillary angles were first employed by Huxley.

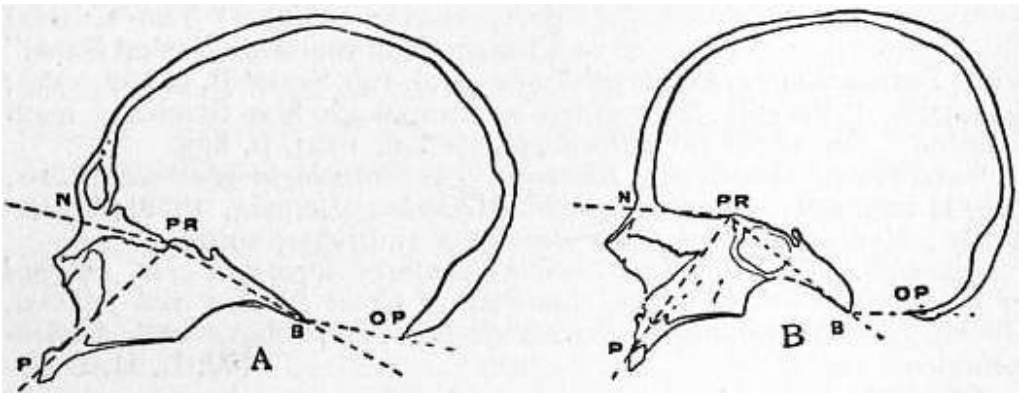
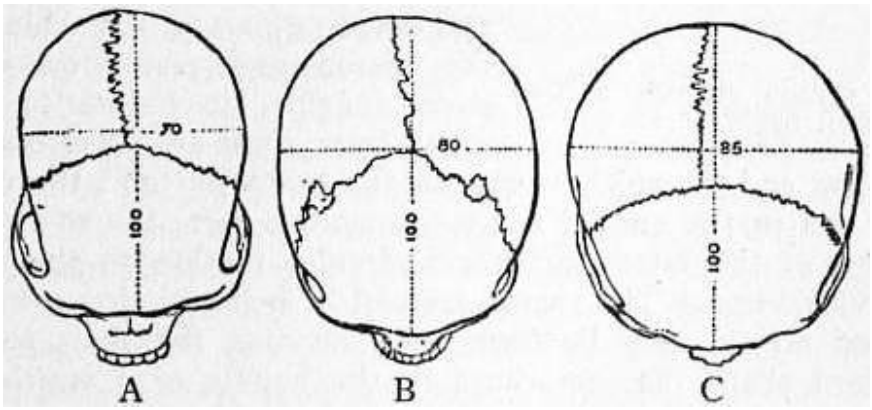


FIG. 3.—The spheno-ethmoidal, spheno-maxillary and foramino-basal angles are shown in the crania of:—A, a New Guinea native (male); B, a European woman. *N.Pr.B*, Spheno-ethmoidal angle; *P.Pr.B*, Spheno-maxillary angle; *Pr.B.Op*, Foramina-basal angle.

The third subdivision of craniometric researches is one in which the field of comparison is still further narrowed. For herein the various sub-racial types such as the dark and fair Europeans are brought together for the purposes of comparison or contrast. But although the range of research is thus narrowed and restricted, the guiding principles and the methods remain unchanged. In this department of craniometry, Anders Retzius has gained the foremost place among the pioneers of research. Retzius's name is, as already mentioned, associated not with any particular angle or angular measurement, but rather with a method of expressing as a formula two cranial dimensions which have been measured and which are to be compared. Thus for instance one skull may be so proportioned that its greatest width measures 75% of its greatest length (*i.e.* its width is to its length as three to four).



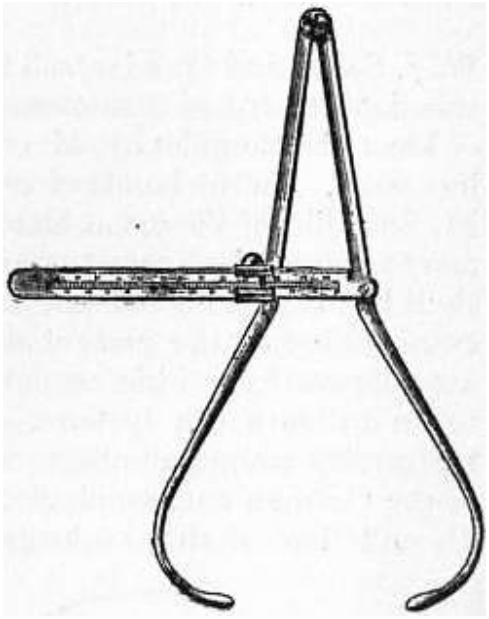
From Tylor's *Anthropology*, by permission of Macmillan & Co., Ltd.

FIG. 4.—Top view of skulls. (A) Negro, index 70, dolichocephalic; (B) European, index 80, mesaticephalic; (C) Samoyed, index 85, brachycephalic.

This ratio (of 75%) is termed the cephalic or breadth-index, which in such an instance would be described as equal to 75. A skull providing a breadth-index of 75 will naturally possess very different proportions from another which provides a corresponding index equal to 85. And in fact this particular

index in human skulls varies from about 58 to 90 in undistorted examples (fig. 4). Such is the general scheme of Retzius's system of classification of skulls by means of indices, and one of his earliest applications of the method was to the inhabitants of Sweden. One striking result was to exhibit a most marked contrast in respect of the breadth-index of the skull, between the Lapps and their Scandinavian neighbours, and thus a craniometric difference was added to the list of characters (such as stature, hair-colour and complexion) whereby these two types were already distinguished. Since the publication of Retzius's studies, the cephalic or breadth-index of the skull has retained a premier position among its almost innumerable successors, though it is of historical interest to note that, while Retzius had undoubtedly devised the method of comparing "breadth-indices," he always qualified the results of its use by reference to other data. These qualifications were overlooked by the immediate successors of Retzius, much to the disadvantage of craniometry. In addition to the researches on the skull forms of Lapps and Swedes, others dealing with the comparison of Finns and Swedes (by Retzius) as well as the investigation of the form of skull in Basques and Guanches (by Broca) possess historic interest.

Thus far little or nothing has been said with regard to instruments. Camper devised a four-sided open frame with cross-wires, through which skulls were viewed and by means of which accurate drawings could be projected on to paper. The methods of Retzius as here described require the aid of callipers of various sorts, and such instruments were quickly



devised and applied to the special needs of the case. Such instruments are still in use, and two forms of simple craniometer are shown in the accompanying illustrations (figs. 5 and 6). For the more accurate comparison required in the study of various European types, delicate instruments for measuring angles were invented by Anthelme in Paris (1836) and John Grattan in Belfast (1853). These instruments enabled the observer to transmit to the plane surface of a sheet of drawing paper a correct tracing of the contour of the specimen under investigation. A further modification was devised by the talented Dr Busk in the year 1861, and since that date the number and forms of these instruments have been greatly multiplied. With reference to contributors to the advance of knowledge in this particular department of craniometry, there should be added to the foregoing names those of Huxley, Sir W. H. Flower and Sir W. Turner in England, J. L. A. de Quatrefages in France, J. C. G. Lucae and H. Welcker in Germany. Moreover, the methods have also been multiplied, so that in addition to angular and linear measurements, those of the capacity or cubical contents of the cranium and those of the curvature of its surface demand reference. The masterly work of Cleland claims special mention in this connexion. And finally while two dimensions are combined in the cephalic index of Retzius, the combination of three dimensions (in a formula called a modulus) distinguishes some recent work, although the employment of the modulus is actually a return to a system devised in 1859 by Karl E. von Baer.

FIG. 5.—Callipers used in Craniometry, Professor Martin's (P. Hermann, Zürich) model.

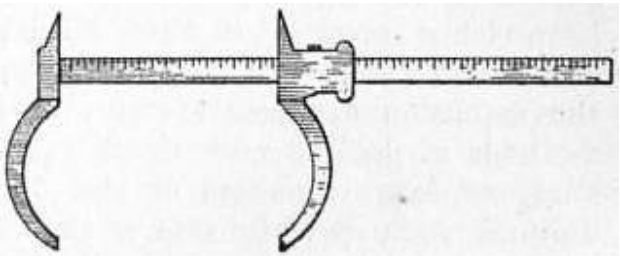


FIG. 6.—Flower's Craniometer as modified by Dr W. L. H. Duckworth.

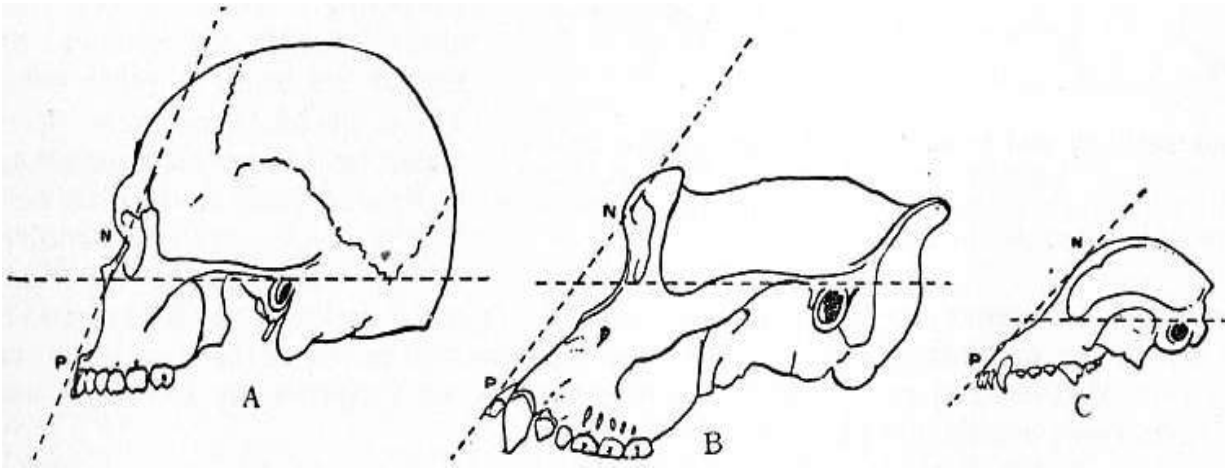


FIG. 7.—The facial angle of the Frankfort Agreement is shown in the crania of:—A, a New Britain native (male) 62°; B, a gorilla (male) 50°; C, a dog 42°. This angle has now replaced the facial angle of Camper (cf. fig. 1).

The fourth subdivision of craniometry is closely allied to that which has just been described, and it deals with the comparison of the prehistoric and the recent types of mankind. The methods are exactly similar to those employed in the comparison of living races; but in some particular instances where the prehistoric individual is represented only by a comparatively minute portion of the skull, some special modifications of the usual procedures have been necessitated. In this field the works of W. His and L. Rütimeyer on the prehistoric races of Switzerland, those of Ecker (South Germany), of Broca in France, of Thurnam and Davis in England, must be cited. G. Schwalbe, Kramberger, W. J. Sollas and H. Klaatsch are the most recent contributors to this department of craniometry.

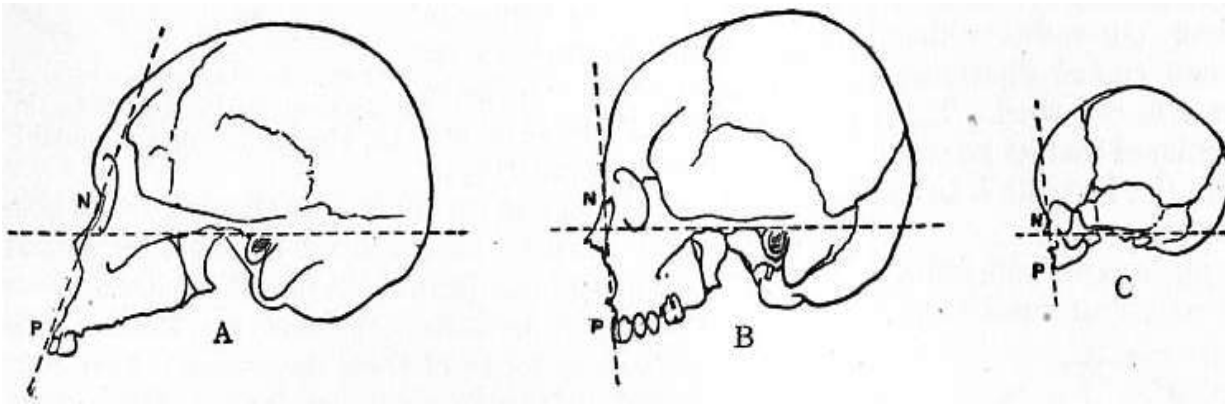


FIG. 8.—The facial angle of the Frankfort Agreement is shown in the crania of:—A, a Guinea native (male) 75°; B, a European (woman) 93°; C, a new-born infant (93°).

Thus the complexity of craniometric studies has inevitably increased. In the hands of von Török of Budapest, as in those of M. Benedikt of Vienna at an earlier date, the number of measurements regarded as necessary for the complete "diagnosis" of a skull has reached a colossal total. Of the trend and progress of craniometry at the present day, three particular developments are noteworthy. First come the attempts made at various times to co-ordinate the systems of measurements so as to ensure uniformity among all observers; of these attempts two, viz. that of the German anthropologists at Frankfort in 1882 (figs. 7 and 8), and that of the Anthropometric Committee of the British Association (1906) seem to require at least a record. In the second place, the application of the methods of statistical science in dealing with large numbers of craniometric data has been richly rewarded in Prof. Karl Pearson's hands. Thirdly, and in connexion with such methods, there may be mentioned the extension of these systems of measurement, and of the methods of dealing with them on statistical principles, to the study of large numbers of the skulls of domestic and feral animals, such as white rats or the varieties of the horse. And lastly no account of craniometry would be complete without mention of the revolt, headed by the Italian anthropologist Sergi, against metrical methods of all kinds. It cannot, however, be alleged that the substitutes offered

by the adherents of Sergi's principles encourage others to forsake the more orthodox numerical methods.

LITERATURE.—Tyson, *The Anatomy of a Pygmie* (London, 1699); Daubenton, "Sur la différence de la situation du tron occipital dans l'homme et dans les animaux," *Comptes rendus de l'académie des sciences* (Paris, 1764); Camper, *Works* (1770, translated by Cogan, 1821); Broca, *Mémoires* (1862 and following years); Huxley, *Journal of Anatomy and Physiology*, vol. 1 (1867); Retzius, *Über die Schädelformen der Nordbewohner* (Stockholm, 1842); Anthelme, *Physiologie de la pensée* (Paris, 1836); Grattan, *Ulster Journal of Archaeology*, vol. 1 (1853); Busk, "A System of Craniometry," *Transactions of the Ethnological Society* (1861); Flower, Catalogue of the Hunterian Museum, *Osteology*, part 1 (London, 1879); Turner, "'Challenger' Reports," *Zoology*, vol. x. pt. 29, "Human Crania" (1884); de Quatrefages, *Crania ethnica* (Paris, 1873); Lucae, *Architectur des menschlichen Schädels* (Frankfort, 1855); Welcker, *Bau und Wachsthum des menschlichen Schädels* (1862); Cleland, "An Inquiry into the Variations of the Human Skull," *Phil. Trans. Roy. Society* (1870), vol. 160, pp. 117 et seq.; von Baer, "Crania selecta," Académie impériale des sciences de S. Pétersbourg (1859); His and Rütimeyer, *Crania Helvetica* (Basel, 1866); Ecker, *Crania Germaniae meridionalis* (1865); Thurnam and Davis, *Crania Britannica*; von Török, *Craniometrie* (Stuttgart, 1890); Benedikt, *Manuel technique et pratique d'anthropométrie cranio-céphalique* (Paris, 1889); Pearson, *Biometrika*, from vol. 1 (in 1902) onwards; Sergi, "The Varieties of the Human Species," English translation, Smithsonian Institution (Washington, 1894); Schwalbe, "Der Neanderthalschädel," *Bonner Jahrbücher*, Heft 106; also *Sonderheft der Zeitschrift für Morphologie und Anthropologie*; Kramberger, *Der paläolithische Mensch von Krapina* (Nägele, Stuttgart, 1901); Sollas, "The Cranial Characters of the Neanderthal Race," *Phil. Transactions of the Royal Society*, vol. 199, Series B, p. 298, 1908; Klaatsch, "Bericht

über einen anthropologischen Streifzug nach London," *Zeitschrift für Ethnologie*, Heft 6, 1903, p. 875.

Handbooks.—Topinard, *Éléments d'anthropologie générale* (Paris, 1885); Schmidt, *Anthropologische Methoden* (Leipzig, 1888); Duckworth, *Morphology and Anthropology* (Cambridge, 1904).

Journals.—*Bulletins de la Société d'Anthropologie de Paris*, *Journal of the Royal Anthropological Institute of Great Britain and Ireland*, *Archiv für Anthropologie*, *Zeitschrift für Morphologie und Anthropologie*.

(W. L. H. D.)

CRANK, a word of somewhat obscure etymology, probably connected with a root meaning "crooked," and appearing in the Ger. *krank*, ill, a figurative use of the original word; among other words in English containing the same original meaning are "cringe" and "crinkle." In mechanics, a crank is a device by which reciprocating motion is converted into circular motion or vice versa, consisting of a *crank-arm*, one end of which is fastened rigidly at right angles to the rotating shaft or axis, while the other end bears a *crank-pin*, projecting from it at right angles and parallel to the shaft. When the reciprocating part of a machine, as the piston and piston-rod of a steam engine, is linked to this crank by a *crank-rod* or *connecting rod*, one end of which works on the crank-pin and the other on a pin in the end of the reciprocating part, the to-and-fro motion of the latter imparts a circular motion to the shaft and vice versa. The crank, instead of being made up as described above, may be formed by bending the shaft to the required shape, as sometimes in the handle of a winch. A *bell-crank*, so called because of its use in bell-hanging to change the direction of motion of the wires from horizontal

to vertical or vice versa, consists of two arms rigidly connected at an angle, say of 90°, to each other and pivoted on a pin placed at the point of junction.

Crank is also the name given to a labour machine used in prisons as a means of punishment (see TREAD-MILL). Other uses of the word, connected with the primary meaning, are for a crooked path, a crevice or chink; and a freakish turn of thought or speech, as in Milton's phrase "quips and cranks." It is also used as a slang expression, American in origin, for a harmless lunatic, or a faddist, whose enthusiasm for some one idea or hobby becomes a monomania. "Crank" or "crank-sided" is a nautical term used of a ship which by reason of her build or from want of balance is liable to overturn. This strictly nautical sense is often confused with "crank" or "cranky," that is, rickety or shaky, probably derived direct from the German *krank*, weak or ill.

CRANMER, THOMAS (1489-1556), archbishop of Canterbury, born at Aslacton or Aslockton in Nottinghamshire on the 2nd of July 1489, was the second son of Thomas Cranmer and of his wife Anne Hatfield. He received his early education, according to Morice his secretary, from "a marvellous severe and cruel schoolmaster," whose discipline must have been severe indeed to deserve this special mention in an age when no schoolmaster bore the rod in vain. The same authority tells us that he was initiated by his father in those field sports, such as hunting and hawking, which formed one of his recreations in after life. To early training he also owed the skilful horsemanship for which he was conspicuous. At the age of fourteen he was sent by his mother, who had in 1501 become a widow, to Cambridge. Little is known with certainty of his university career beyond the facts that he became a fellow of Jesus College in 1510 or 1511, that he had soon after to vacate his

fellowship, owing to his marriage to “Black Joan,” a relative of the landlady of the Dolphin Inn, and that he was reinstated in it on the death of his wife, which occurred in childbirth before the lapse of the year of grace allowed by the statutes. During the brief period of his married life he held the appointment of lecturer at Buckingham Hall, now Magdalene College. The fact of his marrying would seem to show that he did not at the time intend to enter the church; possibly the death of his wife caused him to qualify for holy orders. He was ordained in 1523, and soon after he took his doctor’s degree in divinity. According to Strype, he was invited about this time to become a fellow of the college founded by Cardinal Wolsey at Oxford; but Dean Hook shows that there is some reason to doubt this. If the offer was made, it was declined, and Cranmer continued at Cambridge filling the offices of lecturer in divinity at his own college and of public examiner in divinity to the university. It is interesting, in view of his later efforts to spread the knowledge of the Bible among the people, to know that in the capacity of examiner he insisted on a thorough acquaintance with the Holy Scriptures, and rejected several candidates who were deficient in this qualification.

It was a somewhat curious concurrence of circumstances that transferred Cranmer, almost at one step, from the quiet seclusion of the university to the din and bustle of the court. In August 1529 the plague known as the sweating sickness, which prevailed throughout the country, was specially severe at Cambridge, and all who had it in their power forsook the town for the country. Cranmer went with two of his pupils named Cressy, related to him through their mother, to their father’s house at Waltham in Essex. The king (Henry VIII.) happened at the time to be visiting in the immediate neighbourhood, and two of his chief counsellors, Gardiner, secretary of state, afterwards bishop of Winchester, and Edward Fox, the lord high almoner, afterwards bishop of Hereford, were lodged at Cressy’s house. Meeting with Cranmer, they were naturally led to discuss the king’s meditated divorce from Catherine of Aragon. Cranmer suggested that if the canonists and the universities should decide that marriage with a deceased brother’s widow was illegal, and if it

were proved that Catherine had been married to Prince Arthur, her marriage to Henry could be declared null and void by the ordinary ecclesiastical courts. The necessity of an appeal to Rome was thus dispensed with, and this point was at once seen by the king, who, when Cranmer's opinion was reported to him, is said to have ordered him to be summoned in these terms: "I will speak to him. Let him be sent for out of hand. This man, I trow, has got the right sow by the ear."

At their first interview Cranmer was commanded by the king to lay aside all other pursuits and to devote himself to the question of the divorce. He was to draw up a written treatise, stating the course he proposed, and defending it by arguments from scripture, the fathers and the decrees of general councils. His material interests certainly did not suffer by compliance. He was commended to the hospitality of Anne Boleyn's father, the earl of Wiltshire, in whose house at Durham Place he resided for some time; the king appointed him archdeacon of Taunton and one of his chaplains; and he also held a parochial benefice, the name of which is unknown. When the treatise was finished Cranmer was called upon to defend its argument before the universities of Oxford and Cambridge, which he visited, accompanied by Fox and Gardiner. Immediately afterwards he was sent to plead the cause before a more powerful if not a higher tribunal. An embassy, with the earl of Wiltshire at its head, was despatched to Rome in 1530, that "the matter of the divorce should be disputed and ventilated," and Cranmer was an important member of it. He was received by the Pope with marked courtesy, and was appointed "Grand Penitentiary of England," but his argument, if he ever had the opportunity of stating it, did not lead to any practical decision of the question.

Cranmer returned in September 1530, but in January 1531 he received a second commission from the king appointing him "Conciliarius Regius et ad Caesarem Orator." In the summer of 1531 he accordingly proceeded to Germany as sole ambassador to the emperor. He was also to sound the Lutheran princes with a view to an alliance, and to obtain the removal of some

restrictions on English trade. At Nuremberg he became acquainted with Osiander, whose somewhat isolated theological position he probably found to be in many points analogous to his own. Both were convinced that the old order must change; neither saw clearly what the new order should be to which it was to give place. They had frequent interviews, which had doubtless an important influence on Cranmer's opinions. But Osiander's house had another attraction of a different kind from theological sympathy. His niece Margaret won the heart of Cranmer, and in 1532 they were married. Hook finds in the fact of the marriage corroboration of Cranmer's statement that he never expected or desired the primacy; and it seems probable enough that, if he had foreseen how soon the primacy was to be forced upon him, he would have avoided a disqualification which it was difficult to conceal and dangerous to disclose.

Expected or not, the primacy was forced upon him within a very few months of his marriage. In August 1532 Archbishop Warham died, and the king almost immediately afterwards intimated to Cranmer, who had accompanied the emperor in his campaign against the Turks, his nomination to the vacant see. Cranmer's conduct was certainly consistent with his profession that he did not desire, as he had not expected, the dangerous promotion. He sent his wife to England, but delayed his own return in the vain hope that another appointment might be made. The papal bulls of confirmation were dated February and March 1533, and the consecration took place on the 30th March. One peculiarity of the ceremony had occasioned considerable discussion. It was the custom for the archbishop elect to take two oaths, the first of episcopal allegiance to the pope, and the second in recognition of the royal supremacy. The latter was so wide in its scope that it might fairly be held to supersede the former in so far as the two were inconsistent. Cranmer, however, was not satisfied with this. He had a special protest recorded, in which he formally declared that he swore allegiance to the pope only in so far as that was consistent with his supreme duty to the king. The morality of this course has been much canvassed, though it seems really

to involve nothing more than an express declaration of what the two oaths implied. It was the course that would readily suggest itself to a man of timid nature who wished to secure himself against such a fate as Wolsey's. It showed weakness, but it added nothing to whatever immorality there might be in successively taking two incompatible oaths.

In the last as in the first step of Cranmer's promotion Henry had been actuated by one and the same motive. The business of the divorce—or rather, of the legitimation of Anne Boleyn's expected issue—had now become very urgent, and in the new archbishop he had an agent who might be expected to forward it with the needful haste. The celerity and skill with which Cranmer did the work intrusted to him must have fully satisfied his master. During the first week of April Convocation sat almost from day to day to determine questions of fact and law in relation to Catherine's marriage with Henry as affected by her previous marriage with his brother Arthur. Decisions favourable to the object of the king were given on these questions, though even the despotism of the most despotic of the Tudors failed to secure absolute unanimity. The next step was taken by Cranmer, who wrote a letter to the king, praying to be allowed to remove the anxiety of loyal subjects as to a possible case of disputed succession, by finally determining the validity of the marriage in his archiepiscopal court. There is evidence that the request was prompted by the king, and his consent was given as a matter of course. Queen Catherine was residing at Ampthill in Bedfordshire, and to suit her convenience the court was held at the priory of Dunstable in the immediate neighbourhood. Declining to appear, she was declared contumacious, and on the 23rd of May the archbishop gave judgment declaring the marriage null and void from the first, and so leaving the king free to marry whom he pleased. The Act of Appeals had already prohibited any appeal from the archbishop's court. Five days later he pronounced the marriage between Henry and Anne—which had been secretly celebrated about the 25th of January 1533—to be valid. On the 1st of June he crowned Anne as queen, and

on the 10th of September stood godfather to her child, the future Queen Elizabeth.

The breach with Rome and the subjection of the church in England to the royal supremacy had been practically achieved before Cranmer's appointment as archbishop: and he had little to do with the other constitutional changes of Henry's reign. But his position as chief minister of Henry's ecclesiastical jurisdiction forced him into unpleasant prominence in connexion with the king's matrimonial experiences. In 1536 he was required to revise his own sentence in favour of the validity of Henry's marriage with Anne Boleyn; and on the 17th of May the marriage was declared invalid. The ground on which this sentence is pronounced is fairly clear. Anne's sister, Mary Boleyn, had been Henry VIII.'s mistress; this by canon law was a bar to his marriage with Anne—a bar which had been removed by papal dispensation in 1527, but now the papal power to dispense in such cases had been repudiated, and the original objection revived. The sentence was grotesquely legal and unjust. With Anne's condemnation by the House of Lords Cranmer had nothing to do. He interceded for her in vain with the king, as he had done in the cases of Fisher, More and the monks of Christchurch. His share in the divorce of Anne of Cleves was less prominent than that of Gardiner, though he did preside over the Convocation in which nearly all the dignitaries of the church signified their approval of that measure. To his next and last interposition in the matrimonial affairs of the king no discredit attaches itself. When he was made cognizant of the charges against Catherine Howard, his duty to communicate them to the king was obvious, though painful.

Meanwhile Cranmer was actively carrying out the policy which has associated his name more closely, perhaps, than that of any other ecclesiastic with the Reformation in England. Its most important feature on the theological as distinct from the political side was the endeavour to promote the circulation of the Bible in the vernacular, by encouraging translation and procuring an order in 1538 that a copy of the Bible in English should be set up in every

church in a convenient place for reading. Only second in importance to this was the re-adjustment of the creed and liturgy of the church, which formed Cranmer's principal work during the latter half of his life. The progress of the archbishop's opinion towards that middle Protestantism, if it may be so called, which he did so much to impress on the formularies of the Church of England, was gradual, as a brief enumeration of the successive steps in that progress will show. In 1538 an embassy of German divines visited England with the design, among other things, of forming a common confession for the two countries. This proved impracticable, but the frequent conferences Cranmer had with the theologians composing the embassy had doubtless a great influence in modifying his views. Both in parliament and in Convocation he opposed the Six Articles of 1539, but he stood almost alone. During the period between 1540 and 1543 the archbishop was engaged at the head of a commission in the revision of the "Bishop's Book" (1537) or *Institutions of a Christian Man*, and the preparation of the *Necessary Erudition* (1543) known as the "King's Book," which was a modification of the former work in the direction of Roman Catholic doctrine. In June 1545 was issued his Litany, which was substantially the same as that now in use, and shows his mastery of a rhythmical English style.

The course taken by Cranmer in promoting the Reformation exposed him to the bitter hostility of the reactionary party or "men of the old learning," of whom Gardiner and Bonner were leaders, and on various occasions—notably in 1543 and 1545—conspiracies were formed in the council or elsewhere to effect his overthrow. The king, however, remained true to him, and all the conspiracies signally failed. It illustrates a favourable trait in the archbishop's character that he forgave all the conspirators. He was, as his secretary Morice testifies, "a man that delighted not in revenging."

Cranmer was present with Henry VIII. when he died (1547). By the will of the king he was nominated one of a council of regency composed of sixteen persons, but he acquiesced in the arrangement by which Somerset became

lord protector. He officiated at the coronation of the boy king Edward VI., and is supposed to have instituted a sinister change in the order of the ceremony, by which the right of the monarch to reign was made to appear to depend upon inheritance alone, without the concurrent consent of the people. But Edward's title had been expressly sanctioned by act of parliament, so that there was no more room for election in his case than in that of George I., and the real motive of the changes was to shorten the weary ceremony for the frail child.

During this reign the work of the Reformation made rapid progress, the sympathies both of the Protector and of the young king being decidedly Protestant. Cranmer was therefore enabled without let or hindrance to complete the preparation of the church formularies, on which he had been for some time engaged. In 1547 appeared the *Homilies* prepared under his direction. Four of them are attributed to the archbishop himself—those on Salvation, Faith, Good Works and the Reading of Scripture. His translation of the German Catechism of Justus Jonas, known as Cranmer's Catechism, appeared in the following year. Important, as showing his views on a cardinal doctrine, was the *Defence of the True and Catholic Doctrine of the Sacrament*, which he published in 1550. It was immediately answered from the side of the "old learning" by Gardiner. The first prayer-book of Edward VI. was finished in November 1548, and received legal sanction in March 1549; the second was completed and sanctioned in April 1552. The archbishop did much of the work of compilation personally. The forty-two articles of Edward VI. published in 1553 owe their form and style almost entirely to the hand of Cranmer. The last great undertaking in which he was employed was the revision of his codification of the canon law, which had been all but completed before the death of Henry. The task was one eminently well suited to his powers, and the execution of it was marked by great skill in definition and arrangement. It never received any authoritative sanction, Edward VI. dying before the proclamation establishing it could be made, and it remained unpublished until 1571, when a Latin translation by Dr Walter Haddon and Sir

John Cheke appeared under the title *Reformatio legum ecclesiasticarum*. It laid down the lawfulness and necessity of persecution to the death for heresy in the most absolute terms; and Cranmer himself condemned Joan Bocher to the flames. But he naturally loathed persecution, and was as tolerant as any in that age.

Cranmer stood by the dying bed of Edward as he had stood by that of his father, and he there suffered himself to be persuaded to take a step against his own convictions. He had pledged himself to respect the testamentary disposition of Henry VIII. by which the succession devolved upon Mary, and now he violated his oath by signing Edward's "device" of the crown to Lady Jane Grey. On grounds of policy and morality alike the act was quite indefensible; but it is perhaps some palliation of his perjury that it was committed to satisfy the last urgent wish of a dying man, and that he alone remained true to the nine days' queen when the others who had with him signed Edward's device deserted her. On the accession of Mary he was summoned to the council—most of whom had signed the same device—reprimanded for his conduct, and ordered to confine himself to his palace at Lambeth until the queen's pleasure was known. He refused to follow the advice of his friends and avoid the fate that was clearly impending over him by flight to the continent. Any chance of safety that lay in the friendliness of a strong party in the council was more than nullified by the bitter personal enmity of the queen, who could not forgive his share in her mother's divorce and her own disgrace. On the 14th of September 1553 he was sent to the Tower, where Ridley and Latimer were also confined. The immediate occasion of his imprisonment was a strongly worded declaration he had written a few days previously against the mass, the celebration of which, he heard, had been re-established at Canterbury. He had not taken steps to publish this, but by some unknown channel a copy reached the council, and it could not be ignored. In November, with Lady Jane Grey, her husband, and two other Dudleys, Cranmer was condemned for treason. Renard thought he would be executed, but so true a Romanist as Mary could scarcely have an

ecclesiastic put to death in consequence of a sentence by a secular court, and Cranmer was reserved for treatment as a heretic by the highest of clerical tribunals, which could not act until parliament had restored the papal jurisdiction. Accordingly in March 1554 he and his two illustrious fellow-prisoners, Ridley and Latimer, were removed to Oxford, where they were confined in the Bocardo or common prison. Ridley and Latimer were unflinching, and suffered bravely at the stake on the 16th of October 1555. Cranmer had been tried by a papal commission, over which Bishop Brooks of Gloucester presided, in September 1555. Brooks had no power to give sentence, but reported to Rome, where Cranmer was summoned, but not permitted, to attend. On the 25th of November he was pronounced contumacious by the pope and excommunicated, and a commission was sent to England to degrade him from his office of archbishop. This was done with the usual humiliating ceremonies in Christ Church, Oxford, on the 14th of February 1556, and he was then handed over to the secular power. About the same time Cranmer subscribed the first two of his "recantations." His difficulty consisted in the fact that, like all Anglicans of the 16th century, he recognized no right of private judgment, but believed that the state, as represented by monarchy, parliament and Convocation, had an absolute right to determine the national faith and to impose it on every Englishman. All these authorities had now legally established Roman Catholicism as the national faith, and Cranmer had no logical ground on which to resist. His early "recantations" are merely recognitions of his lifelong conviction of this right of the state. But his dilemma on this point led him into further doubts, and he was eventually induced to revile his whole career and the Reformation. This is what the government wanted. Northumberland's recantation had done much to discredit the Reformation, Cranmer's, it was hoped, would complete the work. Hence the enormous effect of Cranmer's recovery at the final scene. On the 21st of March he was taken to St Mary's church, and asked to repeat his recantation in the hearing of the people as he had promised. To the surprise of all he declared with dignity and emphasis that what he had recently done

troubled him more than anything he ever did or said in his whole life; that he renounced and refused all his recantations as things written with his hand, contrary to the truth which he thought in his heart; and that as his hand had offended, his hand should be first burned when he came to the fire. As he had said, his right hand was steadfastly exposed to the flames. The calm cheerfulness and resolution with which he met his fate show that he felt that he had cleared his conscience, and that his recantation of his recantations was a repentance that needed not to be repented of.

It was a noble end to what, in spite of its besetting sin of infirmity of moral purpose, was a not ignoble life. The key to his character is well given in what Hooper said of him in a letter to Bullinger, that he was "too fearful about what might happen to him." This weakness was the worst blot on Cranmer's character, but it was due in some measure to his painful capacity for seeing both sides of a question at the same time, a temperament fatal to martyrdom. As a theologian it is difficult to class him. As early as 1538 he had repudiated the doctrine of Transubstantiation; by 1550 he had rejected also the Real Presence (Pref. to his *Answer to Dr Richard Smith*). But here he used the term "real" somewhat unguardedly, for in his *Defence* he asserts a real presence, but defines it as exclusively a spiritual presence; and he repudiates the idea that the bread and wine were "bare tokens." His views on church polity were dominated by his implicit belief in the divine right of kings (not of course the divine *hereditary* right of kings) which the Anglicans felt it necessary to set up against the divine right of popes. He set practically no limits to the ecclesiastical authority of kings; they were as fully the representatives of the church as the state, and Cranmer hardly distinguished between the two. Church and state to him were one.

AUTHORITIES.—*Letters and Papers of Henry VIII.* vols. iv.-xx.: *Acts of the Privy Council, 1542-1556*; *Cal. of State Papers, Dom. and Foreign*; Foxe's *Acts and Monuments*; Strype's *Memorials of Cranmer* (1694); *Anecdotes and Character of Archbishop Cranmer*, by Ralph Morice, and

two contemporary biographies (Camden Society's publications); *Remains of Thomas Cranmer*, by Jenkyns (1833); *Lives of Cranmer*, by Gilpin (1784), Todd (1831), Le Bas, in Hook's *Lives of the Archbishops of Canterbury*, vols. vi. and vii. (1868), by Canon Mason (1897), A. D. Innes (1900) and A. F. Pollard (1904); Froude's *History*; R. W. Dixon's *History*; J. Gairdner's *History of the Church, 1485-1558*; Bishop Cranmer's *Recantacyons*, ed. Gairdner (1885). R. E. Chester Waters's *Chesters of Chicheley* (1877) contains a vast amount of genealogical information about Cranmer which has only been used by one of his biographers.

(A. F. P.)

CRANNOG (Celt. *crann*, a tree), the term applied in Scotland and Ireland to the stockaded islands so numerous in ancient times in the lochs of both countries. The existence of these lake-dwellings in Scotland was first made known by John Mackinlay, a fellow of the Society of Antiquaries of Scotland, in a letter sent to George Chalmers, the author of *Caledonia*, in 1813, describing two crannogs, or fortified islands in Bute. The crannog of Lagore, the first discovered in Ireland, was examined and described by Sir William Wilde in 1840. But it was not until after the discovery of the pile-villages of the Swiss lakes, in 1853, had drawn public attention to the subject of lake-dwellings, that the crannogs of Scotland and Ireland were systematically investigated.

The results of these investigations show that they have little in common with the Swiss lake-dwellings, except that they are placed in lakes. Few examples are known in England, although over a hundred and fifty have been examined in Ireland, and more than half that number in Scotland. As a rule

they have been constructed on islets or shallows in the lochs, which have been adapted for occupation, and fortified by single or double lines of stockaded defences drawn round the margin. To enlarge the area, or raise the surface-level where that was necessary, layers of logs, brushwood, heather and ferns were piled on the shallow, and consolidated with gravel and stones. Over all there was laid a layer of earth, a floor of logs or a pavement of flagstones. In rare instances the body of the work is entirely of stones, the stockaded defence and the huts within its enclosure being the only parts constructed of timber. Occasionally a bridge of logs, or a causeway of stones, formed a communication with the shore, but often the only means of getting to and from the island was by canoes hollowed out of a single tree. Remains of huts of logs, or of wattled work, are often found within the enclosure. Three crannogs in Dowalton Loch, Wigtownshire, examined by Lord Lovaine in 1863, were found to be constructed of layers of fern and birch and hazel branches, mixed with boulders and penetrated by oak piles, while above all there was a surface layer of stones and soil. The remains of the stockade round the margin were of vertical piles mortised into horizontal bars, and secured by pegs in the mortised holes. The crannog of Lochlee, near Tarbolton, Ayrshire, explored by Dr R. Munro in 1878, was 100 ft. in diameter, and had a double row of piles, bound by horizontal stretchers with square mortise-holes, enclosing an area 60 ft. in diameter. In the centre was a space 40 ft. square, bounded by the remains of a wooden wall and paved inside with split logs. A partition divided it into two equal parts, one of which had a doorway opening to the south, and close by it an extensive refuse-heap. In the middle of the other part was a stone-paved hearth, with remains of three former hearths underneath. The substructure was built up from the bottom of the loch, partly of brushwood but chiefly of logs and trunks of trees with the branches lopped off, placed in layers, each disposed transversely or obliquely across the one below it. A crannog in Loch-an-Dhugael, Balinakill, Argyllshire, described by the same explorer in 1893, revealed a substructure similar to that at Lochlee, with a double row of piles enclosing an area 45 to 50 ft. in diameter, within

which was a circular construction 32 ft. in diameter, which had been supported by a large central post and about twenty uprights ranged round the circumference.

From their common feature of a substructure of brushwood and logs built up from the bottom, the crannogs have been classed as fascine-dwellings, to distinguish them from the typical pile-dwellings of the earlier periods in Switzerland, whose platforms are supported by piles driven into the bed of the lake. The crannog of Cloonfinlough in Connaught had a triple stockade of oak piles, connected by horizontal stretchers and enclosing an area 130 ft. in diameter, laid with trunks of oak trees. In the crannog of Lagore, county Meath, there were about 150 cartloads of bones, chiefly of oxen, deer, sheep and swine, the refuse of the food of the occupants. In the crannog of Lisnacroghera, county Antrim, iron swords, with sheaths of thin bronze ornamented with scrolls characteristic of the Late Celtic style, iron daggers, an iron spear-head 16½ in. in length, and pieces of what are called large caldrons of iron, were found. Among the few remains of lacustrine settlements in England and Wales, some are suggestive of the typical crannog structure. The most important of these is the Glastonbury lake village, excavated by Mr A. Bulleid and Mr St George Gray. It consists of more than sixty separate dwellings, grouped within a triangular palisaded defence, formed in the midst of a marsh now partially reclaimed. The dwellings were circular, from 18 to 35 ft. in diameter, the substructure formed of logs and brushwood mingled with stones and clay, and outlined by piles driven into the bottom of the shallow lake. The walls of the houses seem to have been made of wattle-work, supported by posts sometimes not more than a single foot apart. The floors are of clay, with a hearth of stones in the centre, often showing several renewals over the original. The relics recovered show unmistakably that the occupation must be dated within the Iron Age, but probably pre-Roman, as no evidence of contact with Roman civilization has been discovered. The stage of civilization indicated is nevertheless not a low one. Besides the implements and weapons of iron there are fibulae and brooches of bronze, weaving combs and spindle-

whorls, a bronze mirror and tweezers, wheel-made pottery as well as hand-made, ornamented with Late Celtic patterns, a bowl of thin bronze decorated with bosses, the nave of a wooden wheel with holes for twelve spokes, and a dug-out canoe. Another site in Holderness, Yorkshire, examined by Mr Boynton in 1881, yielded evidence of fascine construction, with suggestions of occupation in the latter part of the Bronze Age. Similar indications are adduced by Professor Boyd Dawkins from the site on Barton Mere. On the other hand, the implements and weapons found in the Scottish and Irish crannogs are usually of iron, or, if objects of bronze and stone are found, they are commonly such as were in use in the Iron Age. Crannogs are frequently referred to in the Irish annals. Under the year 848 the *Annals of the Four Masters* record the burning of the island of Lough Gabhor (the crannog of Lagore), and the same stronghold is noticed as again destroyed by the Danes in 933. Under the year 1246 it is recorded that Turlough O'Connor made his escape from the crannog of Lough Leisi, and drowned his keepers. Many other entries occur in the succeeding centuries. In the register of the privy council of Scotland, April 14, 1608, it is ordered that "the haill houssis of defence, strongholds, and *crannokis* in the Yllis (the western isles) pertaining to Angus M'Conneill of Dunnyvaig and Hector M'Cloyne of Dowart sal be delyverit to His Majestie." Judging from the historical evidence of their late continuance, and from the character of the relics found in them, the crannogs may be included among the latest prehistoric strongholds, reaching their greatest development in early historic times, and surviving through the middle ages. In Ireland, Sir William Wilde has assigned their range approximately to the period between the 9th and 16th centuries; while Dr Munro holds that the vast majority of them, both in Ireland and in Scotland, were not only inhabited, but constructed during the Iron Age, and that their period of greatest development was as far posterior to Roman civilization as that of the Swiss *Pfahlbauten* was anterior to it. (See LAKE DWELLINGS.)

AUTHORITIES.—Dr R. Munro, *The Lake Dwellings of Europe: being the Rhind Lectures in Archaeology for 1888* (with a bibliography of the

subject) (London, 1890); *Ancient Scottish Lake-Dwellings or Crannogs* (Edinburgh, 1882); Col. W. G. Wood-Martin, *The Lake-Dwellings of Ireland, or Ancient Lacustrine Habitations of Erin, commonly called Crannogs* (Dublin, 1886); Sir W. Wilde, *Descriptive Catalogue of the Antiquities in the Museum of the Royal Irish Academy*, article "Crannogs," pp. 220-233 (Dublin, 1857); John Stuart, "Scottish Artificial Islands or Crannogs," in the *Proceedings of the Society of Antiquaries of Scotland*, vol. vi. (Edinburgh, 1865); A. Bulleid, "The Lake Village near Glastonbury," in *Proceedings of the Somersetshire Archaeological Society*, vol. xl. (1894).

(J. An.)

CRANSAC, a town of southern France, in the department of Aveyron, 28m. N.W. of Rodez by rail. Pop. (1906) town, 4988; commune, 6953. The town is a coal-mining centre and has cold mineral springs, known in the middle ages. There are iron-mines in the neighbourhood. Hills to the north of the town contain disused coal-mines which have been on fire for centuries. About 5 m. to the south is the fine Renaissance château of Bournazel, built for the most part by Jean de Buisson, baron of Bournazel, about 1545. The barony of Bournazel became a marquisate in 1624.

CRANSTON, a city of Providence county, Rhode Island, U.S.A., adjoining the city of Providence on the S. Pop. (1890) 8099; (1900) 13,343; (1910) 21,107; area, 30 sq. m. It is served by the New York, New Haven & Hartford railway. The surface of the E. part is level, that of the W. part is somewhat rolling. Within the city are several villages, including Arlington, Auburn, Edgewood, Fiskeville and Oaklawn. The inhabitants of the country districts are engaged largely in the growing of hay, Indian corn, rye, oats and market-garden produce; in the several villages cotton and print goods, fuses for electrical machinery, and automatic fire-protection sprinklers are manufactured. The value of Cranston's factory product increased from $1,402,359 in 1900 to $2,130,969 in 1905, or 52%. The state has a farm of 667 acres in the S. part of the city; on this are the state prison, the Providence county jail, the state workhouse and the house of correction, the state almshouse, the state hospital for the insane, the Sockanosset school for boys, and the Oaklawn school for girls—the last two being departments of the state reform school. The post-office address of all these state institutions is Howard. Cranston was settled as a part of Providence about 1640 by associates of Roger Williams, and in 1754 was incorporated as a separate township, but in 1868, in 1873 and in 1892 portions of it were reannexed to Providence. The township is said to have been named in honour of Samuel Cranston (1659-1727), governor of Rhode Island from 1698 until his death. It was incorporated as a city in 1910.

CRANTOR, a Greek philosopher of the Old Academy, was born, probably about the middle of the 4th century B.C., at Soli in Cilicia. He was a fellow-pupil of Polemo in the school of Xenocrates at Athens, and was the first

commentator on Plato. He is said to have written some poems which he sealed up and deposited in the temple of Athens at Soli (Diog. Laërtius iv. 5. 25). Of his celebrated work *On Grief* (Περὶ πένθους), a letter of condolence to his friend Hippocles on the death of his children, numerous extracts have been preserved in Plutarch's *Consolatio ad Apollonium* and in the *De consolatione* of Cicero, who speaks of it (*Acad.* ii. 44. 135) in the highest terms (*aureolus et ad verbum ediscendus*). Crantor paid especial attention to ethics, and arranged "good" things in the following order—virtue, health, pleasure, riches.

See F. Kayser, *De Crantore Academico* (1841); M. H. E. Meier, *Opuscula academica*, ii. (1863); F. Susemihl, *Geschichte der griechischen Litteratur in der Alexandrinerzeit*, i. (1891), p. 118.

CRANWORTH, ROBERT MONSEY ROLFE, BARON (1790-1868), lord chancellor of England, elder son of the Rev. E. Rolfe, was born at Cranworth, Norfolk, on the 18th of December 1790. Educated at Bury St Edmunds, Winchester, and Trinity College, Cambridge, he was called to the bar at Lincoln's Inn in 1816, and attached himself to the chancery courts. He represented Penryn and Falmouth in parliament from 1832 till his promotion to the bench as baron of the exchequer in 1839. In 1850 he was appointed a vice-chancellor and created Baron Cranworth, and in 1852 he became lord chancellor in Aberdeen's ministry. He continued to hold the chancellorship in the administration of Palmerston until the latter's resignation in 1857. He was not reappointed when Palmerston returned to office in 1859, but on the retirement of Lord Westbury in 1865 he accepted the great seal for a second time, and held it till the fall of the Russell administration in 1866. Cranworth died in London on the 26th of July 1868. Never a very zealous law reformer,

Cranworth's name is associated in the statute book with only one small measure on conveyancing. But as a judge he will continue to hold first rank. His judgments were marked by sound common sense, while he himself was remarkably free from the prejudices of his profession. Few men of his day enjoyed greater personal popularity than Cranworth. He left no issue and the title became extinct on his death.

See *The Times*, 27th of July 1868; E. Manson, *The Builders of our Law* (1904); E. Foss, *The Judges of England* (1848-1864); J. B. Atlay, *Lives of the Chancellors*, vol. ii. (1908).

CRAPE (an anglicized version of the Fr. *crêpe*), a silk fabric of a gauzy texture, having a peculiar crisp or crimpy appearance. It is woven of hard spun silk yarn "in the gum" or natural condition. There are two distinct varieties of the textile—soft, Canton or Oriental crape, and hard or crisped crape. The wavy appearance of Canton crape results from the peculiar manner in which the weft is prepared, the yarn from two bobbins being twisted together in the reverse way. The fabric when woven is smooth and even, having no *crêpé* appearance, but when the gum is subsequently extracted by boiling it at once becomes soft, and the weft, losing its twist, gives the fabric the waved structure which constitutes its distinguishing feature. Canton crapes are used, either white or coloured, for ladies' scarves and shawls, bonnet trimmings, &c. The Chinese and Japanese excel in the manufacture of soft crapes. The crisp and elastic structure of hard crape is not produced either in the spinning or in the weaving, but is due to processes through which the gauze passes after it is woven. What the details of these processes are is known to only a few manufacturers, who so jealously guard their secret that, in some cases, the

different stages in the manufacture are conducted in towns far removed from each other. Commercially they are distinguished as single, double, three-ply and four-ply crapes, according to the nature of the yarn used in their manufacture. They are almost exclusively dyed black and used in mourning dress, and among Roman Catholic communities for nuns' veils, &c. In Great Britain hard crapes are made at Braintree in Essex, Norwich, Yarmouth, Manchester and Glasgow. The crape formerly made at Norwich was made with a silk warp and worsted weft, and is said to have afterwards degenerated into bombazine. A very successful imitation of real crape is made in Manchester of cotton yarn, and sold under the name of Victoria crape.

CRASH, a technical textile term applied to a species of narrow towels, from 14 to 20 in. wide. The name is probably of Russian origin, the simplest and coarsest type of the cloth being known as "Russia crash." The latter is made from grey flax or tow yarns, and sometimes from boiled yarns. The simple term "crash" is given to all these narrow cloths, but the above distinction is very convenient, as also are the following: grey, boiled, bleached, plain, twilled and fancy crash. A large variety obtains with and without fancy borders, while of late years cotton has been introduced as warp, as well as mixed and jute yarns for weft. After the cloth has passed through all the finishing operations, it is cut up into lengths of about 3 yds., the two ends sewn together and it is then ready to be placed over a suspended roller; for this reason it is often termed "roller towelling."

CRASHAW, RICHARD (1613-1650), English poet, styled "the divine," was born in London about 1613. He was the son of a strongly anti-papistical divine, Dr William Crashaw (1572-1626), who distinguished himself, even in those times, by the excessive acerbity of his writings against the Catholics. In spite of these opinions, however, he was attracted by Catholic devotion, for he translated several Latin hymns of the Jesuits. Richard Crashaw was originally put to school at Charterhouse, but in July 1631 he was admitted to Pembroke College, Cambridge, where he took the degree of B.A. in 1634. The publication of Herbert's *Temple* in 1633 seems to have finally determined the bias of his genius in favour of religious poetry, and next year he published his first book, *Epigrammatum sacrorum liber*, a volume of Latin verses. In March 1636 he removed to Peterhouse, was made a fellow of that college in 1637, and proceeded M.A. in 1638. It was about this time that he made the acquaintance and secured the lasting friendship of Abraham Cowley. He was also on terms of intimacy with the Anglican monk Nicholas Ferrar, and frequently visited him at his religious house at Little Gidding. In 1641 he is said to have gone to Oxford, but only for a short time; for when in 1643 Cowley left Cambridge to seek a refuge at Oxford, Crashaw remained behind, and was forcibly ejected from his fellowship in 1644. In the confusion of the civil wars he escaped to France, where he finally embraced the Catholic religion, towards which he had long been tending.

During his exile his religious and secular poems were collected by an anonymous friend, and published under the title of *Steps to the Temple* and *The Delights of the Muses*, in one volume, in 1646. The first part includes the hymn to St Teresa and the version of Marini's *Sospetto d' Herode*. This same year Cowley found him in great destitution at Paris, and induced Queen Henrietta Maria to extend towards him what influence she still possessed. At her introduction he proceeded to Italy, where he became attendant to Cardinal Palotta at Rome. In 1648 he published two Latin hymns at Paris. He remained until 1649 in the service of the cardinal, to whom he had a great personal attachment; but his retinue contained persons whose violent and licentious

behaviour was a source of ceaseless vexation to the sensitive English mystic. At last his denunciation of their excesses became so public that the animosity of those persons was excited against him, and in order to shield him from their revenge he was sent by the cardinal in 1650 to Loretto, where he was made a canon of the Holy House. In less than three weeks, however, he sickened of fever, and died on the 25th of August, not without grave suspicion of having been poisoned. He was buried in the Lady chapel at Loretto. A collection of his religious poems, entitled *Carmen Deo nostro*, was brought out in Paris in 1652, dedicated at the dead poet's desire to the faithful friend of his sufferings, the countess of Denbigh. The book is illustrated by thirteen engravings after Crashaw's own designs.

Crashaw excelled in all manner of graceful accomplishments; besides being an excellent Latinist and Hellenist, he had an intimate knowledge of Italian and Spanish; and his skill in music, painting and engraving was no less admired in his lifetime than his skill in poetry. Cowley embalmed his memory in an elegy that ranks among the very finest in our language, in which he, a Protestant, well expressed the feeling left on the minds of contemporaries by the character of the young Catholic poet:—

> "His faith, perhaps, in some nice tenets might
> Be wrong; his life, I'm sure, was in the right:
> And I, myself, a Catholic will be,
> So far at least, dear saint, to pray to thee!"

The poetry of Crashaw will be best appreciated by those who can with most success free themselves from the bondage of a traditional sense of the dignity of language. The custom of his age permitted the use of images and phrases which we now justly condemn as incongruous and unseemly, and the fervent fancy of Crashaw carried this licence to excess. At the same time his verse is studded with fiery beauties and sudden felicities of language, unsurpassed by any lyrist between his own time and Shelley's. There is no religious poetry in

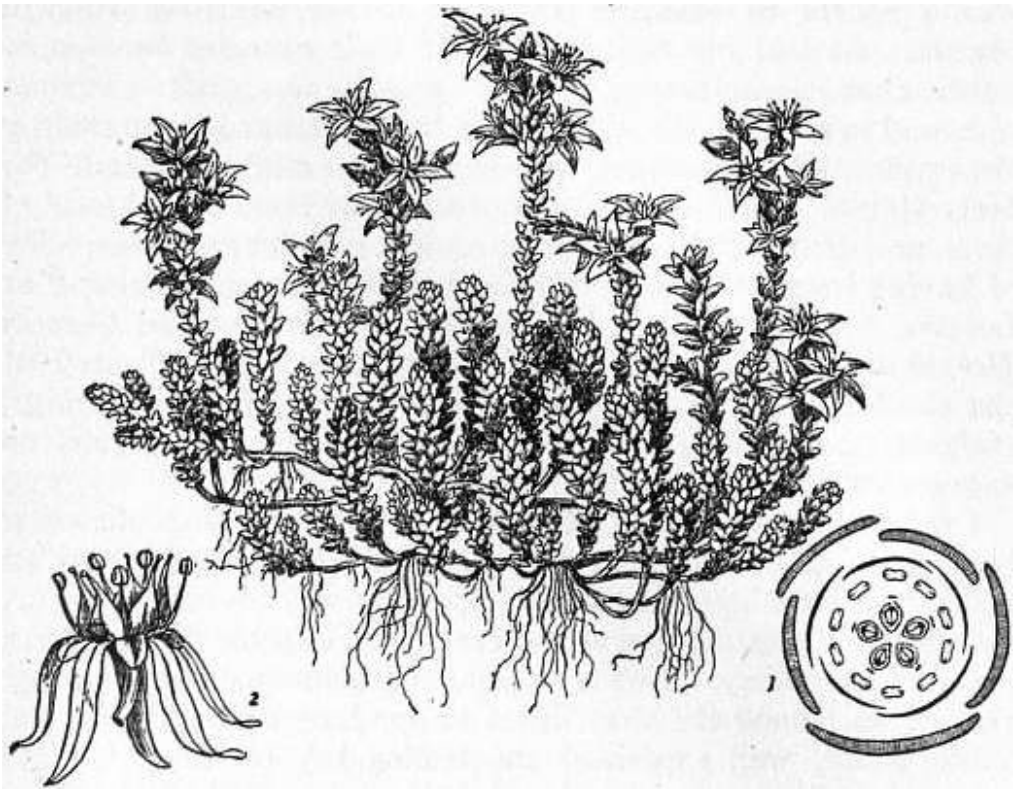
English so full at once of gross and awkward images and imaginative touches of the most ethereal beauty. The temper of his intellect seems to have been delicate and weak, fiery and uncertain; he has a morbid, almost hysterical, passion about him, even when his ardour is most exquisitely expressed, and his adoring addresses to the saints have an effeminate falsetto that makes their ecstasy almost repulsive. The faults and beauties of his very peculiar style can be studied nowhere to more advantage than in the *Hymn to Saint Teresa*. Among the secular poems of Crashaw the best are *Music's Duel*, which deals with that strife between the musician and the nightingale which has inspired so many poets, and *Wishes to his supposed Mistress*. In his latest sacred poems, included in the *Carmen Deo nostro*, sudden and eminent beauties are not wanting, but the mysticism has become more pronounced, and the ecclesiastical mannerism more harsh and repellent. The themes of Crashaw's verses are as distinct as possible from those of Shelley's, but it may, on the whole, be said that at his best moments he reminds the reader more closely of the author of *Epipsychidion* than of any earlier or later poet.

Crashaw's works were first collected, in one volume, in 1858 by W. B. Turnbull. In 1872 an edition, in 2 volumes, was printed for private subscription by the Rev. A. B. Grosart. A complete edition was edited (1904) for the Cambridge University Press by Mr A. R. Waller.

(E. G.)

CRASSULACEAE, in botany, a natural order of dicotyledons, containing 13 genera and nearly 500 species; of cosmopolitan distribution, but most strongly developed in South Africa. The plants are herbs or small shrubs, generally with thick fleshy stems and leaves, adapted for life in dry, especially

rocky places. The fleshy leaves are often reduced to a more or less cylindrical structure, as in the stonecrops (*Sedum*), or form closely crowded rosettes as in the house-leek (*Sempervivum*). Correlated with their life in dry situations, the bulk of the tissue is succulent, forming a water-store, which is protected from loss by evaporation by a thickly cuticularized epidermis covered with a waxy secretion which gives a glaucous appearance to the plant. The flowers are generally arranged in terminal or axillary clusters, and are markedly regular with the same number of parts in each series. This number is, however, very variable, and often not constant in one and the same species. The sepals and petals are free or more or less united, the stamens as many or twice as many as the petals; the carpels, usually free, are equal to the petals in number, and form in the fruit follicles with two or more seeds. Opposite each carpel is a small scale which functions as a nectary. Means of vegetative propagation are general. Many species spread by means of a creeping much-branched rootstock, or as in house-leek, by runners which perish after producing a terminal leaf-rosette. In other cases small portions of the stem or leaves give rise to new plants by budding, as in *Bryophyllum*, where buds develop at the edges of the leaf and form new plants.



Stonecrop (*Sedum acre*) slightly reduced. 1, Horizontal plan of arrangement of flower of stonecrop; 2, flower of *Sedum rubens*.

The order is almost absent from Australia and Polynesia, and has but few representatives in South America; it is otherwise very generally distributed. The largest genus, *Sedum*, contains about 140 species in the temperate and colder parts of the northern hemisphere; eight occur wild in Britain, including *S. Telephium* (orpine) and *S. acre* (common stonecrop) (see fig.). The species are easily cultivated and will thrive in almost any soil. They are readily propagated by seeds, cuttings or divisions. *Crassula* has about 100 species, chiefly at the Cape. *Cotyledon*, a widely distributed genus with about 90 species, is represented in the British Isles by *C. Umbilicus*, pennywort, or navelwort, which takes its name from the succulent peltate leaves. It grows profusely on dry rocks and walls, especially on the western coasts, and bears a spike of drooping greenish cup-shaped flowers. The *Echeveria* of gardens is now included in this genus. *Sempervivum* has about 50 species in the

mountains of central and southern Europe, in the Himalayas, Abyssinia, and the Canaries and Madeira; *S. tectorum*, common house-leek, is seen often growing on tops of walls and house-roofs. The hardy species will grow well in dry sandy soil, and are suitable for rockeries, old walls or edgings. They are readily propagated by offsets or by seed.

The order is closely allied to Saxifragaceae, from which it is distinguished by its fleshy habit and the larger number of carpels.

CRASSUS (literally "dense," "thick," "fat"), a family name in the Roman gens Licinia (plebeian). The most important of the name are the following:

1. PUBLIUS LICINIUS CRASSUS, surnamed *Dives Mucianus*, Roman statesman, orator and jurist, consul, 131 B.C. He was the son of P. Mucius Scaevola (consul 175) and was adopted by a P. Licinius Crassus Dives. An intimate friend of Tiberius Gracchus, he was chosen after his death to take his place on the agrarian commission (see GRACCHUS). In 131 when Crassus was consul with L. Valerius Flaccus, Aristonicus, an illegitimate son of Eumenes II. of Pergamum, laid claim to the kingdom, which had been bequeathed by Attalus III. to Rome. Both consuls were anxious to obtain the command against him; Crassus was pontifex maximus, and Flaccus a flamen of Mars. Crassus declared that Flaccus could not neglect his sacred office, and imposed a conditional fine on him in the event of his leaving Rome. The popular assembly remitted the fine, but Flaccus was ordered to obey the pontifex maximus. Crassus accordingly proceeded to Asia, although in doing so he violated the rule which forbade the pontifex maximus to leave Italy. Nothing is known of his military operations. But in the following year, when he was

making preparations to return, he was surprised near Leucae. He was himself taken prisoner by a Thracian band, and provoked his captors, who were ignorant of his identity, to put him to death. Crassus does not seem to have possessed much military ability, but he was greatly distinguished for his knowledge of law and his accomplished oratory. He had acquired such a mastery of the Greek language that, when he presided over the courts in Asia, he was able to answer each suitor in ordinary Greek or any of the dialects in use.

Cicero, *De oratore*, i. 50; *Philippics*, xi. 8; Plutarch, *Tib. Gracchus*, 21; Livy, *Epit.* 59; Val. Max. iii. 2. 12, viii. 7. 6; Vell. Pat. ii. 4; Justin xxxvi. 4; Orosius v. 10.

2. Lucius Licinius Crassus (140-91 B.C.), the orator, of unknown parentage. At the age of nineteen (or twenty-one) he made his reputation by a speech against C. Papirius Carbo, the friend of the Gracchi. The law passed by him and his colleague Q. Mucius Scaevola during their consulship (95), to prevent those passing as Roman citizens who had no right to the title, was one of the prime causes of the Social War (Cicero, *Pro Balbo*, xxi., *De officiis*, iii. 11). During his censorship Crassus suppressed the newly founded schools of Latin rhetoricians (Aulus Gellius xv. 11). He died from excitement caused by his passionate speech against the consul L. Marcius Philippus, who had insulted the Senate. Crassus is one of the chief speakers in the *De oratore* of Cicero, who has also preserved a few fragments of his speeches.

3. Publius Licinius Crassus, called *Dives*, father of the triumvir. Little is known of him before he became consul in 97, except that he proposed a law regulating the expenses of the table, which met with general approval. During his consulship the practice of magic arts was condemned by a decree of the senate, and human sacrifice was abolished. He was subsequently governor of Spain for some years, during which he gained several successes over the Lusitanians, and on his return in 93 was honoured with a triumph. After the Social War, as censor with L. Julius Caesar, he had the task of enrolling in

new tribes certain of the Latins and Italians as a reward for their loyalty to the Romans, but the proceedings seem to have been interrupted by certain irregularities. They also forbade the introduction of foreign wines and unguents. Crassus committed suicide in 87, to avoid falling into the hands of the Marian party.

Plutarch, Crassus, 4; Aulus Gellius ii. 24; Macrobius, *Saturnalia*, ii. 13; Livy, *Epit.* 80; Pliny, *Nat. Hist.* xxx. 3; Appian, *Bell. Civ.* i. 72; Festus, under *Referri*.

4. MARCUS LICINIUS CRASSUS (c. 115-53 B.C.), the Triumvir, surnamed *Dives* (rich) on account of his great wealth. His wealth was acquired by traffic in slaves, the working of silver mines, and judicious purchases of lands and houses, especially those of proscribed citizens. The proscription of Cinna obliged him to flee to Spain; but after Cinna's death he passed into Africa, and thence to Italy, where he ingratiated himself with Sulla. Having been sent against Spartacus, he gained a decisive victory, and was honoured with a minor triumph. Soon afterwards he was elected consul with Pompey, and (70) displayed his wealth by entertaining the populace at 10,000 tables, and distributing sufficient corn to last each family three months. In 65 he was censor, and in 60 he joined Pompey and Caesar in the coalition known as the first triumvirate. In 55 he was again consul with Pompey, and a law was passed, assigning the provinces of the two Spains and Syria to the two consuls for five years. Crassus was satisfied with Syria, which promised to be an inexhaustible source of wealth. Having crossed the Euphrates he hastened to make himself master of Parthia; but he was defeated at Carrhae (53 B.C.) and taken prisoner by Surenas, the Parthian general, who put him to death by pouring molten gold down his throat. His head was cut off and sent to Orodes, the Parthian king. Crassus was a man of only moderate abilities, and owed his importance to his great wealth.

See Plutarch's *Life*; also CAESAR, GAIUS JULIUS; POMPEY; ROME: *History*, II. "The Republic."

CRATER, the cavity at the mouth of a volcanic duct, usually funnel-shaped or presenting the form of a bowl, whence the name, from the Gr. κρατήρ, a bowl. A volcanic hill may have a single crater at, or near, its summit, or it may have several minor craters on its flanks: the latter are sometimes called "adventitious craters" or "craterlets." Much of the loose ejected material, falling in the neighbourhood of the vent, rolls down the inner wall of the crater, and thus produces a stratification with an inward dip. The crater in an active volcano is kept open by intermittent explosions, but in a volcano which has become dormant or extinct the vent may become plugged, and the bowl-shaped cavity may subsequently be filled with water, forming a crater-lake, or as it is called in the Eifel a *Maar*. In some basaltic cones, like those of the Sandwich Islands, the crater may be a broad shallow pit, having almost perpendicular walls, with horizontal stratification. Such hollows are consequently called pit-craters. The name *caldera* (Sp. for cauldron) was suggested for such pits by Capt. C. E. Dutton, who regarded them as having been formed by subsidence of the walls. The term caldera is often applied to bowl-shaped craters in Spanish-speaking countries. (See VOLCANO.)

CRATES, Athenian actor and author of comedies, flourished about 470 B.C. He was regarded as the founder of Greek comedy proper, since he abandoned political lampoons on individuals, and introduced more general subjects and a

well-developed plot (Aristotle, *Poëtica*, 5). He is stated to have been the first to represent the drunkard on the stage (Aristophanes, *Knights*, 37 ff.).

Fragments in Meineke, *Poëtarum Comicorum Graecorum fragmenta*, i.

CRATES, the name of two Greek philosophers.

1. Crates, of Athens, successor of Polemo as leader of the Old Academy.

2. Crates, of Thebes, a Cynic philosopher of the latter half of the 4th century. He was the famous pupil of Diogenes, and the last great representative of Cynicism. It is said that he lost his ample fortune owing to the Macedonian invasion, but a more probable story is that he sacrificed it in accordance with his principles, directing the banker, to whom he entrusted it, to give it to his sons if they should prove fools, but to the poor if his sons should prove philosophers. He gave up his life to the attainment of virtue and the propagation of ascetic self-control. His habit of entering houses for this purpose, uninvited, earned him the nickname Θυρεπανοίκτης ("Door-opener"). His marriage with Hipparchia, daughter of a wealthy Thracian family, was in curious contrast to the prosaic character of his life. Attracted by the nobility of his character and undeterred by his poverty and ugliness, she insisted on becoming his wife in defiance of her father's commands. The date of his death is unknown, though he seems to have lived into the 3rd century. His writings were few. According to Diogenes Laërtius, he was the author of a number of letters on philosophical subjects; but those extant under the name of Crates (R. Hercher, *Epistolographi Graeci*, 1873) are, spurious, the work of later rhetoricians. Diogenes Laërtius credits him with a short poem, Παίγνια,

and several philosophic tragedies. Plutarch's life of Crates is lost. The great importance of Crates' work is that he formed the link between Cynicism and the Stoics, Zeno of Citium being his pupil.

See N. Postumus, *De Cratete Cynico* (1823); F. Mullach, *Frag. Philosophorum Graecorum*, ii. (1867); E. Wellmann in Ersch and Gruber's *Allgemeine Encyklopädie*; Diog. Laërt. vi. 85-93, 96-98.

CRATES, of Mallus in Cilicia, a Greek grammarian and Stoic philosopher of the 2nd century B.C., leader of the literary school and head of the library of Pergamum. His principles were opposed to those of Aristarchus, the leader of the Alexandrian school. He was the chief representative of the allegorical theory of exegesis, and maintained that Homer intended to express scientific or philosophical truths in the form of poetry. About 170 B.C. he visited Rome as ambassador of Attalus II., king of Pergamum; and having broken his leg and been compelled to stay there for some time, he delivered lectures which gave the first impulse to the study of grammar and criticism among the Romans (Suetonius, *De grammaticis*, 2). His chief work was a critical and exegetical commentary on Homer.

See C. Wachsmuth, *De Cratete Mallota* (1860), containing an account of the life, pupils and writings of Crates; J. E. Sandys, *Hist. of Class. Schol.* i. 156 (ed. 2, 1906).

CRATINUS (c. 520-423 B.C.), Athenian comic poet, chief representative of the old, and founder of political, comedy. Hardly anything is known of his life, and only fragments of his works have been preserved. But a good idea of their character can be gained from the opinions of his contemporaries, especially Aristophanes. His comedies were chiefly distinguished by their direct and vigorous political satire, a marked exception being the burlesque Ὀδυσσεῖς, dealing with the story of Odysseus in the cave of Polyphemus, probably written while a law was in force forbidding all political references on the stage. They were also remarkable for the absence of the parabasis and chorus. Persius calls the author "the bold," and even Pericles at the height of his power did not escape his vehement attacks, as in the *Nemesis* and *Archilochi*, the last-named a lament for the loss of the recently deceased Cimon, with whose conservative sentiments Cratinus was in sympathy. The *Panoptae* was a satire on the sophists and omniscient speculative philosophers of the day. Of his last comedy the plot has come down to us. It was occasioned by the sneers of Aristophanes and others, who declared that he was no better than a doting drunkard. Roused by the taunt, Cratinus put forth all his strength, and in 423 B.C. produced the Πυτίνη, or *Bottle*, which gained the first prize over the *Clouds* of Aristophanes. In this comedy, good-humouredly making fun of his own weakness, Cratinus represents the comic muse as the faithful wife of his youth. His guilty fondness for a rival—the bottle—has aroused her jealousy. She demands a divorce from the archon; but her husband's love is not dead and he returns penitent to her side. In Grenfell and Hunt's *Oxyrhynchus Papyri*, iv. (1904), containing a further instalment of their edition of the Behnesa papyri discovered by them in 1896-1897, one of the greatest curiosities is a scrap of paper bearing the argument of a play by Cratinus,—the *Dionysalexandros* (*i.e.* Dionysus in the part of Paris), aimed against Pericles; and the epitome reveals something of its wit and point. The style of Cratinus has been likened to that of Aeschylus; and Aristophanes, in the *Knights*, compares him to a rushing torrent. He appears to have been fond of lofty diction and bold figures, and was most successful in the lyrical parts

of his dramas, his choruses being the popular festal songs of his day. According to the statement of a doubtful authority, which is not borne out by Aristotle, Cratinus increased the number of actors in comedy to three. He wrote 21 comedies and gained the prize nine times.

Fragments in Meineke, *Fragmenta Comicorum Graecorum*, or Kock, *Comicorum Atticorum fragmenta*. A younger Cratinus flourished in the time of Alexander the Great. It is considered that some of the comedies ascribed to the elder Cratinus were really the work of the younger.

CRATIPPUS (fl. c. 375 B.C.), Greek historian. There are only three or four references to him in ancient literature, and his importance is due to the fact that he has been identified by several scholars (*e.g.* Blass) with the author of the historical fragment discovered by Grenfell and Hunt, and published by them in *Oxyrhynchus Papyri*, vol. v. It may be regarded as a fairly certain inference from a passage in Plutarch (*De Gloria Atheniensium*, p. 345 E, ed. Bernardakis, ii. p. 455) that he was an Athenian writer, intermediate in date between Thucydides and Xenophon, and that his work continued the narrative of Thucydides, from the point at which the latter historian stopped (410 B.C.) down to the battle of Cnidus (394 B.C.).

The fragments are published in C. Müller's *Fragmenta Historicorum Graecorum*. For authorities see under THEOPOMPUS.

CRATIPPUS, of Mitylene (1st century B.C.), Peripatetic philosopher, contemporary with Cicero, whose son he taught at Athens, and by whom he is praised in the *De officiis* as the greatest of his school. He was the friend of Pompey also and shared his flight after the battle of Pharsalia, for the purpose, it is said, of convincing him of the justice of providence. Brutus, while at Athens after the assassination of Caesar, attended his lectures. The freedom of Rome was conferred upon him by Caesar, at the request of Cicero. The only work attributed to him is a treatise on divination, but his reputation may be gauged by the fact that in 44 B.C. the Areopagus invited him to succeed Andronicus of Rhodes as scholarch. He seems to have held that, while motion, sense and appetite cannot exist apart from the body, thought reaches its greatest power when most free from bodily influence, and that divination is due to the direct action of the divine mind on that faculty of the human soul which is not dependent on the body.

Cicero, *De divinatione*, i. 3, 32, 50, ii. 48, 52; *De officiis*, i. 1, iii. 2; Plutarch, *Cicero*, 24.

CRAU (from a Celtic root meaning “stone”), a region of southern France, comprised in the department of Bouches-du-Rhone, and bounded W. by the canal from Arles to Port du Bouc and the Rhone, N. by the chain of the Alpines separating it from an analogous region, the Petite Crau, E. by the hills around Salon and Istres, S. by the gulf of Fos, an inlet of the Mediterranean Sea. Covering an area of about 200 sq. m., the Crau is a low-lying, waterless plain, owing its formation to a sudden inundation, according to some authorities, of the Rhone and the Durance, according to others of the Durance alone. Its surface is formed chiefly of stones varying in size from an egg to a

man’s head; these, mixed with a proportion of fine soil, overlie a subsoil formed of stones cemented into a hard mass by deposits of calcareous mud, beneath which lies a bed of loose stones, once the sea-bed. Naturally sterile and poor in lime, the Crau is adapted for agriculture by the process of warping, carried out by means of the Canal de Craponne, which dates from the middle of the 16th century; about one-quarter of the region in the north and east has thus been covered by the rich deposits of the waters of the Durance. The soil also responds in places to deep cultivation and the application of artificial manures. By these aids, uncultivated land, which before supplied only rough and scanty pasture for a few sheep, has been fitted for the growth of the vine, olive and other fruits; where irrigation is practicable, water-meadows have been formed. The dryness of the climate is unfavourable to the production of cereals.

CRAUCK, GUSTAVE (1827-1905), French sculptor, was born and died at Valenciennes, where a special museum for his works was erected in his honour. Though little known to the world at large during his long life, he ranks among the best modern sculptors of France. At Paris his “Coligny” monument is in the rue de Rivoli; his “Victory” in the Place des Arts et Métiers; and “Twilight” in the Avenue de l’Observatoire. Among his finest works is his “Combat du Centaure,” on which he was engaged for thirty years, the figure of the Lapith having been modelled after the athlete, Eugene Sandow. In 1907 an exhibition of his works was held in the École des Beaux-Arts.

CRAUFURD, QUINTIN (1743-1819), British author, was born at Kilwinnock on the 22nd of September 1743. In early life he went to India, where he entered the service of the East India Company. Returning to Europe before the age of forty with a handsome fortune, he settled in Paris, where he gave himself to the cultivation of literature and art, and formed a good library and collection of paintings, coins and other objects of antiquarian interest. Craufurd was on intimate terms with the French court, especially with Marie Antoinette, and was one of those who arranged the flight to Varennes. He escaped to Brussels, but in 1792 he returned to Paris in the hope of rescuing the royal prisoners. He lived among the French *émigrés* until the peace of Amiens made it possible to return to Paris. Through Talleyrand's influence he was able to remain in Paris after the war was renewed, and he died there on the 23rd of November 1819.

He wrote, among other works, *The History, Religion, Learning and Manners of the Hindus* (1790), *Secret History of the King of France and his Escape from Paris* (first published in 1885), *Researches concerning the Laws, Theology, Learning and Commerce of Ancient and Modern India* (1817), *History of the Bastille* (1798), *On Pericles and the Arts in Greece* (1815), *Essay on Swift and his Influence on the British Government* (1808), *Notice sur Marie Antoinette* (1809), *Mémoires de Mme du Hausset* (1808).

CRAUFURD, ROBERT (1764-1812), British major-general, was born at Newark, Ayrshire, on the 5th of May 1764, and entered the 25th Foot in 1779. As captain in the 75th regiment he first saw active service against Tippoo Sahib in 1790-92. The next year he was employed, under his brother Charles,

with the Austrian armies operating against the French. Returning to England in 1797, he soon saw further service, as a lieutenant-colonel, on Lake's staff in the Irish rebellion. A year later he was British commissioner on Suvarov's staff when the Russians invaded Switzerland, and at the end of 1799 was in the Helder expedition. From 1801 to 1805 Lieutenant-Colonel Craufurd sat in parliament for East Retford, but in 1807 he resumed active service with Whitelock in the unfortunate Buenos Aires expedition. He was almost the only one of the senior officers who added to his reputation in this affair, and in 1808 he received a brigade command under Sir John Moore. His regiments were heavily engaged in the earlier part of the famous retreat, but were not present at Corunna, having been detached to Vigo, whence they returned to England. Later in 1809, once more in the Peninsula, Brigadier-General Craufurd was three marches or more in rear of Wellesley's army when a report came in that a great battle was in progress. The march which followed is one almost unparalleled in military annals. The three battalions of the "Light Brigade" (43rd, 52nd and 95th) started in full marching order, and arrived at the front on the day after the battle of Talavera, having covered 62 m. in twenty-six hours. Beginning their career with this famous march, these regiments and their chief, under whom served such men as Charles and William Napier, Shaw and Colborne, soon became celebrated as one of the best corps of troops in Europe, and every engagement added to their laurels. Craufurd's operations on the Coa and Agueda in 1810 were daring to the point of rashness, but he knew the quality of the men he led better than his critics did, and though Wellington censured him for his conduct, he at the same time increased his force to a division by the addition of two picked regiments of Portuguese *Caçadores*. The conduct of the renowned "Light Division" at Busaco is described by Napier in one of his most vivid passages. The winter of 1810-1811 Craufurd spent in England, and his division was commanded in the interim by another officer, who did not display much ability. He reappeared on the field of the battle of Fuentes d'Onoro amidst the cheers of his men, and nothing could show his genius for war better than his conduct on

this day, in covering the strange readjustment of his line which Wellington was compelled to make in the face of the enemy. A little later he obtained major-general's rank; and on the 19th of January 1812, as he stood on the glacis of Ciudad Rodrigo, directing the stormers of the Light Division, he fell mortally wounded. His body was carried out of action by his staff officer, Lieutenant Shaw of the 43rd (see SHAW KENNEDY), and, after lingering four days, he died. He was buried in the breach of the fortress where he had met his death, and a monument in St Paul's cathedral commemorates Craufurd and Mackinnon, the two generals killed at the storming of Ciudad Rodrigo. The exploits of Craufurd and the Light Division are amongst the most cherished traditions of the British and Portuguese armies. One of the quickest and most brilliant, if not the very first, of Wellington's generals, he had a fiery temper, which rendered him a difficult man to deal with, but to the day of his death he possessed the confidence and affection of his men in an extraordinary degree.

His elder brother, Lieutenant-General Sir CHARLES CRAUFURD (1761-1821), entered the 1st Dragoon Guards in 1778. Made captain in the Queen's Bays in 1785, he became the equerry and intimate friend of the duke of York. He studied in Germany for some time, and, with his brother Robert's assistance, translated Tielcke's book on the Seven Years' War (*The Remarkable Events of the War between Prussia, Austria and Russia from 1756 to 1763*). As aide-de-camp he accompanied the duke of York to the French War in 1793, and was at once sent as commissioner to the Austrian headquarters, with which he was present at Neerwinden, Caesar's Camp, Famars, Landrecies, &c. Major in 1793, and lieutenant-colonel in 1794, he returned to the English army in the latter year, and on one occasion distinguished himself at the head of two squadrons, taking 3 guns and 1000 prisoners. When the British army left the continent Craufurd was again attached to the Austrian army, and was present at the actions on the Lahn, the combat of Neumarkt, and the battle of Amberg. At the last battle a severe wound rendered him incapable of further service, and cut short a promising career. He succeeded his brother Robert as member

of parliament for East Retford (1806-1812). He died in 1821, having become a lieutenant-general and a G.C.B.

CRAVAT (from the Fr. *cravate*, a corruption of "Croat"), the name given by the French in the reign of Louis XIV. to the scarf worn by the Croatian soldiers enlisted in the royal Croatian regiment. Made of linen or muslin with broad edges of lace, it became fashionable, and the name was applied both in England and France to various forms of neckerchief worn at different times, from the loosely tied lace cravat with long flowing ends, called a "Steinkirk" from the battle of 1692 of that name, to the elaborately folded and lightly starched linen or cambric neckcloth worn during the period of Beau Brummell.

CRAVEN, PAULINE MARIE ARMANDE AGLAÉ (1808-1891), French author, the daughter of an *émigré* Breton nobleman, was born in London on the 12th of April 1808. Her father, the comte Auguste de la Ferronays, was a close friend of the duc de Berri, whom he accompanied on his return to France in 1814. He and his wife were attached to the court of Charles X. at the Tuileries, but a momentary quarrel with the duc de Berri made retirement imperative to the count's sense of honour. He was appointed ambassador at St Petersburg, and in 1827 became foreign minister in Paris. Pauline was thus brought up in brilliant surroundings, but her strongest impressions were those

which she derived from the group of Catholic thinkers gathered round Lamennais, and her ardent piety furnishes the key of her life. In 1828 her father was sent to Rome, and Pauline, at the suggestion of Alexis Rio, the art critic, made her first literary essay with a description of the emotions she experienced on a visit to the catacombs. At the revolution of July, M. de la Ferronays resigned his position, and retired with his family to Naples. Here Pauline met her future husband, Augustus Craven, who was then attaché to the British embassy. His father, Keppel Richard Craven, the well-known supporter of Queen Caroline, objected to his son's marriage with a Catholic; but his scruples were overcome, and immediately after the marriage (1834) Augustus Craven was received into the Roman Catholic Church. Mrs Craven, whose family life as revealed in the *Récit d'une sœur* was especially tender and intimate, suffered several severe bereavements in the years following on her marriage. The Cravens lived abroad until 1851, when the death of Keppel Craven made his son practically independent of his diplomatic career, in which he had not been conspicuously successful. He stood unsuccessfully for election to parliament for Dublin in 1852, and from that time retired into private life. They went to live at Naples in 1853, and Mrs Craven began to write the history of the family life of the la Ferronays between 1830 and 1836, its incidents being grouped round the love story of her brother Albert and his wife Alexandrine. This book, the *Récit d'une sœur* (1866, Eng. trans. 1868), was enthusiastically received and was awarded a prize by the French Academy. Straitened circumstances made it desirable for Mrs Craven to earn money by her pen. *Anne Sévérin* appeared in 1868, *Fleurange* in 1871, *Le Mot d'énigme* in 1874, *Le Valbriant* (Eng. trans., *Lucia*) in 1886. Among her miscellaneous works may be mentioned *La Sœur Natalie Narischkin* (1876), *Deux Incidents de la question catholique en Angleterre* (1875), *Lady Georgiana Fullerton, sa vie et ses œuvres* (1888). Mrs Craven's charming personality won her many friends. She was a frequent guest with Lord Palmerston, Lord Ellesmere and Lord Granville. She died in Paris on the 1st

of April 1891. Her husband, who died in 1884, translated the correspondence of Lord Palmerston and of the Prince Consort into French.

See *Memoir of Mrs Augustus Craven* (1894), by her friend Mrs Mary Catherine Bishop; also *Paolina Craven*, by T. F. Ravaschieri Fieschi (1892). There is a biography of Mrs Craven's father, "En Emigration," in Étienne Lamy's *Témoins des jours passés* (1907).

CRAVEN, WILLIAM CRAVEN, Earl of (1608-1697), eldest son of Sir William Craven, lord mayor of London, and of Elizabeth, daughter of Alderman William Whitmore, was born in June 1608, matriculated at Trinity College, Oxford, in 1623, and joined the society of the Middle Temple in 1624. He had already inherited his father's vast fortune by the latter's death in 1618, and before he came of age he had distinguished himself in the military service of the princes of Orange. Returning home he was knighted and created Baron Craven of Hampstead Marshall in Berkshire in 1627. He early showed enthusiasm for the cause of the unfortunate king and queen of Bohemia, driven from their dominions, and in 1632 joined Frederick in a military expedition to recover the Palatinate, meeting Gustavus Adolphus at Höchst, whose praise he gained by being the first, though wounded, to mount the breach at the capture of Kreuznach on the 22nd of February. The Swedish king, however, refused to allow the elector an independent command for the defence of the Palatinate, and Craven returned to England. In May 1633 he was placed on the council of Wales. In 1637 he took part in a second expedition in aid of the palatine family on the Lower Rhine, with the young elector Charles Louis and his brother Rupert, and offered as a contribution the sum of £30,000, but their forces were defeated near Wessel and Craven wounded and taken prisoner together with Rupert. He purchased his freedom in 1639, and then joined the small court of the exiled queen Elizabeth at the

Hague and at Rhenen, supplying her generously with funds on the cessation of her English pension owing to the outbreak of the Civil War. He contributed also large sums in aid of Charles I., and, after his execution, of Charles II., the amount bestowed upon the latter being alone computed at £50,000,[1] notwithstanding that since 1651 the greater part of his estates had been confiscated by the parliament and his house at Caversham reduced to ruins.[2] At the Restoration he accompanied Charles to England, regained his estates, and was rewarded with offices and honours. He was made colonel of several regiments including the Coldstream, and in 1667 lieutenant-general and also high steward of Cambridge University. In 1666 he became a privy councillor, but was not included later in 1679 in Sir William Temple's remodelled council.[3] In 1668 he became a governor of the Charterhouse, was appointed lord-lieutenant of Middlesex, and master of the Trinity House in 1670; and in 1673 a commissioner for Tangier. He was one of the lords proprietors of Carolina and a member of the Fishery Committee.

In March 1664 he was created viscount and earl of Craven. Meanwhile his devotion to the interests of the queen of Bohemia was unceasing, and on her return to England he offered her hospitality at his house in Drury Lane, where she remained till February 1662. At her death, within a fortnight afterwards, she bequeathed to Craven her papers and her valuable collection of portraits, but there is no foundation for the belief entertained later that she had married him. In 1682 he became the guardian of Ruperta, the natural daughter of his old comrade in arms, Prince Rupert. He was again made a privy councillor and lieutenant-general of the forces by James on his accession, and at the age of eighty was in command of the Coldstreams at Whitehall on the 17th of December 1688 when the Dutch troops arrived. He refused to withdraw them at the bidding of Count Solms, the Dutch commander, but obeyed later James's own orders to retire. His public career now closed and he filled no office after the revolution. Although his claims upon the gratitude of the Stuart royal family were immense, Craven had never been considered a

possible candidate for high political place. His ability was probably small, and he is spoken of with little respect in the *Verney Papers* and by the electress Sophia in her *Memoirs*. The latter retails some foolish observations made by Craven, and Pepys was disgusted at his coarse and stupid jests at the Fishery Board, where his "very confused and very ridiculous proceedings" are also censured.[4] His military prowess, however, his generosity and his public spirit are undoubted. He showed great activity during the plague and fire of London. He was a patron of letters and a member of the Royal Society. He inherited Combe Abbey near Coventry from his father, and purchased Hampstead Marshall in Berkshire, where he built a house on the model of Heidelberg Castle.

He died unmarried on the 9th of April 1697, when the earldom became extinct, the barony passing by special remainder to his cousin William, 2nd Baron Craven; the present earl of Craven (the earldom being revived in 1801) is descended from John, a younger brother of the latter. The first Lord Craven's brother John, who was created Baron Craven of Ryton in Shropshire and who died in 1648, was the founder of the Craven scholarships at Oxford and Cambridge universities, of which the first was awarded in 1649.

BIBLIOGRAPHY.—See the article in the *Dict. of Nat. Biography* (and Errata); *Lives of the Princesses of England (Elizabeth, eldest daughter of James I.)*, vol. vi., by M. A. E. Green (1854); *Memoirs of Elizabeth Stuart*, by Miss Benger (1825); *Memoiren der Herzogin Sophie*, ed. by A. Köcher in *Publ. aus den k. preussischen Staatsarchiven*, Bd. iv. (1879); "Briefe der Elisabeth Stuart" in *Bibliothek des litterarischen Vereins* (Stuttgart, 1903), 155, 157; G. E. C.'s *Complete Peerage* (1889), ii. 404; *Lives and Characters of the Most Illustrious Persons* (1713), p. 546; Macaulay's *Hist. of England*, ii. 584 (1858); *Verney Papers* (Camden Soc., 1853); *Cal. of St. Pap. Dom.*; Tracts relating to the confiscation of his estate in Cat. of the British Museum. Much information also doubtless exists in the Craven MSS. at Combe Abbey.

(P. C. Y.)

1 *Verney Papers*, 189 note.

2 Evelyn's *Diary*, June 8th, 1654.

3 *Hist. MSS. Com.; Various Collections*, ii. 394.

4 *Diary*, Oct. 18th and Nov. 18th, 1664, and March 10th, 1665.

CRAWFORD, EARLS OF. The house of Lindsay, of which the earl of Crawford is the head, traces its descent back to the barons of Crawford who flourished in the 12th century, and has included a number of men who have played leading parts in the history of Scotland. It is said that "though other families in Scotland may have been of more historic, none can in genealogical importance equal that of Lindsay," and the Lindsays claim that "the predecessors of the 1st earl of Crawford were barons at the period of the earliest parliamentary records, and that, in fact, they were never enrolled in the modern sense of the term, but were among the *pares*, of which kings are *primi*, from the commencement of recorded history." Again we are told, "the earldom of Crawford, therefore, like those of Douglas, of Moray, Ross, March and others of the earlier times of feudalism, formed a petty principality, an *imperium in imperio*." Moreover, the earls "had also a *concilium*, or petty parliament, consisting of the great vassals of the earldom, with whose advice they acted on great and important occasions."

Sir James Lindsay (d. 1396), 9th lord of Crawford in Lanarkshire, was the only son of Sir James Lindsay, the 8th lord (d. c. 1357), and was related to King Robert II.; he was descended from Sir Alexander Lindsay of Luffness (d. 1309), who obtained Crawford and other estates in 1297 and who was

high chamberlain of Scotland. The 9th lord fought at Otterburn, and Froissart tells of his wanderings after the fight. He was succeeded by his cousin, Sir David Lindsay (c. 1360-1407), son of Sir Alexander Lindsay of Glenesk (d. 1382), and in 1398 Sir David, who married a daughter of Robert II., was made earl of Crawford.

The most important of the early earls of Crawford are the 4th and the 5th earls. Alexander Lindsay, the 4th earl (d. 1454), called the "tiger earl," was, like his father David the 3rd earl, who was killed in 1446, one of the most powerful of the Scottish nobles; for some time he was in arms against King James II., but he submitted in 1452. His son David, the 5th earl (c. 1440-1495), was lord high admiral and lord chamberlain; he went frequently as an ambassador to England and was created duke of Montrose in 1488, but the title did not descend to his son. Montrose fought for James III. at the battle of Sauchieburn, and his son John, the 6th earl (d. 1513), was slain at Flodden.

David Lindsay, 8th earl of Crawford (d. 1542), son of Alexander, the 7th earl (d. 1517), had a son Alexander, master of Crawford (d. 1542), called the "wicked master," who quarrelled with his father and tried to kill him. Consequently he was sentenced to death, and the 8th earl conveyed the earldom to his kinsman, David Lindsay of Edzell (d. 1558), a descendant of the 3rd earl of Crawford, thus excluding Alexander and his descendants, and in 1542 David became 9th earl of Crawford. But the 9th earl, although he had at least two sons, named the wicked master's son David as his heir, and consequently in 1558 the earldom came back to the elder line of the Lindsays, the 9th earl being called the "interpolated earl."

David Lindsay, 10th earl of Crawford (d. 1574), was a supporter of Mary Queen of Scots; he was succeeded by his son David (c. 1547-1607) as 11th earl. This David, a grandson of Cardinal Beaton, was concerned in some of the risings under James VI.; he was converted to Roman Catholicism and was in communication with the Spaniards about an invasion of England. After his death the earldom passed to his son David (d. 1621), a lawless ruffian, and

then to his brother, Sir Henry Lindsay or Charteris (d. 1623), who became 13th earl of Crawford. Sir Henry's three sons became in turn earls of Crawford, the youngest, Ludovic, succeeding in 1639.

Ludovic Lindsay, 16th earl of Crawford (1600-1652), took part in the strange plot of 1641 called the "incident." Having joined Charles I. at Nottingham in 1642, he fought at Edgehill, at Newbury and elsewhere during the Civil War; in 1644, just after Marston Moor, the Scottish parliament declared he had forfeited his earldom, and, following the lines laid down when this was regranted in 1642, it was given to John Lindsay, 1st earl of Lindsay. Ludovic was taken prisoner at Newcastle in 1644 and was condemned to death, but the sentence was not carried out, and in 1645 he was released by Montrose, under whom he served until the surrender of the king at Newark. Later he was in Ireland and in Spain and he died probably in France in 1652. He left no issue.

The earl of Lindsay, who thus supplanted his kinsman, belonged to the family of Lindsay of the Byres, a branch of the Lindsays descended from Sir David Lindsay of Crawford (d. c. 1355), the grandfather of the 1st earl of Crawford. Sir David's descendant, Sir John Lindsay of the Byres (d. 1482), was created a lord of parliament as Lord Lindsay of the Byres in 1445, and his son David, the 2nd lord (d. 1490), fought for James III. at the battle of Sauchieburn. The most prominent member of this line was Patrick, 6th Lord Lindsay of the Byres (d. 1589), a son of John the 5th lord (d. 1563), who was a temperate member of the reforming party. Patrick was one of the first of the Scottish nobles to join the reformers, and he was also one of the most violent. He fought against the regent, Mary of Lorraine, and the French; then during a temporary reconciliation he assisted Mary, queen of Scots, to crush the northern rebels at Corrichie in 1562, but again among the enemies of the queen he took part in the murder of David Rizzio and signed the bond against Bothwell, whom he wished to meet in single combat after the affair at Carberry Hill in 1565. Lindsay, who was a brother-in-law and ally of the

regent Murray, carried Mary to Lochleven castle and obtained her signature to the deed of abdication; he fought against her at Langside, and after Murray's murder he was one of the chiefs of the party which supported the throne of James VI. In 1578, however, he was among those who tried to drive Morton from power, and in 1582 he helped to seize the person of the king in the plot called the "raid of Ruthven," afterwards escaping to England. Lindsay had returned to Scotland when he died on the 11th of December 1589. His successor was his son, James the 7th lord (d. 1601).

Patrick's great-grandson, John Lindsay, 17th earl of Crawford and 1st earl of Lindsay (c. 1598-1678), was the son of Robert Lindsay, 9th Lord Lindsay of the Byres, whom he succeeded as 10th lord in 1616. In 1633 he was created earl of Lindsay, and having become a leader of the Covenanters he marched with the Scottish army into England in 1644 and was present at Marston Moor; in 1644 also he obtained the earldom of Crawford in the manner already mentioned. In the same year he became lord high treasurer of Scotland, and in 1645 president of the parliament. Having fought against Montrose at Kilsyth, the earl of Crawford-Lindsay, as he was called, changed sides, and in 1647 he signed the "engagement" for the release of Charles I., losing all his offices by the act of classes when his enemy, the marquess of Argyll, obtained the upper hand. After the defeat of the Scots at Dunbar, however, Crawford regained his influence in Scottish politics, but from 1651 to 1660 he was a prisoner in England. In 1661 he was restored to his former dignities, but his refusal to abjure the covenant compelled him to resign them two years later. His son, William, 18th earl of Crawford and 2nd earl of Lindsay (1644-1698), was, like his father, an ardent covenanter; in 1690 he was president of the Convention parliament. Mr Andrew Lang says this earl was "very poor, very presbyterian, and his letters, almost alone among those of the statesmen of the period, are rich in the texts and unctuous style of an older generation."

William's grandson, John Lindsay, 20th earl of Crawford and 4th earl of Lindsay (1702-1749), won a high reputation as a soldier. He held a command in the Russian army, seeing service against the Turk, and he also served against the same foe under Prince Eugene. Having returned to the English army he led the life-guards at Dettingen and distinguished himself at Fontenoy; later he served against France in the Netherlands. He left no sons when he died in December 1749, and his kinsman, George Crawford-Lindsay, 4th Viscount Garnock (c. 1723-1781), a descendant of the 17th earl, became 21st earl of Crawford and 5th earl of Lindsay. When George's son, George, the 22nd earl (1758-1808), died unmarried in January 1808, the earldoms of Crawford and Lindsay were separated, George's kinsman, David Lindsay (d. 1809), a descendant of the 4th Lord Lindsay of the Byres, becoming 7th earl of Lindsay. Both David and his successor Patrick (d. 1839) died without sons, and in 1878 the House of Lords decided that Sir John Trotter Bethune, Bart. (1827-1894), also a descendant of the 4th Lord Lindsay of the Byres, was entitled to the earldom. In 1894 John's cousin, David Clark Bethune (b. 1832), became 11th earl of Lindsay.

The earldom of Crawford remained dormant from 1808, when this separation took place, until 1848, when the House of Lords adjudged it to James Lindsay, 7th earl of Balcarres.

The earls of Balcarres are descended from John Lindsay, Lord Menmuir (1552-1598), a younger son of David Lindsay, 9th earl of Crawford. John, who bought the estate of Balcarres in Fifeshire, became a lord of session as Lord Menmuir in 1581; he was a member of the Scottish privy council and one of the commissioners of the treasury called the Octavians. He had great influence with James VI., helping the king to restore episcopacy after he had become, in 1595, keeper of the privy seal and a secretary of state. Menmuir, a man of great intellectual attainments, left two sons, the younger, David, succeeding to the family estates on his brother's death in 1601. David (c.

1586-1641), a notable alchemist, was created Lord Lindsay of Balcarres in 1633, and in 1651 his son Alexander was made earl of Balcarres.

Alexander Lindsay, 1st earl of Balcarres (1618-1659), the "Rupert of the Covenant," fought against Charles I. at Marston Moor, at Alford and at Kilsyth, but later he joined the royalists, signing the "engagement" for the release of the king in 1647, and having been created earl of Balcarres took part in Glencairn's rising in 1653. Richard Baxter speaks very highly of the earl, who died at Breda in August 1659. His son Charles (d. 1662) became 2nd earl of Balcarres, and another son, Colin (c. 1654-1722), became 3rd earl. Colin, who was perhaps the most trusted of the advisers of James II., wrote some valuable *Memoirs touching the Revolution in Scotland, 1688-1690*; these were first published in 1714, and were edited for the Bannatyne Club by the 25th earl of Crawford in 1841. Having been allowed to return to Scotland after an exile in France, the earl joined the Jacobite rising in 1715. His successor was his son Alexander, the 4th earl (d. 1736), who was followed by another son, James, the 5th earl (1691-1768), who fought for the Stuarts at Sheriffmuir. Afterwards James was pardoned and entered the English army, serving under George II. at Dettingen. This earl wrote some *Memoirs of the Lindsays*, which were completed by his son Alexander, the 6th earl (1752-1825). Alexander was with the English troops in America during the struggle for independence, and was governor of Jamaica from 1794 to 1801, filling a difficult position with great credit to himself. He became a general in 1803, and died at Haigh Hall, near Wigan, which he had received through his wife, Elizabeth Dalrymple (1759-1816), on the 27th of May 1825. This earl did not claim the earldom of Crawford, although he became earl *de jure* in 1808, but in 1843 his son James Lindsay (1783-1869) did so, and in 1848 the claim was allowed by the House of Lords. James was thus 24th earl of Crawford and 7th earl of Balcarres; in 1826 he had been created a peer of the United Kingdom as Baron Wigan of Haigh Hall.

His son, Alexander William Crawford Lindsay, 25th earl of Crawford (1812-1880), was born at Muncaster Castle, Cumberland, on the 16th of October 1812, and educated at Eton and Cambridge. He travelled much in Europe and the East, and was most learned in genealogy and history. His more important works include *Lives of the Lindsays* (3 vols., 1849), *Letters on Egypt, Edom and the Holy Land* (1838), *Sketches of the History of Christian Art* (1847 and 1882), *Etruscan Inscriptions Analysed* (1872), and *The Earldom of Mar during 500 years* (1882). He succeeded to the title in September 1869, and died at Florence on the 13th of December 1880. A year later it was discovered that the family vault at Dunecht had been broken into and the body stolen. It was not until the 18th of July 1882 that the police, acting on the confession of an eye-witness of the desecration, found the remains, which were then reinterred at Haigh Hall, Wigan.

His only son, James Ludovic Lindsay, 26th earl of Crawford (1847-), British astronomer and orientalist, was born at St Germain-en-Laye, France, on the 28th of July 1847. Educated at Eton and Trinity College, Cambridge, he devoted himself to astronomy, in which he early achieved distinction. In 1870 he went to Cadiz to observe the eclipse of the sun, and, in 1874, to Mauritius to observe the transit of Venus. In the interval, with the assistance of his father, he had built an observatory at Dunecht, Aberdeenshire, which in 1888 he presented, together with his unique library of astronomical and mathematical works, to the New Royal Observatory on Blackford Hill, Edinburgh, where they were installed in 1895. His services to science were recognized by his election to the presidentship of the Royal Astronomical Society in 1878 and 1879 in succession to Sir William Huggins, and to the fellowship of the Royal Society in 1878. He also received the degree of LL.D. from Edinburgh University in 1882, and in the following year was nominated honorary associate of the Royal Prussian Academy of Sciences. An enthusiastic bibliophile, he became a trustee of the British Museum, and acted for a term as president of the Library Association. To the free library of Wigan, Lancashire, he gave a series of oriental and English MSS. of the 9th

to the 19th centuries in illustration of the progress of handwriting, while for the use of specialists and students he issued the invaluable *Bibliotheca Lindesiana*. He represented Wigan in the House of Commons from 1874 till his succession to the title in 1880.

Another title held by the Lindsays was that of Spynie, Sir Alexander Lindsay (c. 1555-1607), created Baron Spynie in 1590, being a younger son of the 10th earl of Crawford. The 2nd Lord Spynie was Alexander's son, Alexander (d. 1646), who served in Germany under Gustavus Adolphus and assisted Charles I. in Scotland during the Civil War; and the 3rd lord was the latter's son, George. When George, a royalist who was taken prisoner at the battle of Worcester, died in 1671 this title became extinct.

The dukedom of Montrose, which had lapsed on the death of the 5th earl of Crawford in 1495 and had been revived in 1707 in the Graham family, was claimed in 1848 by the 24th earl of Crawford, but in 1853 the House of Lords gave judgment against the earl.

The Lindsays have furnished the Scottish church with several prelates. John Lindsay (d. 1335) was bishop of Glasgow; Alexander Lindsay (d. 1639) was bishop of Dunkeld until he was deposed in 1638; David Lindsay (d. c. 1641) was bishop of Brechin and then of Edinburgh until he, too, was deposed in 1638; and a similar fate attended Patrick Lindsay (1566-1644), bishop of Ross from 1613 to 1633 and archbishop of Glasgow from 1633 to 1638. Perhaps the most famous of the Lindsay prelates was David Lindsay (c. 1531-1613), a nephew of the 9th earl of Crawford. David, who married James VI. to Anne of Denmark at Upsala, was one of the leaders of the Kirk party; he became bishop of Ross under the new scheme for establishing episcopacy in 1600.

See Lord Lindsay (25th earl of Crawford), *Lives of the Lindsays* (1849); A. Jervise, *History and Traditions of the Land of the Lindsays* (1882); G. E. C(okayne), *Complete Peerage* (1887-1898); H. T. Folkard,

A Lindsay Record (1899); and Sir J. B. Paul's edition of the *Scots Peerage* of Sir R. Douglas, vol. iii. (1906).

CRAWFORD, FRANCIS MARION (1854-1909), American author, was born at Bagni di Lucca, Italy, on the 2nd of August 1854, being the son of the American sculptor Thomas Crawford (*q.v.*), and the nephew of Julia Ward Howe, the American poet. He studied successively at St Paul's school, Concord, New Hampshire; Cambridge University; Heidelberg; and Rome. In 1879 he went to India, where he studied Sanskrit and edited the Allahabad *Indian Herald*. Returning to America he continued to study Sanskrit at Harvard University for a year, contributed to various periodicals, and in 1882 produced his first novel, *Mr Isaacs*, a brilliant sketch of modern Anglo-Indian life mingled with a touch of Oriental mystery. This book had an immediate success, and its author's promise was confirmed by the publication of *Dr Claudius* (1883). After a brief residence in New York and Boston, in 1883 he returned to Italy, where he made his permanent home. This accounts perhaps for the fact that, in spite of his nationality, Marion Crawford's books stand apart from any distinctively American current in literature. Year by year he published a number of successful novels: *A Roman Singer* (1884), *An American Politician* (1884), *To Leeward* (1884), *Zoroaster* (1885), *A Tale of a Lonely Parish* (1886), *Marzio's Crucifix* (1887), *Saracinesca* (1887), *Paul Patoff* (1887), *With the Immortals* (1888), *Greifenstein* (1889), *Sant' Ilario* (1889), *A Cigarette-maker's Romance* (1890), *Khaled* (1891), *The Witch of Prague* (1891), *The Three Fates* (1892), *The Children of the King* (1892), *Don Orsino* (1892), *Marion Darche* (1893), *Pietro Ghisleri* (1893), *Katharine Lauderdale* (1894), *Love in Idleness* (1894), *The Ralstons*, (1894), *Casa*

Braccio (1895), *Adam Johnston's Son* (1895), *Taquisara* (1896), *A Rose of Yesterday* (1897), *Corleone* (1897), *Via Crucis* (1899), *In the Palace of the King* (1900), *Marietta* (1901), *Cecilia* (1902), *Whosoever Shall Offend* (1904), *Soprano* (1905), *A Lady of Rome* (1906). He also published the historical works, *Ave Roma Immortalis* (1898), *Rulers of the South* (1900)—renamed *Sicily, Calabria and Malta* in 1904,—and *Gleanings from Venetian History* (1905). In these his intimate knowledge of local Italian history combines with the romancist's imaginative faculty to excellent effect. But his place in contemporary literature depends on his novels. He was a gifted narrator, and his books of fiction, full of historic vitality and dramatic characterization, became widely popular among readers to whom the realism of "problems" or the eccentricities of subjective analysis were repellent, for he could unfold a romantic story in an attractive way, setting his plot amid picturesque surroundings, and gratifying the reader's intelligence by a style at once straightforward and accomplished. The *Saracinesca* series shows him perhaps at his best. *A Cigarette-maker's Romance* was dramatized, and had considerable popularity on the stage as well as in its novel form; and in 1902 an original play from his pen, *Francesco da Rimini*, was produced in Paris by Sarah Bernhardt. He died at Sorrento on the 9th of April 1909.

CRAWFORD, THOMAS (1814-1857), American sculptor, was born of Irish parents in New York on the 22nd of March 1814. He showed at an early age great taste for art, and learnt to draw and to carve in wood. In his nineteenth year he entered the studio of a firm of monumental sculptors in his native city; and in the summer of 1835 he went to Rome and became a pupil of Thorwaldsen. The first work which made him generally known as a man of

genius was his group of “Orpheus entering Hades in Search of Eurydice,” executed in 1839. This was followed by other poetical sculptures, among which were the “Babes in the Wood,” “Flora,” “Hebe and Ganymede,” “Sappho,” “Vesta,” the “Dancers,” and the “Hunter.” Among his statues and busts are especially noteworthy the bust of Josiah Quincy, executed for Harvard University (now in the Boston Athenaeum), the equestrian statue of Washington at Richmond, Virginia, the statue of Beethoven in the Boston music hall, statues of Channing and Henry Clay, and the colossal figure of “Armed Liberty” for the Capitol at Washington. For this building he executed also the figures for the pediment and began the bas-reliefs for the bronze doors, which were afterwards completed by W. H. Rinehart. The groups of the pediment symbolize the progress of civilization in America. Crawford’s works include a large number of bas-reliefs of Scriptural subjects taken from both the Old and the New Testaments. He made Rome his home, but he visited several times his native land—first in 1844 (in which year he married Louisa Ward), next in 1849, and lastly in 1856. He died in London on the 10th of October 1857.

See *Das Lincoln Monument, eine Rede des Senator Charles Sumner*, to which are appended the biographies of several sculptors, including that of Thomas Crawford (Frankfort a. M., 1868); Thomas Hicks, *Eulogy on Thomas Crawford* (New York, 1865).

CRAWFORD, WILLIAM HARRIS (1772-1834), American statesman, was born in Amherst county, Virginia, on the 24th of February 1772. When he was seven his parents moved into Edgefield district, South Carolina, and four years later into Columbus county, Georgia. The death of his father in 1788

left the family in reduced circumstances, and William made what he could by teaching school for six years. He then studied at Carmel Academy for two years, was principal, for a time, of one of the largest schools in Augusta, and in 1798 was admitted to the bar. From 1800 to 1802, with Horatio Marbury, he prepared a digest of the laws of Georgia from 1755 to 1800. From 1803 to 1807 he was a member of the State House of Representatives, becoming during this period the leader of one of two personal-political factions in the state that long continued in bitter strife, occasioning his fighting two duels, in one of which he killed his antagonist, and in the other was wounded in his wrist. From 1807 to 1813 he was a member of the United States Senate, of which he was president *pro tempore* from March 1812 to March 1813. In 1813 he declined the offer of the post of secretary of war, but from that year until 1815 was minister to the court of France. He was then secretary of war in 1815-1816, and secretary of the treasury from 1816 to 1825. In 1816 in the congressional caucus which nominated James Monroe for the presidency Crawford was a strong opposing candidate, a majority being at first in his favour, but when the vote was finally cast 65 were for Monroe and 54 for Crawford. In 1824, when the congressional caucus was fast becoming extinct, Crawford, being prepared to control it, insisted that it should be held, but of 216 Republicans only 66 attended; of these, 64 voted for Crawford. Three other candidates, however, Andrew Jackson, John Quincy Adams, and Henry Clay, were otherwise put in the field. During the campaign Crawford was stricken with paralysis, and when the electoral vote was cast Jackson received 99, Adams 84, Crawford 41, and Clay 37. It remained for the house of representatives to choose from Jackson, Adams and Crawford, and through Clay's influence Adams became president. Crawford was invited by Adams to continue as secretary of the treasury, but declined. He recovered his health sufficiently to become (in 1827) a circuit judge in his own state, but died while on circuit, in Elberton, Georgia, on the 15th of September 1834. In his day he was undoubtedly one of the foremost political leaders of the country, but his reputation has not stood the test of time. He was of imposing presence

and had great conversational powers; but his inflexible integrity was not sufficiently tempered by tact and civility to admit of his winning general popularity. Consequently, although a skilful political organizer, he incurred the bitter enmity of other leaders of his time—Jackson, Adams and Calhoun. He won the admiration of Albert Gallatin and others by his powerful support of the movement in 1811 to recharter the Bank of the United States; he earned the condemnation of posterity by his authorship in 1820 of the four-years-term law, which limited the term of service of thousands of public officials to four years, and did much to develop the "spoils system." He was a Liberal Democrat, and advised the calling of a constitutional convention as preferable to nullification or secession.

CRAWFORDSVILLE, a city and the county-seat of Montgomery county, Indiana, U.S.A., situated about 40 m. N.W. of Indianapolis. Pop. (1890) 6089; (1900) 6649, including 230 negroes and 221 foreign-born; (1910) 9371. It is served by the Chicago, Indianapolis & Louisville, the Cleveland, Cincinnati, Chicago & St Louis, and the Vandalia railways, and by interurban electric lines. Wabash College, founded here in 1832 by Presbyterian missionaries but now non-sectarian, had in 1908 27 instructors, 345 students, and a library of 43,000 volumes. Among manufactures are flour, iron, wagons and carriages, acetylene lights, wire and nails, matches, brick paving blocks, and electrical machinery. North-east of the city there are valuable mineral springs, from which the city obtains its water-supply. Crawfordsville, named in honour of W. H. Crawford, was first settled about 1820, was laid out as a town in 1823, and was chartered as a city in 1863. It was for many years the home of Gen. Lew Wallace.

CRAWFURD, JOHN (1783-1868), Scottish orientalist, was born in the island of Islay, Scotland, on the 13th of August 1783. After studying at Edinburgh he became surgeon in the East India Company's service. He afterwards resided for some time at Penang, and during the British occupation of Java from 1811 to 1817 his local knowledge made him invaluable to the government. In 1821 he served as envoy to Siam and Cochin-China, and in 1823 became governor of Singapore. His last political service in the East was a difficult mission to Burma in 1827. In 1861 he was elected president of the Ethnological Society. He died at South Kensington on the 11th of May 1868.

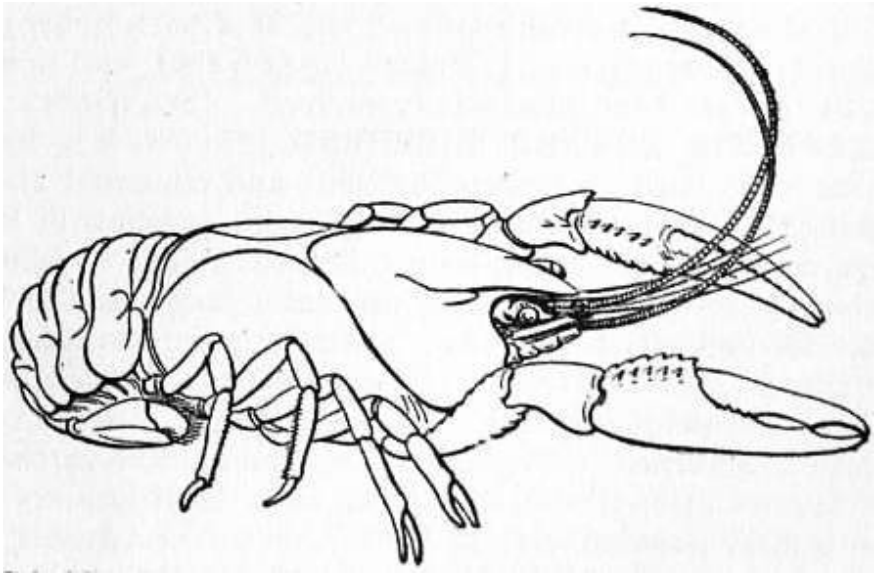
Crawfurd wrote a *History of the Indian Archipelago* (1820), *Descriptive Dictionary of the Indian Islands and Adjacent Countries* (1856), *Journal of an Embassy to the Court of Ava in 1827* (1829), *Journal of an Embassy to the Courts of Siam and Cochin-China, exhibiting a view of the actual State of these Kingdoms* (1830), *Inquiry into the System of Taxation in India, Letters on the Interior of India*, an attack on the newspaper stamp-tax and the duty on paper entitled *Taxes on Knowledge* (1836), and a valuable Malay grammar and dictionary (1852).

CRAYER, GASPARD DE (1582-1669), Flemish painter, was born at Antwerp, and learnt the art of painting from Raphael Coxcie. He matriculated

in the guild of St Luke at Brussels in 1607, resided in the capital of Brabant till after 1660, and finally settled at Ghent. Amongst the numerous pictures which he painted in Ghent, one in the town museum represents the martyrdom of St Blaise, and bears the inscription A° 1668 aet. 86. Crayer was one of the most productive yet one of the most conscientious artists of the later Flemish school, second to Rubens in vigour and below Vandyck in refinement, but nearly equalling both in most of the essentials of painting. He was well known and always well treated by Albert and Isabella, governors of the Netherlands. The cardinal-infant Ferdinand made him a court-painter. His pictures abound in the churches and museums of Brussels and Ghent; and there is scarcely a country chapel in Flanders or Brabant that cannot boast of one or more of his canvases. But he was equally respected beyond his native country; and some important pictures of his composition are to be found as far south as Aix in Provence and as far east as Amberg in the Upper Palatinate. His skill as a decorative artist is shown in the panels executed for a triumphal arch at the entry of Cardinal Ferdinand into the Flemish capital, some of which are publicly exhibited in the museum of Ghent. Crayer died at Ghent. His best works are the “Miraculous Draught of Fishes” in the gallery of Brussels, the “Judgment of Solomon” in the gallery of Ghent, and “Madonnas with Saints” in the Louvre, the Munich Pinakothek, and the Belvedere at Vienna. His portrait by Vandyck was engraved by P. Pontius.

CRAYFISH (Fr. *écrevisse*), the name of freshwater crustaceans closely allied to and resembling the lobsters, and, like them, belonging to the order Macrura. They are divided into two families, the *Astacidae* and *Parastacidae*, inhabiting respectively the northern and the southern hemispheres.

The crayfishes of England and Ireland (*Astacus*, or *Potamobius*, *pallipes*) are generally about 3 or 4 in. long, of a dull green or brownish colour above and paler brown or yellowish below. They are abundant in some rivers, especially where the rocks are of a calcareous nature, sheltering under stones or in burrows which they dig for themselves in the banks and coming out at night in search of food. They are omnivorous feeders, killing and eating insects, snails, frogs and other animals, and devouring any carrion that comes in their way. It is stated that they sometimes come on land in search of vegetable food.



Crayfish (*Cambarus* sp.) from the Mississippi River. (After Morse.)

On the continent of Europe, *Astacus pallipes* occurs chiefly in the west and south, being found in France, Spain, Italy and the Balkan Peninsula. It is known in France as *écrevisse à pattes blanches* and in Germany as *Steinkrebs*, and is little used as food. The larger *Astacus fluviatilis* (*écrevisse à pattes rouges*, *Edelkrebs*) is not found in Britain, but occurs in France and Germany, southern Sweden, Russia, &c. It is distinguished, among other characters, by the red colour of the under side of the large claws. It is the species most highly esteemed for the table. Other species of the genus are found in central

and eastern Europe and as far east as Turkestan. Farther east a gap occurs in the distribution and no crayfishes are met with till the basin of the Amur is reached, where a group of species occurs, extending into northern Japan. In North America, west of the Rocky Mountains, the genus *Astacus* again appears, but east of the watershed it is replaced by the genus *Cambarus*, which is represented by very numerous species, ranging from the Great Lakes to Mexico. Several blind species inhabit the subterranean waters of caves. The best known is *Cambarus pellucidus*, found in the Mammoth Cave of Kentucky.

The area of distribution occupied by the southern crayfishes or *Parastacidae* is separated by a broad equatorial zone from that of the northern group, unless, as has been asserted, the two come into contact or overlap in Central America. None is found in any part of Africa, though a species occurs in Madagascar. They are absent also from the oriental region of zoologists, but reappear in Australia and New Zealand. Some of the Australian species, such as the "Murray River lobster" (*Astacopsis spinifer*), are of large size and are used for food. In South America crayfishes are found in southern Brazil, Argentina and Chile.

(W. T. Ca.)

CRAYON (Fr. *craie*, chalk, from Lat. *creta*), a coloured material for drawing, employed generally in the form of pencils, but sometimes also as a powder, and consisting of native earthy and stony friable substances, or of artificially prepared mixtures of a base of pipe or china clay with Prussian blue, orpiment, vermilion, umber and other pigments. Calcined gypsum, talc and compounds of magnesium, bismuth and lead are occasionally used as

bases. The required shades of tints are obtained by adding varying amounts of colouring matter to equal quantities of the base. Crayons are used by the artist to make groupings of colours and to secure landscape and other effects with ease and rapidity. The outline as well as the rest of the picture is drawn in crayon. The colours are softened off and blended by the finger, with the assistance of a stump of leather or paper; and shading is produced by cross-hatching and stippling. The art of painting in crayon or pastel is supposed to have originated in Germany in the 17th century. By Johann Alexander Thiele (1685-1752) it was carried to great perfection, and in France it was early practised with much success. Amongst the earlier pastellists may be mentioned Rosalba Carriera (1675-1757), W. Hoare (1707-1792), F. Cotes (1726-1770), and J. Russell (1744-1806); and in recent years the art has been successfully revived. (See PASTEL.)

CREASY, SIR EDWARD SHEPHERD (1812-1878), English historian, was born at Bexley in Kent, and educated at Eton and King's College, Cambridge. He became a fellow of King's College in 1834, and having been called to the bar at Lincoln's Inn three years later, was made assistant judge at the Westminster sessions court. In 1840 he was appointed professor of modern and ancient history in the university of London, and in 1860 became chief justice of Ceylon and a knight. Broken down in health he returned to England in 1870, and after a further but short stay in Ceylon died in London on the 27th of January 1878. Creasy's most popular work is his *Fifteen decisive Battles of the World*, which, first published in 1851, has passed through many editions. He also wrote *The History of the Ottoman Turks* (London, 1854-1856); *History of England* (London, 1869-1870); *Rise and*

Progress of the English Constitution (London, 1853, and other editions); *Historical and Critical Account of the several Invasions of England* (London, 1852); a novel entitled *Old Love and the New* (London, 1870); and various other works.

CREATIANISM AND TRADUCIANISM. Traducianism is the doctrine about the origin of the soul which was taught by Tertullian in his *De anima*—that souls are generated from souls in the same way and at the same time as bodies from bodies: creatianism is the doctrine that God creates a soul for each body that is generated. The Pelagians taunted the upholders of original sin with holding Tertullian's opinion, and called them Traduciani (from *tradux*: vid. Du Cange s. vv.), a name which was perhaps suggested by a metaphor in *De an.* 19, where the soul is described "velut surculus quidam ex matrice Adam in propaginem deducta." Hence we have formed "traducianist," "traducianism," and by analogy "creatianist," "creatianism." Augustine denied that traducianism was necessarily connected with the doctrine of original sin, and to the end of his life was unable to decide for or against it. His letter to Jerome (*Epist. Clas.* iii. 166) is a most valuable statement of his difficulties. Jerome condemned it, and said that creatianism was the opinion of the Church, though he admitted that most of the Western Christians held traducianism. The question has never been authoritatively determined, but creatianism, which had always prevailed in the East, became the general opinion of the medieval theologians, and Peter Lombard's *creando infundit animas Deus et infundendo creat* was an accepted formula. Luther, like Augustine, was undecided, but Lutherans have as a rule been traducianists. Calvin favoured creatianism.

Peter Lombard's phrase perhaps shows that even in his time it was felt that some union of the two opinions was needed, and Augustine's toleration pointed in the same direction, for the traducianism he thought possible was one in which God *operatur institutas administrando non novas instituendo naturas* (*Ep.* 166. 5. 11). Modern psychologists teach that while "personality" can be discerned in its "becoming," nothing is known of its origin. Lotze, however, who may be taken as representing the believers in the immanence of the divine Being, puts forth—but as a "dim conjecture"—something very like creatianism (*Microcosmus*, bk. iii. chap. v. ad fin.). It is still, as in the days of Augustine, a question whether a more exact division of man into body, soul *and spirit* may help to throw light on this subject.

See indices to *Augustine*, vol. xi., and *Jerome*, vol. xi. in Migne's *Patrologia*, s.v. "Anima"; Franz Delitzsch, *Biblical Psychology*, ii. § 7; G. P. Fisher, *History of Chr. Doct.* pp. 187 ff.; A. Harnack, *History of Dogma* (passim; see Index); Liddon, *Elements of Religion*, Lect. iii.; Mason, *Faith of the Gospel*, iv. §§ 3, 4, 9, 10.

(A. N.*)

CRÉBILLON, PROSPER JOLYOT DE (1674-1762), French tragic poet, was born on the 13th of January 1674 at Dijon, where his father, Melchior Jolyot, was notary-royal. Having been educated at the Jesuits' school of the town, and at the Collège Mazarin, he became an advocate, and was placed in the office of a lawyer named Prieur at Paris. With the encouragement of his master, son of an old friend of Scarron's, he produced a *Mort des enfants de Brutus*, which, however, he failed to bring upon the

stage. But in 1705 he succeeded with *Idoménée*; in 1707 his *Atrée et Thyeste* was repeatedly acted at court; *Électre* appeared in 1709; and in 1711 he produced his finest play, the *Rhadamiste et Zénobie*, which is his masterpiece and held the stage for a long period, although the plot is so complicated as to be almost incomprehensible. But his *Xerxes* (1714) was only once played, and his *Sémiramis* (1717) was an absolute failure. In 1707 Crébillon had married a girl without fortune, who had since died, leaving him two young children. His father also had died, insolvent. His three years' attendance at court had been fruitless. Envy had circulated innumerable slanders against him. Oppressed with melancholy, he removed to a garret, where he surrounded himself with a number of dogs, cats and ravens, which he had befriended; he became utterly careless of cleanliness or food, and solaced himself with constant smoking. But in 1731, in spite of his long seclusion, he was elected member of the French Academy; in 1735 he was appointed royal censor; and in 1745 Mme de Pompadour presented him with a pension of 1000 francs and a post in the royal library. He returned to the stage in 1726 with a successful play, *Pyrrhus*; in 1748 his *Catilina* was played with great success before the court; and in 1754, when he was eighty years old, appeared his last tragedy, *Le Triumvirat*. Crébillon died on the 17th of June 1754. The enemies of Voltaire maintained that Crébillon was his superior as a tragic poet. The spirit of rivalry thus provoked induced Voltaire to take the subjects of no less than five of Crébillon's tragedies—*Sémiramis*, *Électre*, *Catilina*, *Le Triumvirat*, *Atrée*—as subjects for tragedies of his own. The so-called *Éloge de Crébillon* (1762), really a depreciation, which appeared in the year of the poet's death, is generally attributed to Voltaire, though he strenuously denied the authorship. Crébillon's drama is marked by a force too often gained at the expense of scenes of unnatural horror; his pieces show lack of culture and a want of care which displays itself even in the mechanism of his verse, though fine isolated passages are not infrequent.

There are numerous editions of his works, among which may be noticed: *Œuvres* (1772), with preface and "éloge," by Joseph de la Porte;

Œuvres (1828), containing D'Alembert's *Éloge de Crébillon* (1775); and *Théâtre complet* (1885) with a notice by Auguste Vitu. A complete bibliography is given by Maurice Dutrait, in his *Étude sur la vie et le théâtre de Crébillon* (1895).

His only son, Claude Prosper Jolyot Crébillon (1707-1777), French novelist, was born at Paris on the 14th of February 1707. His life was spent almost entirely in Paris, but the publication of *L'Écumoire, ou Tanzaï et Neadarné, histoire japonaise* (1734), which contained veiled attacks on the bull *Unigenitus*, the cardinal de Rohan and the duchesse du Maine, brought Crébillon into disgrace. He was first imprisoned and afterwards forced to live in exile for five years at Sens and elsewhere. With Alexis Piron and Charles Collé he founded in 1752 the gay society which met regularly to dine at the famous "Caveau," where many good stories were elaborated. From 1759 onwards he was to be found at the Wednesday dinners of the Pelletier, at which Garrick, Sterne and Wilkes were sometimes guests. He married in 1748 an English lady of noble family, Lady Henrietta Maria Stafford, who had been his mistress from 1744. Their life is said to have been passed in much affection and mutual fidelity; and there could be no greater contrast than that between Crébillon's private life and the tone of his novels, the immorality of which lent irony to the author's tenure of the office of censor, bestowed on him in 1759 through the favour of Mme de Pompadour. He died in Paris on the 12th of April 1777. The most famous of his numerous novels are: *Les Amours de Zéokinizul, roi des Kofirans* (1740), in which "Zéokinizul" and "Kofirans" may be translated Louis XIV. and the French respectively; and *Le Sopha, conte moral* (1740), where the moral is supplied in the title only. This last novel is given by some authorities as the reason for his imprisonment.

His *Œuvres* were collected and printed in 1772. See a notice of Crébillon prefixed to O. Uzanne's edition of his *Contes dialogués* in the series of *Conteurs du XVIIIe siècle*. Crébillon's novels might be

pronounced immoral to the last degree if it were not that two writers slightly later in date surpassed even his achievements in this particular. André Robert de Nerciat (1739-1800) produced under a false name a number of licentious tales, and was followed by Donatien, marquis de Sade.

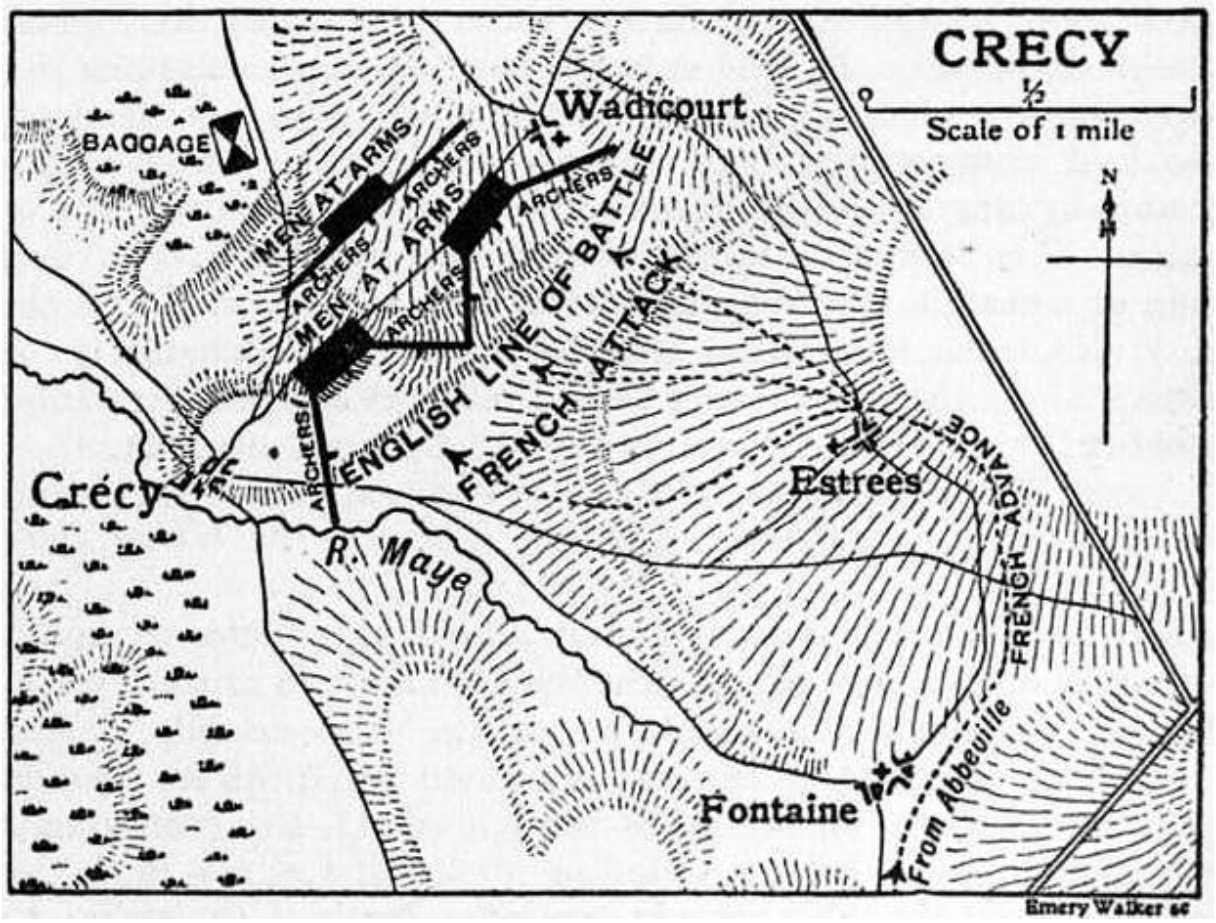
CRÈCHE (Fr. for a "crib" or cradle), the name given to a day-nursery, a public institution for the feeding and care of infants while the mothers are engaged in work outside their homes, or are otherwise prevented from giving them proper attention. Infants are usually admitted when over a month old, and are kept till they are capable of looking after themselves. The advantages of such institutions are that the attention of skilled and trained nurses is given to the children, the food is better and more adapted to their needs than that given in their homes, the surroundings are cleaner and healthier, and habits of discipline and cleanliness are instilled, which, in many cases, react on the mothers. The nurseries are usually under medical supervision, and the small fees charged, which average in London from 3d. to 4d. a day, and on the continent of Europe about 2d., are much less than the cost to the mother who places her young children under the care of neighbours when at work or away from home. Institutions of this kind were started in France in 1844, and have been established in the majority of the large towns on the continent of Europe. In the industrial centres of France and Germany they have helped to check infantile mortality. The state or municipality in nearly every case grants subsidies, but few are maintained entirely by public authorities; voluntary contributions are depended upon for the main support, and the organization and management are left in the hands of private societies and charitable

institutions, although some outside official supervision with regard to the number of infants admitted to each institution, air-space, and ventilation and general hygienic conditions is considered useful. In Great Britain the establishment of such institutions has been left almost entirely to private initiative; and in comparison with the continent the provision is inadequate and unsatisfactory, Paris having nearly double the proportion of accommodation for infants to the population that is provided in London. The National Society of Day Nurseries was founded in 1901 for the purpose of providing a bureau where information may be found of good methods of founding and managing a crèche.

See the *Report of the Consultative Committee upon the School Attendance of Children below the Age of Five*, issued by the Board of Education (1908).

CRÉCY (Cressy), a town of northern France, in the department of Somme, on the Maye, 12 m. N. by E. of Abbeville by road. It is famous in history for the great victory gained here on the 26th of August 1346 by the English under Edward III. over the French of King Philip of Valois. After its campaign in northern France, the English army retired into Ponthieu, and encamped on the 25th of August at Crécy, the French king in the meantime marching from Abbeville on Braye. Early on the 26th Edward's army took up its position for battle, and Philip's, hearing of this, moved to attack him, though the French army marched in much disorder, and on arrival formed only an imperfect line of battle. The English lay on the forward slope of a hillside, with their right in front of the village of Crécy, their left resting on Wadicourt. Two of the three divisions or "battles" were in first line, that of the young prince of Wales (the

Black Prince) on the right, that of the earls of Northampton and Arundel on the left; the third, under the king's own command, in reserve, and the baggage was packed to the rear. Each battle consisted of a centre of dismounted knights and men-at-arms, and two wings of archers. The total force was 3900 men-at-arms, 11,000 English archers, and 5000 Welsh light troops (Froissart, first edition, the second gives a different estimate). The French were far stronger, having at least 12,000 men-at-arms, 6000 mercenary crossbowmen (Genoese), perhaps 20,000 of the *milice des communes*, besides a certain number of foot of the feudal levy. Along with these served a Luxemburg contingent of horse under John, king of Bohemia, and other feudatories of the Holy Roman Empire, and the whole force was probably about 60,000 strong.



The day was far advanced when the French came upon the English position. Philip, near Estrées, decided to halt and bivouac, deferring the battle until the army was better closed up, but the indiscipline of his army committed him to an immediate action, and he ordered forward the Genoese crossbowmen, while a line of men-at-arms deployed for battle behind them; the rest of the army was still marching in an irregular column of route along the road from Abbeville. A sudden thunderstorm caused a short delay, then the archers and the crossbowmen opened the battle. Here, for the first time in continental warfare, the English long-bow proved its worth. After a brief contest the crossbowmen, completely outmatched, were driven back with enormous loss. Thereupon the first line of French knights behind them charged down upon the "faint-hearted rabble" of their own fugitives, and soon the first two lines of the French were a mere mob of horse and foot struggling with each other. The archers did not neglect the opportunity, and shot coolly and rapidly into the helpless target in front of them. The second attack was made by another large body of knights which had arrived, and served but to increase the number of the casualties, though here and there a few charged up to the English line and fell near it, among them the blind king of Bohemia, who with a party of devoted knights penetrated, and was killed amongst, the ranks of the prince of Wales's men-at-arms. The battle was now one long series of desperate but ill-conducted charges, a fresh onslaught being made as each new corps of troops appeared on the scene. The English archers on the flanks of the two first line battles had been wheeled up, the centres of dismounted men-at-arms held back, so that the whole line resembled a "herse" or harrow with three points formed by the archers (see sketch). Each successive body of the French sought to come to close quarters with the men-at-arms, and exposed themselves therefore at short range to the arrows on either flank. Under these circumstances there could be but one issue of the battle. Though sixteen distinct attacks were made, and the fighting lasted until long after dark, no impression was made on the English line. At one moment the prince was so far in danger that his barons sent to the king for aid. Even

then Edward was not disquieted and he sent a mere handful of knights to the prince's battle, saying, "Let the boy win his spurs." The left battle of the English, hitherto somewhat to the rear, moved up into line with the prince, and the French attack slackened. By midnight the army of France was practically annihilated; 1542 men of gentle blood were left dead on the field and counted by Edward's heralds, the losses of the remainder are unknown. Some fifty of the victors fell in the battle. The story that the Black Prince adopted from the fallen king of Bohemia the crest and motto now borne by the princes of Wales lacks foundation (see JOHN, KING OF BOHEMIA). A memorial to the French and their allies was erected, by public subscription in France, Luxemburg and Bohemia, in 1905.

See H. B. George, *Battles of English History* (London, 1895), and C. W. C. Oman, *A History of the Art of War; The Middle Ages* (London, 1898).

CREDENCE, or CREDENCE TABLE, a small side-table, originally an article of furniture placed near the high table in royal or noble houses, at which the ceremony of the *praegustatio*, Italian *credenziare*, the "assay" or tasting of food and drink for poisons was performed by an official of the household, the *praegustator* or *credentiarius* as he was called in Medieval Latin. Both the ceremony and the table were known as *credentia* (Lat. *credere*, to believe, trust), Ital. *credenza*, Fr. *crédence*. After the need for the ceremony had disappeared the name still survived, and the table developed a back and several shelves for the display of plate, and gradually merged into the buffet (*q.v.*). It is, however, as an article of ecclesiastical furniture that the credence table is most familiar. It takes the form of a small table of wood or stone,

sometimes fixed and sometimes merely a shelf above or near the piscina. It usually stands on the south or Epistle side of the altar, and on it are placed, in the Roman Catholic Church, the cruets containing the wine and water, the chalice, the candlesticks to be carried by the acolytes, and other objects to be used in the ceremony of the Mass. The use of such a table, to which earlier the name of *paratorium* or *oblationarium* was given, appears to have come into use when the personal presentation of the oblations at the Mass became obsolete. When the pope celebrates Mass a special credence table on the Gospel side of the altar is used, and the ceremony of tasting for poison in the unconsecrated elements is still observed. In some churches in England the old credence tables still exist, as at the church of St Cross near Winchester, where there is a fine stone 15th-century example; more frequent are examples of the stone shelf near the piscina. There are some carved wooden ones surviving, one type being with a semicircular top and three legs placed in a triangle with a lower shelf. The formal use of the credence table for the unconsecrated elements and the holy vessels before the celebration has been revived in the English Church.

CREDENTIALS (*lettres de créance*), a document which ambassadors, ministers plenipotentiary, and chargés d'affaires hand to the government to which they are accredited, for the purpose, chiefly, of communicating to the latter the envoy's diplomatic rank. It also contains a request that full credence be accorded to his official statements. Until his credentials have been presented and found in proper order, an envoy receives no official recognition. The credentials of an ambassador or minister plenipotentiary are

signed by the chief of the state, those of a chargé d'affaires by the foreign minister.

CREDI, LORENZO DI (1459-1537), Italian artist, whose surname was Barducci, was born at Florence. He was the least gifted of three artists who began life as journeymen with Andrea del Verrocchio. Though he was the companion and friend of Leonardo da Vinci and Perugino, and closely allied in style to both, he had neither the genius of the one nor the facility of the other. We admire in Da Vinci's heads a heavenly contentment and smile, in his technical execution great gloss and smoothness of finish. Credi's faces disclose a smiling beatitude; his pigments have the polish of enamel. But Da Vinci imparted life to his creations and modulation to his colours, and these are qualities which hardly existed in Credi. Perugino displayed a well-known form of tenderness in heads, moulded on the models of the old Umbrian school. Peculiarities of movement and attitude become stereotyped in his compositions; but when put on his mettle, he could still exhibit power, passion, pathos. Credi often repeated himself in Perugino's way; but being of a pious and resigned spirit, he generally embodied in his pictures a feeling which is yielding and gentle to the verge of coldness. Credi had a respectable local practice at Florence. He was consulted on most occasions when the opinion of his profession was required on public grounds, *e.g.* in 1491 as to the fronting, and in 1498 as to the lantern of the Florentine cathedral, in 1504 as to the place due to Michelangelo's "David." He never painted frescoes; at rare intervals only he produced large ecclesiastical pictures. The greater part of his time was spent on easel pieces, upon which he expended minute and patient labour. But he worked with such industry that numbers of his

Madonnas exist in European galleries. The best of his altar-pieces is that which represents the Virgin and Child with Saints in the cathedral of Pistoia. A fine example of his easel rounds is in the gallery of Mainz. Credi rivalled Fra Bartolommeo in his attachment to Savonarola; but he felt no inclination for the retirement of a monastery. Still, in his old age, and after he had outlived the perils of the siege of Florence (1527), he withdrew on an annuity into the hospital of Santa Maria Nuova, where he died. The National Gallery, London, has two pictures of the Virgin and Child by him.

CREDIT (Lat. *credere*, to believe), in a general sense, belief or trust. The word is used also to express the repute which a person has, or the estimation in which he is held. In a commercial sense credit is the promise to pay at a future time for valuable consideration in the present: hence, a reputation of solvency and ability to make such payments is also termed credit. In bookkeeping credit is the side of the account on which payments are entered; hence, sometimes, the payments themselves.

The part which credit plays in the production and exchange of wealth is discussed in all economic text-books, but special reference may be made to K. Knies, *Geld und Kredit* (1873-1879), and H. D. Macleod, *Theory of Credit* (1889-1891). See also Hartley Withers, *The Meaning of Money* (1909).

CRÉDIT FONCIER, in France, an institution for advancing money on mortgage of real securities. Due to a great extent to the initiative of the economist L. Wolowski, it was created by virtue of a governmental decree of the 28th of February 1852. This decree empowered the issue of loans at a low rate of interest, secured by mortgage bonds, extending over a long period, and repayable by annuities, including instalments of capital. On its inception it had a capital of 25,000,000 francs and took the title of Banque Foncière de Paris. The parent institution in Paris was followed by similar institutions in Nevers and Marseilles. These two were afterwards amalgamated with the first under the title of Crédit Foncier de France. The capital was increased to 60,000,000 francs, the government giving a subvention of 10,000,000 francs, and exercising control over the bank by directly appointing the governor and two deputy-governors. The administration was vested in a council chosen by the shareholders, but its decisions have no validity without the approval of the governor. The Crédit Foncier has the right to issue bonds, repayable in fifty or sixty years, and bearing a fixed rate of interest. A certain number of the bonds carry prizes. The loans must not exceed half the estimated value of the property mortgaged, upon which the bank has the first mortgage. The bank also makes advances to local bodies, departmental and communal, for short or long periods, and with or without mortgage. Its capital amounts to £13,500,000. Its charter was renewed in 1881 for a period of ninety-nine years.

In 1860 the Crédit Foncier lent its support to the foundation of an organization for supplying capital and credit for agricultural and allied industries. This Crédit Agricole rendered but trifling services to agriculture, however, and soon threw itself into speculation. Between 1873 and 1876 it lent enormous sums to the Egyptian government, obtaining the money by opening credit with the Crédit Foncier and depositing with it the securities of the Egyptian government. On the failure of the Egyptian government to meet its payments the Crédit Agricole went into liquidation, and the Crédit Foncier suffered severely in consequence. The impracticability of the credit system to

aid agriculture as worked by the Crédit Agricole was very marked, and, as a consequence, the financing of agricultural associations is now entirely in the hands of the Banque de France.

The *Crédit Mobilier* is an institution for advancing loans on personal or movable estate. It was constituted in 1871, on the liquidation of the Société Générale de Crédit Mobilier, founded in 1852, which it absorbed.

CRÉDIT MOBILIER OF AMERICA, a construction company whose operations in connexion with the building of the Union Pacific Railroad gave rise to the most serious political scandal in the history of the United States Congress. The company was originally chartered as the Pennsylvania Fiscal Agency in 1859. In March 1864 a controlling interest in the stock was secured by Thomas Durant, vice-president of the Union Pacific Railroad Company, and the Pennsylvania legislature authorized the adoption of the name Crédit Mobilier of America. Durant proposed to utilize it as a construction company, pay it an extravagant sum for the work, and thus secure for the stockholders of the Union Pacific, who now controlled the Crédit Mobilier, the bonds loaned by the United States government. The net proceeds from the government and the first mortgage bonds issued to the construction company were $50,863,172.05, slightly more than enough to pay the entire cost of construction. According to the report of the Wilson Congressional Committee, the Crédit Mobilier received in addition, in the form of stock, income bonds, and land grant bonds, $23,000,000—a profit of about 48%. The defenders of the company assert that several items of expense were not included in this report, and that the real net profit was considerably smaller, although they admit that it was still unusually large. The work

extended over the years 1865-1867. During the winter of 1867-1868, when adverse legislation by Congress was feared, it is alleged that Oakes Ames (*q.v.*), a representative from Massachusetts and principal promoter of the Crédit Mobilier, distributed a number of shares among congressmen and senators to influence their attitude. Shares were sold at par when a few dividends repaid a purchaser at this price. Some in fact received dividends without any initial outlay at all. As the result of a lawsuit between Ames and H. S. McComb, some private letters were brought out in September 1872 which gave publicity to the entire proceedings. The House appointed two investigating committees, the Poland and the Wilson committees, and on the report of the former (1873) Ames and James Brooks of New York were formally censured by the House, the former for disposing of the stock and the latter for improperly using his official position to secure part of it. Charges were also made against Schuyler Colfax, then vice-president but Speaker of the House at the time of the transaction, James A. Garfield, William D. Kelley (1814-1880), John A. Logan, and several other members either of the House or of the Senate. The Senate later appointed a special committee to investigate the charges against its members. This committee, on the 27th of February 1873, recommended the expulsion from the Senate of James W. Patterson, of New Hampshire; but as his term expired within five days no action was taken. The evidence was exaggerated by the Democrats for partisan purposes, but the investigation showed clearly that many of those accused were at least indiscreet if not dishonest. The company itself was merely a type of the construction companies by which it was the custom to build railways between 1860 and about 1880.

See J. B. Crawford, *The Crédit Mobilier of America* (Boston, 1880), and R. Hazard, *The Crédit Mobilier of America* (Providence, 1881), both of which defend Ames; also the histories of the Union Pacific Railroad Company by J. P. Davis (Chicago, 1894) and H. K. White (Chicago, 1895); and for a succinct and impartial account, James Ford Rhodes, *History of the United States*, vol. vii. (New York, 1906). The Poland and

Wilson reports are to be found in *House of Representatives Reports*, 42nd Congress, 3rd session, Nos. 77 and 78, and the report of the Senate Committee in *Senate Reports*, 42nd Congress, 3rd session, No. 519.

CREDITON, a market town in the South Molton parliamentary division of Devonshire, England, 8 m. N.W. of Exeter by the London & South-Western railway. Pop. of urban district (1901) 3974. It is situated in the narrow vale of the river Creedy near its junction with the Exe, between two steep hills, and is divided into two parts, the east or old town and the west or new town. The church of Holy Cross, formerly collegiate, is a noble Perpendicular building with Early English and other early portions, and a fine central tower. The grammar school, founded by Edward VI. and refounded by Elizabeth, has exhibitions to Oxford and Cambridge universities. Shoe-making, tanning, agricultural trade, tin-plating, and the manufacture of confectionery and cider have superseded the former large woollen and serge industries. In 1897 Crediton was made the seat of a suffragan bishopric in the diocese of Exeter.

The first indication of settlement at Crediton (*Credington*, *Cryditon*, *Kirton*) is the tradition that Winfrith or Boniface was born there in 680. Perhaps in his memory (for the great extent of the parish shows that it was thinly populated) it became in 909 the seat of the first bishopric in Devonshire. It was probably only a village in 1049, when Leofric, bishop of Crediton, requested Leo IX. to transfer the see to Exeter, as Crediton was “an open town and much exposed to the incursions of pirates.” At the Domesday Survey much of the land was still uncultivated, but its prosperity increased, and in 1269 each of the twelve prebends of the collegiate church had a house and farmland within the parish. The bishops, to whom the manor belonged

until the Reformation, had difficulty in enforcing their warren and other rights; in 1351 Bishop Grandison obtained an exemplification of judgments of 1282 declaring that he had pleas of withernam, view of frank pledge, the gallows and assize of bread and ale. Two years later there was a serious riot against the increase of copyhold. Perhaps it was at this time that the prescriptive borough of Crediton arose. The jury of the borough are mentioned in 1275, and Crediton returned two members to parliament in 1306-1307, though never afterwards represented. A borough seal dated 1469 is extant, but the corporation is not mentioned in the grant made by Edward VI. of the church to twelve principal inhabitants. The borough and manor were granted by Elizabeth to William Killigrew in 1595, but there is no indication of town organization then or in 1630, and in the 18th century Crediton was governed by commissioners. In 1231 the bishop obtained a fair, still held, on the vigil, feast and morrow of St Lawrence. This was important as the wool trade was established by 1249 and certainly continued until 1630, when the market for kersies is mentioned in conjunction with a saying "as fine as Kirton spinning."

See Rev. Preb. Smith, "Early History of Credition," in *Devonshire Association for the Advancement of Science, Literature and Art, Transactions*, vol. xiv. (Plymouth, 1882); Richard J. King, "The Church of St Mary and of the Holy Cross, Credition," in *Exeter Diocesan Architectural Society, Transactions*, vol. iv. (Exeter, 1878).

CREDNER, CARL FRIEDRICH HEINRICH (1809-1876), German geologist, was born at Waltershausen near Gotha, on the 13th of March 1809. He investigated the geology of the Thüringer Waldes, of which he published a

map in 1846. He was author of a work entitled *Über die Gliederung der oberen Juraformation und der Wealden-Bildung im nordwestlichen Deutschland* (Prague, 1863), also of a geological map of Hanover (1865). He died at Halle on the 28th of September 1876.

His son, Carl Hermann Credner (1841-), was born at Gotha on the 1st of October 1841, educated at Breslau and Göttingen, and took the degree of Ph.D. at Breslau in 1864. In 1870 he was appointed professor of geology in the university of Leipzig, and in 1872 director of the Geological Survey of Saxony. He is author of numerous publications on the geology of Saxony, and of an important work, *Elemente der Geologie* (2 vols., 1872; 7th ed., 1891), regarded as the standard manual in Germany. He has also written memoirs on Saurians and Labyrinthodonts.

CREE, a tribe of North American Indians of Algonquian stock. They are still a considerable tribe, numbering some 15,000, and living chiefly in Manitoba and Assiniboia, about Lake Winnipeg and the Saskatchewan river. They gave trouble by their constant attacks upon the Sioux and Blackfeet, but are now peaceable and orderly.

See *Handbook of American Indians* (Washington, 1907).

CREECH, THOMAS (1659-1700), English classical scholar, was born at Blandford, Dorsetshire, in 1659. He received his early education from Thomas Curgenven, master of Sherborne school. In 1675 he entered Wadham College, Oxford, and obtained a fellowship in 1683 at All Souls'. He was headmaster of Sherborne school from 1694 to 1696, and in 1699 he received a college living, but in June 1700 he hanged himself. The immediate cause of the act was said to be a money difficulty, though according to some it was a love disappointment; both of these circumstances no doubt had their share in a catastrophe primarily due to an already pronounced melancholia. Creech's fame rests on his translation of Lucretius (1682) in rhymed heroic couplets, in which, according to Otway, the pure ore of the original "somewhat seems refined." He also published a version of Horace (1684), and translated the *Idylls of Theocritus* (1684), the *Thirteenth Satire* of Juvenal (1693), the *Astronomicon* of Manilius (1697), and parts of Plutarch, Virgil and Ovid.

CREEDS (Lat. *credo*, I believe), or CONFESSIONS OF FAITH. We are accustomed to regard the whole conception of creeds, *i.e.* reasoned statements of religious belief, as inseparably connected with the history of Christianity. But the new study of comparative religion has something to teach us even here. The saying *lex orandi lex credendi* is true of all times and of all peoples. And since we must reckon praise as the highest form of prayer, such an early Christian hymn as is found in 1 Tim. iii. 16 must be acknowledged to be of the nature of a creed: "He who was manifested in the flesh, justified in the spirit, seen of angels, preached among the nations, believed on in the world, received up in glory." It justifies the expansion of the second article of the developed Christian creed from the standpoint of the earliest Christian

tradition. It also supplies a reason for including in our survey of creeds some reference to pre-Christian hymns and beliefs. The pendulum has swung back. Rather than despise the faulty presentation of truth which we find in heathen religions and their more or less degraded rites, we follow the apostle Paul in his endeavour to trace in them attempts "to feel after God" (Acts vii. 27). Augustine, the great teacher of the West, was true to the spirit of the great Alexandrians, when he wrote (*Ep.* 166): "Let every good and true Christian understand that truth, wherever he finds it, belongs to *his* Lord."

We are not concerned with the question whether the earliest forms of recorded religious consciousness such as animism, or totemism, or fetishism, were themselves degradations of a primitive revelation or not.[1] We are only concerned with the fact of experience that the human soul yearns to express its belief. The hymn to the rising and setting sun in the *Book of the Dead* (ch. 15), which is said by Egyptologists to be the oldest poem in the world, carries us back at once to the dawn of history.

> "Hail to thee, Ra, the self-existent.... Glorious is
> thine uprising from the horizon. Both worlds are
> illumined by thy rays.... Hail to thee, Ra, when thou
> returnest home in renewed beauty, crowned and almighty."

In a later hymn Amen-Ra is confessed as "the good god beloved, maker of men, creator of beasts, maker of things below and above, lord of mercy most loving." A similar note is struck in the Indian Vedas. In the more ethical religion of the Avesta the creator is more clearly distinguished from the creature: "I desire to approach Ahura and Mithra with my praise, the lofty eternal, and the holy two."[2] The Persian poet is not far from the kingdom into which Hebrew psalmists and prophets entered.

The whole history of the Jewish religion is centred in the gradual purification of the idea of God. The morality of the Jews did not outgrow

their religion, but their interest was always ethical and not speculative. The highest strains of the psalmists and the most fervent appeals of the prophets were progressively directed to the great end of praising and preaching the One true God, everlasting, with sincere and pure devotion. The creed of the Jew, to this day, is summed up in the well-remembered words, which have been ever on his lips, living or dying: “Hear, O Israel, the Lord our God is one Lord” (Deut. vi. 4).

The definiteness and persistence of this creed, which of course is the strength also of Mahommedanism, presents a contrast to the fluid character of the statements in the Vedas, and to the chaos of conflicting opinions of philosophers among the Greeks and Romans. As Dr J. R. Illingworth has said very concisely: “The physical speculations of the Ionians and Atomists rendered a God superfluous, and the metaphysical and logical reasoning of the Eleatics declared Him to be unknowable.”[3] Plato regarding the world as an embodiment of eternal, archetypal ideas, which he groups under the central idea of Good, identified with the divine reason, at the same time uses the ordinary language of the day, and speaks of God and the gods, feeling his way towards the conception of a personal God, which, to quote Dr Illingworth again, neither he nor Aristotle could reach because they had not “a clear conception of human personality.” They were followed by an age of philosophizing which did little to advance speculation. The Stoics, for example, were more successful in criticizing the current creed than in explaining the underlying truth which they recognized in polytheism. The final goal of Greek philosophy was only reached when the great thinkers of the early Christian Church, who had been trained in the schools of Alexandria and Athens, used its modes of thought in their analysis of the Christian idea of God. “In this sense the doctrine of the Trinity was the synthesis, and summary, of all that was highest in the Hebrew and Hellenic conceptions of God, fused into union by the electric touch of the Incarnation.”[4]

Space does not permit enlargement on this theme, but enough has been said to introduce the direct study of the ancient creeds of Christendom.

I. The Ancient Creeds of Christendom.—The three creeds which may be called oecumenical, although the measure of their acceptance by the universal church has not been uniform, represent three distinct types provided for the use of the catechumen, the communicant, and the church teacher respectively. The Apostles' Creed is the ancient baptismal creed, held in common both by East and West, in its final western form. The Nicene Creed is the baptismal creed of an eastern church enlarged in order to combine theological interpretation with the facts of the historic faith. Its use in the Eucharist of the undivided Church has been continued since the great schism, although the Eastern Church protests against the interpolation of the words "And the Son" in clause 9. The Athanasian Creed is an instruction designed to confute heresies which were current in the 5th century.

1. *The Apostles' Creed.*—The increased interest which has been shown in the history of all creed-forms since the latter part of the 19th century is due in a great measure to the work of the veteran pioneer, Professor P. Caspari of Christiania, who began the herculean task of classifying the enormous number of creed-forms which have been recovered from obscure pages of early Christian literature. In England we owe much to Professors C. A. Heurtley and Swainson. In Germany the monumental work of Professor Kattenbusch has overshadowed all other books on the subject, providing even his most ardent critics with an indispensable record of the literature of the subject.

Apostles' Creed.

The majority of critics agree that the only trace of a formal creed in the New Testament is the simple confession of Jesus as the Lord, *or* the Son of God (Rom. x. 9; 1 Cor. xii. 3). While the apostles were agreed on an outline of teaching (Rom. vi. 17) which included the doctrine of God, the person and work of Christ, and the person and work of the Holy Spirit, it does not appear that they provided any summary, which would cover this ground, as an

authoritative statement of their belief. The tradition which St Paul received included, so to speak, the germ of the central prayer in the Eucharist (1 Cor. xi. 23 ff.), and no doubt included also teaching on conduct, "the way of a Christian life" (1 Thess. iv. 1; Gal. v. 21). The creed in all its forms lies behind worship, which it preserves from idolatry, and behind ethics, to which it supplies a motive power which the pre-Christian system so manifestly lacked. Whether the first creed of the primitive Church was of the simple Christological character which confession of Jesus as the Lord expresses, or of an enlarged type based on the baptismal formula (Matt. xxviii. 19), makes no difference to the statement that the faith which overcame the world derived its energy from convictions which strove for utterance. "With the heart man believeth unto righteousness, and with the mouth confession is made unto salvation" (Rom. x. 10).

When St Paul reminds Timothy (1 Tim. vi. 13) of his confession before many witnesses he does not seem to imply more than confession of Christ as king. He calls it "the beautiful confession" to which Christ Jesus had borne witness before Pontius Pilate, and charges Timothy before God, who quickeneth all things, to keep this commandment. Some writers, notably Professor Zahn,[5] piecing together this text with 2 Tim. i. 13, ii. 8, iv. 1, 2, reconstructs a primitive Apostles' Creed of Antioch, the city from which St Paul started on his missionary journeys. But there is no mention of a third article in the creed, beyond a reference to the Holy Ghost in the context of 2 Tim. i. 14, which would prove the apostolic use of a Trinitarian confession imaginable as the parent of the later Eastern and Western forms. The eunuch's creed interpolated in Acts viii. 57, "I believe that Jesus is the Son of God," since the reading was known to Irenaeus, probably represents the form of baptismal confession used in some church of Asia Minor, and supplies us with the type of a primitive creed. This theory is confirmed by the evidence of the Johannine epistles (1 John iv. 15, v. 5; cf. Heb. iv. 14).

From this point of view it is easy to explain the occurrence of creed-like phrases in the New Testament as fragments of early hymns (1 Tim. iii. 16) or reminiscences of oral teaching (1 Cor. xv. 1 ff.). The following form which Seeberg gives as the creed of St Paul is an artificial combination of fragments of oral teaching, which naturally reappear in the teaching of St Peter, but finds no attestation in the later creeds of particular churches which would prove its claim to be their parent form:

> "The living God who created all things sent His Son Jesus Christ, born of the seed of David, who died for our sins according to the scriptures, and was buried, who was raised on the third day according to the scriptures, and appeared to Cephas and the XII., who sat at the right hand of God in the heavens, all rule and authority and power being made subject unto Him, and is coming on the clouds of heaven with power and great glory."

The evidence of the apostolic fathers is disappointing. Clement (*Cor.* lviii. 2) supplies only parallels to the baptismal formula (Matt. xxviii. 19). Polycarp (*Ep.* 7) echoes St John. But Ignatius might seem to offer in the following passage some confirmation of Zahn's theory of a primitive creed of Antioch (*Trall.* 9): "Be ye deaf, therefore, when any man speaketh to you apart from Jesus Christ, who was of the race of David, who was the Son of Mary, who was truly born and ate and drank, was truly persecuted under Pontius Pilate, was truly crucified and died in the sight of those in heaven and those on earth and those under the earth; who, moreover, was truly raised from the dead, His Father having raised Him, who in the like fashion will so raise us also who believe on Him—His Father, I say, will raise us—in Christ Jesus, apart from whom we have not true life."

The differences, however, which divide this from the later creed forms are scarcely less noticeable than their agreement, and the evidence of the Ignatian epistles generally (*Eph*. xviii.; *Smyrn.* i.), while it confirms the conclusion that instruction was given in Antioch on all points characteristic of the

developed creed, *e.g.* the Miraculous Birth, Crucifixion, Resurrection, the Catholic Church, forgiveness of sins, the hope of resurrection, does not prove that this teaching was as yet combined in a Trinitarian form which classified the latter clauses under the work of the Holy Ghost.

At this point a word must be said on the important question of interpretation. While we may hope for eventual agreement on the history of the different types of creed forms, there can be no hope of agreement on the interpretation of the words Holy Spirit between Unitarian and Trinitarian critics. Writers who follow Harnack explain "holy spirit" as the gift of impersonal influence, and between wide limits of difference agree in regarding Christ as Son of God by adoption and not by nature. Amid the chaos of conflicting opinions as to the original teaching of Jesus, the Gospel within the Gospel, the central question "What think ye of Christ?" emerges as the test of all theories. "No man can say that Jesus is the Lord save in the Holy Ghost" (1 Cor. xii. 3). Belief in the fact of the Incarnation of the eternal Word, as it is stated in the words of Ignatius quoted above, or in any of the later creeds, stands or falls with belief in the Holy Ghost as the guide alike of their convictions and destinies, no mere impersonal influence, but a living voice.

If the essence of Christianity is winnowed down to a bare imitation of the Man Jesus, and his religion is accepted as Buddhists accept the religion of Buddha, still it cannot be denied that the early Christians put their trust in Christ rather than his religion. "I am the life," not "I teach the life," "I am the truth," not merely "I teach the truth," are not additions of Johannine theology but the central aspect of the presentation of Christ as the good physician, healer of souls and bodies, which the most rigid scrutiny of the Synoptic Gospels leaves as the residuum of accepted fact about Jesus of Nazareth. To say more would be out of place in this article, but enough has been said to introduce the exhaustive discussion by Kattenbusch (ii. 471-728) of the

meaning of the theological teaching both of the New Testament and of the earliest creeds.

To return within our proper limits. Kattenbusch, with whom Harnack is in general agreement, regards the Old Roman Creed, which comes to light in the 4th century, as the parent of all developed forms, whether Eastern or Western. Marcellus, the exiled bishop of Ancyra, is quoted by Epiphanius as presenting it to Bishop Julius of Rome c. A.D. 340. Ussher's recognition of the fact that this profession of faith by Marcellus was the creed of Rome, not of Ancyra, is the starting-point of modern discussions of the history of the creeds. Some sixty years later Rufinus, a priest of Aquileia, wrote a commentary on the creed of his native city and compared it with the Roman Creed. His Latin text is probably as ancient as the Greek text of Marcellus, because the Roman Church must always have been bilingual in its early days. It was as follows:

I. 1. I believe in God (the) Father almighty;
II. 2. And in Christ Jesus His only Son our Lord,
3. who was born of the Holy Spirit and the Virgin Mary,
4. crucified under Pontius Pilate and buried
5. the third day He rose from the dead,
6. He ascended into heaven,
7. sitteth at the right hand of the Father,
8. thence He shall come to judge living and dead.
III. 9. And in the Holy Ghost,
10. (the) holy Church,
11. (the) remission of sins,
12. (the) resurrection of the flesh.

This Old Roman Creed may be traced back in the writings of Bishops Felix and Dionysus (3rd century), and in the writings of Tertullian in the 2nd century.

Tertullian calls the creed the "token" which the African Church shares with the Roman (*de Praescr.* 36): "The Roman Church has made a common token with the African Churches, has recognized one God, creator of the universe, and Christ Jesus, of the Virgin Mary, Son of God the Creator, and the

resurrection of the flesh." The reference is to the earthenware token which two friends broke in order that they might commend a stranger for hospitality by sending with him the broken half. Their creed became the passport by which Christians in strange cities could obtain admission to assemblies for worship and to common meals. The passage quoted is obviously a condensed quotation of the Roman Creed, which reappears also in the following (*de Virg. vel.* i.):

> "The rule of faith is one altogether ... of believing in one God Almighty, maker of the world, and in His Son Jesus Christ, born of Mary the Virgin, crucified under Pontius Pilate; the third day raised from the dead, received in the heavens, sitting now at the right hand of the Father, about to come and judge quick and dead through the resurrection also of the flesh."

There are many references in Tertullian to the teaching of the Gnostic Marcion, whose breach with the Roman Church may be dated A.D. 145. He seems to have still held to the Roman creed interpreted in his own way. An ingenious conjecture by Zahn enables us to add the words "holy Church" to our reconstruction of the creed from the writings of Tertullian. In his revised New Testament Marcion speaks of "the covenant which is the mother of us all, which begets us in the holy Church, to which we have vowed allegiance." He uses a word used by Ignatius of the oath taken on confession of the Christian faith. It follows that the words "holy Church" were contained in the Roman Creed.[6]

While all critics agree in tracing back this form to the earliest years of the 2nd century, and regard it as the archetype of all similar Western creeds, there is great diversity of opinion on its relation to Eastern forms. Kattenbusch maintains that the Roman Creed reached Gaul and Africa in the course of the 2nd century, and perhaps all districts of the West that possessed Christian congregations, also the western end of Asia Minor possibly in connexion with

Polycarp's visit to Rome A.D. 154. He finds that materials fail for Pontus, Galatia, Cappadocia, Syria, Palestine, Egypt. Further, he holds that all the Eastern creeds which are known to us as existing in the 4th century, or may be traced back to the 3rd, lead to Antioch as their starting-point. He concludes that the Roman Creed was accepted at Antioch after the fall of Paul of Samosata in A.D. 272, and was adapted to the dogmatic requirements of the time, all the later creeds of Palestine, Asia Minor and Egypt being dependent on it.

On the other hand, Kunze, Loofs, Sanday, and Zahn find evidence of the existence of an Eastern type of creed of equal or greater antiquity and distinguished from the Roman by such phrases as "One" (God), "Maker of heaven and earth," "suffered," "shall come again in glory." Thus Kunze reconstructs a creed of Antioch for the 3rd century, and argues that it is independent of the Roman Creed.

Creed of Antioch.

I. 1. I believe in one and one only true God, Father Almighty, maker of all things, visible and invisible.

II. 2. And in our Lord Jesus Christ, His Son, the only-begotten and first born of all creation, begotten of Him before all the ages, through whom also the ages were established, and all things came into existence;

3. Who for our sakes, came down, and was born of Mary the Virgin.

4. And crucified under Pontius Pilate, and buried,

5. And the third day rose according to the scriptures,

6. and ascended into heaven.

7.

8. And is coming again to judge quick and dead.

9. [The beginning of the third article has not been recorded.]

10.

11. Remission of sins.

12. Resurrection of the dead, life everlasting.

Along similar lines Loofs selects phrases as typical of creeds which go back to a date preceding the Nicene Council.

A. Creed of Eusebius of Caesarea, presented to the Nicene Council.

B. Revised Creed of Cyril of Jerusalem.

C. Creed of Antioch quoted by Cassian.

D. Creed of Antioch quoted in the Apostolic Constitutions.

E. Creed of Lucian the Martyr (Antioch).

F. Creed of Arius (Alexandria).

1. One (God), A, B, C, D, E, F.
   Maker of heaven and earth and of all things visible and invisible (or a like phrase), A, B, C, D, E.
2. Lord Jesus Christ, His Son, the only begotten (or a like phrase), A, B, C, D, E, F.
3. Crucified under Pontius Pilate, B, C, D (A, E, F omit because they are theological creeds. Loofs thinks that the baptismal creeds on which they are based may have contained the words).
5. Rose the third day, A, B, D, E (F omits "the third day" being a theological creed; the translation of C is uncertain).
6. Went up, A, B, D, E, F.
   + and ... and ... and, A, B, C, D, E, F.
8. And is coming, B, C, D, E, F; and is about to come, A;
   + again, A, C, D, E, F(B?); + in glory, A, B; with glory, D, E.
10. + Catholic, B, D, F (A, C, E?)
12. + life eternal, B, C; + life of the age to come, D, F.

Sanday (*Journal Theol. Studies*, iii. 1) does not attempt a reconstruction on this elaborate scale, but contents himself with pointing out evidence, which Kattenbusch seems to him to have missed, for the existence of creeds of Egypt, Cappadocia and Palestine before the time of Aurelian. He criticizes Harnack's theory that there existed in the East, that is, in Asia Minor, or in Asia Minor and Syria as far back as the beginning of the 2nd century, a Christological instruction (μάθημα) organically related to the second article of the Roman Creed, and formulas which taught that the "One God" was "Creator of heaven and earth," and referred to the holy prophetic spirit, and lasted on till they influenced the course of creed-development in the 4th

century. He asks, is it not simpler to believe that there was a definite type in the background?

Another English student, the Rev. T. Barns, engaged specially in work upon the history of the creed of Cappadocia, points out the importance of the extraordinary influence of Firmilian of Caesarea in the affairs of the church of Antioch in the early part of the 3rd century. He is led to argue that the creed of Antioch came rather from Cappadocia than Rome. Whether his conclusion is justified or not, it helps to show how strongly the trend of contemporary research is setting against the theory of Kattenbusch that the Roman Creed when adopted at Antioch became the parent of all Eastern forms. It does not, however, militate against the possibility that the Roman Creed was carried from Rome to Asia Minor and to Palestine in the 2nd century. It is evidently impossible to arrive at a final decision until much more spade work has been done in the investigation of early Eastern creeds. Connolly's study of the early Syrian creed (*Zeitschrift für die neutestamentliche Wissenschaft*, 1906, p. 202) deserves careful consideration. His reconstruction of the creed of Aphraates is interesting in relation to the other traces of a Syriac creed form existing prior to the 4th century.

> [I believe] in God the Lord of all, that made the heavens and the earth and the seas and all that in them is; [And in our Lord Jesus Christ] [the Son of God,] God, Son of God, King, Son of the King, Light from Light, (Son and Counsellor, and Guide, and Way, and Saviour, and Shepherd, and Gatherer, and Door, and Pearl, and Lamb,) and first-born of all creatures, who came and put on a body from Mary the Virgin (of the seed of the house of David, from the Holy Spirit), and put on our manhood, and suffered, *or* and was crucified, went down to the place of the dead, *or* to Sheol, and lived again, and rose the third day, and ascended to the height, *or* to heaven, and sat on the right hand of His Father, and He is the Judge of the dead and of the living, who sitteth on the throne; [And in

the Holy Spirit;] [And I believe] in the coming to life of the dead; [and] in the mystery of Baptism (of the remission of sins).

The probable battle-ground of the future between the opposing theories lies in the writings of Irenaeus. He has most of the characteristic expressions of the Eastern creeds. He inserts "one" in clause 1 and 2. He has the phrases "Maker of heaven and earth," "suffered," and "crucified," with "under Pontius Pilate" after instead of before it. Probably also he had "in glory" in clause 8. But there is always the possibility to be faced that Irenaeus drew his creed from Rome rather than Asia Minor. Kattenbusch does not shrink from suggesting that he shows acquaintance with the Roman Creed, and that Justin Martyr also knew it, in which case all the so-called Eastern characteristics have been imprinted on the original Roman form, and are not derived from an Eastern archetype. But the ordinary reader need not feel concern about the future victory of either theory. The plain fact is that the same facts were taught in Palestine, Asia Minor and Gaul, whether gathered up in a parallel creed form or not. The contrast which Rufinus draws between the Roman Creed and others, both of the East and the West, is justified. In comparison with them it was guarded more carefully from change.[7] We have yet to inquire how it received the additions which distinguish the derived form now in use as the baptismal creed of all Western Christendom. Some had already found an entrance into Western creeds. We find "suffered" in the creed of Milan, "descended into hell" in the creed of Aquileia, the Danubian lands and Syria; the words "God" and "almighty" were shortly added to clause 7 in the Spanish creed; "life everlasting" had stood from an early date in the African creed. The creed of Caesarius of Arles (d. 543) proves that these variations had all been united in one Gallican creed together with "catholic" and "communion of saints," but this Gallican form still lacked "Maker of heaven and earth" and the additions in clause 7.

Two newly-discovered creeds help us greatly to narrow down the limits of the problem. The creed of Niceta of Remesiana in Dacia proves that c. A.D.

400 the Dacian church had added to the Roman Creed “maker of heaven and earth,” “suffered,” “dead,” “Catholic,” “communion of saints” and “life everlasting.” Parallel to it is the Faith of St Jerome discovered in 1903 by Dom. Morin.[8]

The Faith of St Jerome.

> “I believe in one God the Father almighty, maker of things visible and invisible. I believe in one Lord Jesus Christ, the Son of God, born of God, God of God, Light of Light, almighty of almighty, true God of true God, born before the ages, not made, by whom all things were made in heaven and in earth. Who for our salvation descended from heaven, was conceived of the Holy Ghost, born of the Virgin Mary, suffered by suffering under Pontius Pilate, under Herod the King, crucified, buried, descended into hell, trod down the sting of death, rose again the third day, appeared to the apostles. After this He ascended into heaven, sitteth at the right of God the Father, thence shall come to judge the quick and the dead. And I believe in the Holy Ghost, God not unbegotten nor begotten, not created nor made, but co-eternal with the Father and the Son. I believe (that there is) remission of sins in the holy catholic church, communion of saints, resurrection of the flesh unto eternal life. Amen.”

This creed may be the form which Jerome mentions in one of his letters (*Ep.* 17, n. 4) as sent to Cyril of Jerusalem. It is important as connecting the creeds of East and West. Since Jerome was born in Pannonia we may conjecture that he is inserting Nicene phrases from the Jerusalem creed into his baptismal creed, and that this form added to Niceta’s creed proves that the creed of the Danube lands possessed the clauses “maker of heaven and earth” and “communion of saints.”

The first occurrence of the completed form is in a treatise (*Scarapsus*) of the Benedictine missionary Pirminius, abbot of Reichenau (c. A.D. 730). The difficulty hitherto has been to trace the source from which the clause "maker of heaven and earth" has come into it. It has been known that the forms in use in the south of France approximated to it but without those words. In the 6th century we find creed forms in use in Gaul which include them, but include also other variations distinguishing them from the form which we seek. The missing link which has hitherto been lacking in the evidence has been found by Barns in the influence of Celtic missionaries who streamed across from Europe until they came in touch with the remnants of the Old Latin Christianity of the Danube. The chief documents of the date A.D. 700, which contain forms almost identical with the received text, are connected with monasteries founded by Columban and his friends: Bobbio, Luxeuil, S. Gallen, Reichenau. From one of these monasteries the received text seems to have been taken to Rome. Certainly it was from Rome that it was spread. We can trace the use of the received text along the line of the journeys both of Pirminius and Boniface, and there is little doubt that they received it from the Roman Church, with which Boniface was in frequent communication. Pope Gregory II. sent him instructions to use what seems to have been an official Roman order of Baptism, which would doubtless include a Roman form of creed. Pirminius, who was far from being an original writer, made great use of a treatise by Martin of Braga, but substituted a Roman form of Renunciation, and refers to the Roman rite of Unction in a way which leads us to suppose that the form of creed which he substituted for Martin's form was also Roman. It seems clear, therefore, that the received text was either made or accepted in Rome, c. A.D. 700, and disseminated through the Benedictine missionaries. At the end of the 8th century Charlemagne inquired of the bishops of his empire as to current forms. The reply of Amalarius of Trier is important because it shows that he not only used the received text, but also connected it with the Roman order of Baptism. The emperor's wish for

uniformity doubtless led in a measure to its eventual triumph over all other forms.

2. *The Nicene Creed* of the liturgies, often called the Constantinopolitan creed, is the old baptismal creed of Jerusalem revised by the insertion of Nicene terms. The idea that the council merely added to the last section has been disproved by Hort's famous dissertation in 1876.[9]

Nicene Creed.

The text of the creed of the Nicene Council was based on the creed of Eusebius of Caesarea, and a comparison of the four creeds side by side proves to demonstration their distinctness, in spite of the tendency of copyists to confuse and assimilate the forms.[10]

Creed of Eusebius, A.D. 325 (Caesarea).	*Revision by the Council of Nicaea, A.D. 325.*
We believe	We believe
I. 1. In one God the Father Almighty, the maker of all things visible and invisible.	I. 1. In one God the Father Almighty the maker of all things visible and invisible.
II. 2. And in one Lord Jesus Christ,the Word of God.	II. 2. And in one Lord Jesus Christ, the Son of God,
God of God, Light of Light, (Life of Life,) only begotten Son (first-born of all creation, before all worlds begotten of God the Father), by whom all things were made;	begotten of the Father, only begotten, that is of the substance of the Father, God of God, Light of Light, very God of very God, begotten not made, of one substance with the Father, by whom all things were made, both those

3. Who for our Salvation was incarnate (and lived as a citizen amongst men),

4. And Suffered,
5. And rose the third day,

6. And ascended (to the Father),

7. And shall come again (in glory) to judge quick and dead.

III. 8. And (we believe) in (one) Holy Ghost.

Creed of Jerusalem, A.D. 348.

I (or We) believe

I. 1. In one God the Father, Almighty, maker of heaven and earth, and of all things visible and invisible.

II. 2. And in one Lord Jesus Christ, the only begotten Son of God, begotten of His Father,

very God before all worlds,

by whom all things were made;

in heaven and those on earth.

3. Who for us men and for our salvation came down and was incarnate, was made man,

4. And suffered,
5. And rose the third day,

6. Ascended into Heaven,

7. Is coming to judge quick and dead.

III. 8. And in the Holy Ghost.

Revision by Cyril, A.D. 362. Council of Constantinople, A.D. 381. Council of Chalcedon, A.D. 451.

We believe

I. 1. In one God the Father Almighty, maker of heaven and earth, and of all things visible and invisible.

II. 2. And in one Lord Jesus Christ, the only begotten Son of God, begotten of His Father before all worlds, [God of God,] Light of Light, very God of very God, begotten, not

	made, being of one substance with the Father, by whom all things were made;
3. was incarnate, and was made Man,	3. Who for us men and for our salvation came down from heaven and incarnate of the Holy Ghost and the Virgin Mary, and was made Man.
4. Crucified and buried.	4. And was crucified also for us under Pontius Pilate, and suffered and
5. Rose again the third day,	5. He rose again the third day, according to the Scriptures,
6. And ascended into heaven and *sat* on the right hand of the Father,	6. And ascended into heaven and sitteth on the right hand of the Father,
7. And shall come *in glory* to judge the quick and the dead, whose kingdom shall have no end.	7. And He shall come again to judge the quick and the dead, whose kingdom shall have no end.
III. 8. And in *One* Holy Ghost, *the Paraclete*, who spake *in* the Prophets,	III. 8. And in the Holy Ghost, the Lord and Giver of Life. who proceedeth from the Father [*and the Son*], who with the Father and

	the Son together is worshipped and glorified, who spake by the Prophets,
9. And in one baptism of repentance for remission of sins,	9. In the Catholic and Apostolic Church.
10. And in one holy Catholic Church,	10. We acknowledge one baptism for remission of sins.
11. And in resurrection *of the flesh*,	11. We look for the resurrection of the dead,
12. And in life eternal.	12. And in the life of the world to come.

The revised Jerusalem Creed was quoted by Epiphanius in his treatise *The Anchored One*, c. A.D. 374, some years before the council of Constantinople (A.D. 381). We gather that it had already been introduced into Cyprus as a baptismal creed. Hort's identification of it as the work of Cyril of Jerusalem is now generally accepted. On his return from exile in A.D. 362 Cyril would find "a natural occasion for the revision of the public creed by the skilful insertion of some of the conciliar language, including the term which proclaimed the restoration of full communion with the champions of Nicaea, and other phrases and clauses adapted for impressing on the people positive truth." Some of Cyril's personal preferences expressed in his catechetical lectures find expression, *e.g.* "resurrection of the *dead*" for "flesh."

The weak point in Hort's theory was the suggestion that the creed was brought before the council by Cyril in self justification. The election of Meletius of Antioch as the first president of the council carried with it the vindication of his old ally Cyril. Kunze's suggestion is far more probable that it was used at the baptism of Nektarius, praetor of the city, who was elected third president of the council while yet unbaptized. Unfortunately the acts of

the council have been lost, but they were quoted at the council of Chalcedon in A.D. 451, and the revised Jerusalem Creed was quoted as "the faith of the 150 Fathers," that is, as confirmed in some way by the council of Constantinople, while at the time it was distinguished from "the faith of the 318 Fathers" of Nicaea. One of the signatories of the Definition of Faith made at Chalcedon, in which both creeds were quoted in full, Kalemikus, bishop of Apamea in Bithynia, refers to the council of Constantinople as having been held at the ordination of the most pious Nektarius the bishop. Obviously there was some connexion in his mind between the creed and the ordination.

The reasons which brought the revised creed into prominence at Chalcedon are still obscure. It is possible that Leo's letter to Flavian gave the impulse to put it forward because it contained a parallel to words which Leo quoted from the Old Roman Creed, "born of the Holy Ghost and the Virgin Mary," "crucified and buried," which do not occur in the first Nicene Creed. If, as is probable, it was from the election of Nektarius the baptismal creed of Constantinople, we may even ask whether the pope did not refer to it when he wrote emphatically of the "common and indistinguishable confession" of all the faithful. Kattenbusch supposes that Anatolius, bishop of Constantinople, or his archdeacon Aetius, who read the creed at the 2nd session of the council, took up the idea that through its likeness to the Roman Creed it would be a useful weapon against Eutyches and others who were held to interpret the Nicene Creed in an Apollinarian sense. But Kunze thinks that it was not used as a base of operations against Eutyches because there is some evidence that Monophysites were willing to accept it. Certainly it won its way to general acceptance in the East as the creed of the church of the imperial city; regarded as an improved recension of the Nicene Faith. The history of the introduction of the creed into liturgies is still obscure. Peter Fullo, bishop of Antioch, was the first to use it in the East, and in the West a council held by King Reccared at Toledo in 589. The theory of Probst that it had been used in Rome before this time has not been confirmed. King Reccared's council is usually credited with the introduction of the words "And the Son" into clause 9 of the creed.

But some MSS.[11] omit them in the creed-text while inserting them in a canon of the faith drawn up at the time. Probably they were interpolated in the creed by mistake of copyists. When attention was called to the interpolation in the 9th century it became one cause of the schism between East and West. Charlemagne was unable to persuade Pope Leo III. to alter the text used in Rome by including the words. But it was so altered by the pope's successor.

The interpolation really witnessed to a deep-lying difference between Eastern and Western theology. Eastern theologians expressed the mysterious relationship of the Holy Spirit to the Father and the Son in such phrases as "Who proceedeth from the Father and receiveth from the Son," rightly making the Godhead of the Father the foundation and primary source of the eternally derived Godhead of the Son and the Spirit. Western theologians approached the problem from another point of view. Hilary, starting from the thought of Divine self-consciousness as the explanation of the coinherence of the Father in the Son and the Son in the Father, says that the Spirit receives of both. Augustine teaches that the Father and the Son are the one principle of the Being of the Spirit. From this it is a short step to say with the *Quicumque vult* that the Spirit proceeds from the Son, while guarding the idea that the Father is the one fountain of Deity. Since Eastern theologians would be willing to say "proceeds from the Father through the Son," it is clear that the two views are not irreconcilable.

3. *The Athanasian Creed*, so called because in many MSS. it bears the title "The Faith of S. Athanasius," is more accurately designated by its first words *Quicumque vult*.[12] Its history has been the subject of much controversy for years past, but no longer presents an insoluble problem. Critics indeed agree on the main outline. Until 1870 the standard work on the subject was Waterland's *Critical History of the Athanasian Creed*, first published in 1723. Having traced "the opinions of the learned moderns" from Gerard Vossius, A.D. 1642, "who led the way to a more strict and critical inquiry," Waterland passed in review all

Athanasian Creed.

the known MSS. and commentaries, and after a searching investigation concluded that the creed was written in Gaul between 420 and 430, probably by Hilary of Arles.

In 1870 the controversy on the use of the creed in the Book of Common Prayer led to fresh investigation of the MSS., and a theory known as the "Two-portion theory" was started by C. A. Swainson, developed by J. R. Lumby, and adopted by Harnack. Swainson thought that the *Quicumque* was brought into its present shape in the 9th century. The so-called profession of Denebert, bishop-elect of Worcester, in A.D. 798 presented to the archbishop of Canterbury (which includes clauses 1, 3-6, 20-22, 24, 25), and the Trèves fragment (a portion of a sermon in *Paris bibl. nat. Lat.* 3836, *saec.* viii., which quoted clauses 27-34, 36-40), seemed to him to represent the component parts of the creed as they existed separately. He conjectured that they were brought together in the province of Rheims c. 860.

This theory, however, depended upon unverified assumptions, such as the supposed silence of theologians about the creed at the beginning of the 9th century; the suggestion that the completed creed would have been useful to them if they had known it as a weapon against the heresy of Adoptianism; the assertion that no MS. containing the complete text was of earlier date than c. 813. This was Lumby's revised date, but the progress of palaeographical studies has made it possible to demonstrate that MSS. of the 8th century do exist which contain the complete creed.

The two-portion theory was vigorously attacked by G. D. W. Ommanney, who was successful in the discovery of new documents, notably early commentaries, which contained the text of the creed embedded in them, and thus supplied independent testimony to the fact that the creed was becoming fairly widely known at the end of the 8th century. Other new MSS. and commentaries were found and collated by the Rev. A. E. Burn and Dom Morin. In 1897 Loofs, summing up the researches of 25 years in his article

Athanasianum (*Realencyclopädie f. prot. Theol. u. Kirche*, 3rd ed. ii. p. 177), declared that the two-portion theory was dead.

This conclusion has never been seriously challenged. It has been greatly strengthened by the discovery of a MS. which was presented by Bishop Leidrad of Lyons with an autograph inscription to the altar of St Stephen in that town, some time before 814. As M. Delisle at once pointed out (*Notices et extraits des manuscrits*, 1898), this MS. supplies a fixed date from which palaeographers can work in dating MSS. The *Quicumque* occurs in a collection of materials forming an introduction to the psalter. The suggestion has been made that Leidrad intended to use the *Quicumque* in his campaign against the Adoptianists in 798. But the phrases of the creed seem to have needed sharpening against the Nestorian tendency of the Adoptianists. It is more probable that Leidrad was interested in the growing use of the creed as a canticle, and was consulted in the preparation of the famous Golden Psalter, now at Vienna, which contains the same collection of documents as an introduction. This MS. may now without hesitation be assigned to the date 772-788. The earliest known MS. is at Milan (*Cod. Ambros.* O, 212, *sup.*), and is dated by Traube as early as c. 700.

There is a reference to the *Quicumque* in the first canon of the fourth council of Toledo of the year 633, which quotes part or the whole of clauses 4, 20-22, 28 f., 31, 33, 35 f., 40. The council also quoted phrases from the so-called *Creed of Damasus*, a document of the 4th century, which in some cases they preferred to the phrases of the *Quicumque*. Their quotations form a connecting link in the chain of evidence by which the use of the creed may be traced back to the writings of Caesarius, bishop of Arles (503-543). Dom Morin has now demonstrated ("Le Symbole d'Athanase et son premier témoin S. Césaire d'Arles," *Rev. Bénédictine*, Oct. 1901) that Caesarius used the creed continually as a sort of elementary catechism. The fact that it exactly reproduces both the qualities and the literary defects of Caesarius is a strong argument in favour of Morin's suggestion that he may have been the

author. Further, Caesarius was in the habit of putting some words of a distinguished writer at the head of his compositions, which would account for the fact that the name of Athanasius was subsequently attached to the creed.

The use, however, of the *Quicumque* by Caesarius as a catechism may be explained by the suggestion that it had been taught him in his youth, so that his style had been moulded by it. He was not an original thinker. Moreover, the creed is quoted by his rival Avitus, bishop of Vienne 490-523, who quotes clause 22, as from the Rule of Catholic Faith, but was not likely to value a composition of Caesarius so highly. Morin does not deal fully with the arguments from internal evidence which point back to the beginning of the 5th century as the date of the creed. If the creed-phrases needed sharpening against the revived Nestorian error of the Adoptianists, it is scarcely likely to have been written during the generation following the condemnation of Nestorius in 431. Burn suggests that it was written to meet the Sabellian and Apollinarian errors of the Spanish heretic Priscillian, possibly by Honoratus, bishop of Arles (d. 429). He suggests further that the *Creed of Damasus* was the reply of that pope to Priscillian's appeal. This would explain the quotation of the two documents together by the council of Toledo, since the heresy lasted on for a long time in Spain. But the theory has been carried to extravagant lengths by Künstle, who thinks that the creed was written in Spain in the 5th century, and soon taken to the monastery of Lerins. There are phrases in the writings of Vincentius of Lerins and of Faustus, bishop of Riez, which are parallel to the teaching of the creed, though they cannot with any confidence be called quotations. They tend in any case to prove that the *Quicumque* comes to us from the school of Lerins, of which Honoratus was the first abbot, and to which Caesarius also belonged.

The earliest use of the *Quicumque* was in sermons, in which the clauses were quoted, as by the council of Toledo without reference to the creed as a whole. From the 8th century, if not from earlier times, commentaries were written on it. The writer of the Oratorian Commentary (Theodulf of Orleans?)

addressing a synod which instructed him to provide an exposition of this work on the faith, writes of it, as “here and there recited in our churches, and continually made the subject of meditation by our priests.” It was soon used as a canticle. Angilbert, abbot of St Riquier (c. 814), records that it was sung by his school in procession on rogation days. It passed into the office of Prime, apparently first at Fleury. In the first Prayer Book of Edward VI. it was “sung or said” after the Benedictus on the greater feasts, and this use was extended in the second Prayer Book. In 1662 the rubric was altered and it was substituted for the Apostles’ Creed. It has no place in the offices of the Eastern Orthodox Church, but is found, without the words “And the Son” of clause 22, in the appendix of many modern editions. In the Russian service books it appears at the beginning of the psalter.

The controversy on its use in modern times has turned mainly on the interpretation of the warning clauses. No new translation can put an end to the difficulty. While it is true that the Church has never condemned individuals, and that the warnings refer only to those who have received the faith, and do not touch the question of the unbaptized, there is a growing feeling that they go beyond the teaching of Holy Scripture on the responsibility of intellect in matters of faith.[13]

On the other hand the creed is a valuable statement of Catholic faith on the Trinity and the Incarnation, and its use for students and teachers at least is by no means obsolete. The special characteristic of its theology is in the first part where it owes most to the teaching of Augustine, who in his striving after self-knowledge analysed the mystery of his own triune personality and illustrated it with psychological images, “I exist and I am conscious that I exist, and I love the existence and the consciousness; and all this independently of any external influence.” Such a riper analysis of the mystery of his own personality enabled him to arrive at a clearer conception of the idea of divine personality, “whose triunity has nothing potential or unrealized

about it; whose triune elements are eternally actualized, by no outward influence, but from within; a Trinity in Unity."[14]

II. Modern Confessions of Faith.—The second great creed-making epoch of Church history opens in the 16th century with the Confession of Augsburg. The famous theses which Luther nailed to the door of the church at Wittenberg in 1517 cannot be called a confession, but they expressed a protest which could not rest there. Some reconstruction of popular beliefs was needed by many consciences. There is a striking contrast between the crudeness of much and widely accepted medieval theology and the decrees of the council of Trent. Even from the Roman Catholic standpoint such a need was felt. Luther himself had a gift of words which through his catechisms made the reformed theology popular in Germany. In 1530 it became necessary to define his position against both Romanists and Zwinglians.

1. *The Confession of Augsburg* was drawn up by Melanchthon, revised by Luther, and presented to the emperor Charles V. at the diet of Augsburg. Some 21 of its articles dealt with doctrine, 7 with ecclesiastical abuses. It expounded in terse and significant teaching the doctrine (1) of God, (2) of original sin, (3) of the Son of God, (4) of justification ..., (21) of the worship of saints. The abuses which it was maintained had been corrected by Lutheranism were discussed in articles (1) on Communion in both kinds, (2) on the marriage of clergy, (3) on the Mass, &c. (see Augsburg, Confession of).

Augsburg confession.

The main difference between these, the first of a long series of articles of religion and the ancient creeds, lies in the fact that they are manifestoes embodying creeds and answering more than one purpose. This is the reason of their frequent failure to convey any sense of proportion in the expression of truth. The disciplinary question of clerical marriage is not of the same primary importance as the doctrinal questions involved in the restoration of

the cup to the laity, or discussed in the subsequent article on the mass. As has been well said by a learned Baptist theologian, Dr Green: “It was by a true divine instinct that the early theologians made Christ Himself, in His divine-human personality, their centre of the creeds.”[15] The fundamental questions of Christianity, exhibited in the Apostles’ Creed, should be marked off as standing on a higher plane than others. In this respect catechisms of modern times, from Luther’s down to the recent Evangelical catechism of the Free Churches, and including from their respective points of view both the catechism of the Church of England and the catechism of the council of Trent, are markedly superior to articles and synodical decrees. The failure of the latter was really inevitable. In the 16th century a spirit of universal questioning was rife, and it is this utter unsettlement of opinion which is reflected in the discussions of doubts on matters only remotely connected with “the faith once for all delivered unto the saints” (Jude 3). Moreover, fresh complications arose from the confusion in which the question of the duties and rights of the civil power was entangled. In an age when the foundations of the system on which society had rested for centuries were seriously shaken, such subjects as the right of the magistrate to interfere with the belief of the individual, and the limits of his authority over conscience, naturally assumed a prominence hitherto unknown.[16]

2. *Other Lutheran Formularies.*—For the purpose of classification it will be convenient to discuss Lutheran, Zwinglian and Calvinistic confessions separately.

Lutheran.

An elaborate *Apology* for the confession of Augsburg was drawn up by Melanchthon in reply to Roman Catholic criticisms. This, together with the confession, the articles of Schmalkalden, drawn up by Luther in 1536, Luther’s catechisms, and the Formula of Concord which was an attempt to settle doctrinal divisions promulgated in 1580, sum up what is called “the confessional theology of Lutheranism.” Of less influence in the subsequent history of Lutheranism, but

of interest as used by Archbishop Parker in the preparation of the Elizabethan articles of 1563, is the confession of Württemberg. It was presented to the council of Trent by the ambassador of the state of Württemberg in 1552. Its thirty-five articles contain a moderate statement of Lutheran teaching.

3. *Zwinglian and Calvinistic Confessions.*—The confession of the Four Cities, Strassburg, Constance, Memmingen and London, was drawn up by M. Bucer and was presented to Charles V. at Augsburg in 1530. These cities were inclined to follow Zwingli in his sacramental teaching which was more fully expressed in the Confession of Basel (1534) and the First Helvetic Confession (1536). Calvin's views were expressed in the Gallican Confession, containing forty articles, which was drawn up in 1559, and was presented both to Francis II. of France and to Charles IX. On the same lines the Belgian Confession of 1561, written by Guido de Brès in French, and translated into Dutch was widely accepted in the Netherlands and confirmed by the synod of Dort (1619). The second Helvetic Confession was the work of Bullinger, published at the request of the Elector Palatine Frederick III. in 1566, and was held in repute in Switzerland, Poland and France as well as the Palatinate. It was sanctioned in Scotland and was well received in England.

Zwinglian and Calvinist.

These confessions teach the root idea of Calvin's theology, the immeasurable awfulness of God, His eternity, and the immutability of His decrees. Such strict Calvinism was the strength also of the Westminster Confession (see below), but was soon weakened in Germany. This same Elector Frederick invited two young divines, Zacharias Ursinus and Caspar Olevianus, to prepare the afterwards celebrated Heidelberg catechism, which in 1563 superseded Calvin's catechism in the Palatinate. While Calvin began sternly with the question: "What is the chief end of human life?" Ans.: "That men may know God by whom they were created,"—the Heidelberg catechism has: "What is thy only comfort in life and death?" Ans.: "That I with body and soul, both in life and death, am not my own, but belong to my faithful

Saviour Jesus Christ." This catechism has been called the charter of the German Reformed Church. It contains three divisions dealing with (1) man's sin, misery, redemption, (2) the Trinity, (3) thankfulness, under which is included all practical Christian life lived in gratitude for mercies received.

4. *English Articles of Religion.*—The ten articles of 1536 were drawn up by Convocation at the bidding of Henry VIII. "to stablysh Christian Quietnes and Unitie." They exhibit a traditional character, a compromise between the old and the new learning. Thus the doctrine of the Real Presence is asserted, but no mention is made of Transubstantiation. Medieval ceremonies are described as useful but without power to remit sins. Two years later, after negotiations with the Lutheran princes, a conference on theological matters was held at Lambeth with Lutheran envoys. Thirteen articles were drawn up, which, though never published (they were found among Cranmer's papers at the beginning of the 19th century), had some influence on the forty-two articles. Some of them were taken from the confession of Augsburg, but the sections on Baptism, the Eucharist and penance, show that the English theologians desired to lay more emphasis on the character of sacraments as channels of grace. The Statute of the Six Articles (1539), "the whip with six strings," was the outcome of the retrograde policy which distinguished the latter years of Henry VIII.

Articles of religion.

With the accession of Edward VI. liturgical reforms were set on foot before an attempt was made to systematize doctrinal teaching. But as early as 1549 Cranmer had in hand "Articles of Religion" to which he required all preachers and lecturers to subscribe. In 1552 they were revised by other bishops and were laid before the council and the royal chaplains. They were then published as "Articles agreed on by the bishops and other learned men in the Synod of London." But there is considerable doubt whether they really received the sanction of Convocation (Gibson, p. 15). They were not devised as a complete scheme of doctrine, but only as a guide in dealing with current

errors of (i.) the Medievalists and (ii.) the Anabaptists. Under (i.) they condemned the doctrine of the school authors on congruous merit (Art. xii.), the doctrine of grace *ex opere operato* (xxvi.). Transubstantiation (xxix.). Under (ii.) they laid stress on the fundamental articles of the faith (Art. i.-iv.), affirmed the Three Creeds (vii.), since many Anabaptists held Arian and Socinian opinions which were rife in Switzerland, Italy and Poland, condemning also their views on original sin (viii.), community of goods (xxxvii.), and on other subjects in articles which do not mention them by name.

The revision undertaken in 1563 by Archbishop Parker, aided by Edm. Guest, bishop of Rochester, shows "an attempt to give greater completeness to the formulary," and to make clearer the Catholic position of the Church of England. For the clause (Art. xxviii.) which denied the Real Presence was substituted one by Guest with the desire "not to deny the reality of the presence of the Body of Christ in the Supper, but only the grossness and sensibleness in the receiving thereof." At the same time the substitution of "Romish doctrine" for "doctrine of School authors" (Art. xxii.) marks an effort to define the line of the Church of England sharply against current Roman teaching. The revision was passed by Convocation and again revised in 1571, when the queen had been excommunicated by papal bull, and an act was passed ordering all clergy to subscribe to them. They have remained unchanged ever since, though the terms of subscription have been modified.

An attempt was made to add nine articles of a strong Calvinistic tone, which were drawn up by Dr Whitaker, regius professor of divinity at Cambridge, and submitted to Archbishop Whitgift. They were rejected both by Queen Elizabeth, and, after the Hampton Court Conference petitioned about them, by King James I.

The first Scottish confession dates from 1560. It is a memorial of the intellectual power and enthusiasm of John Knox. It exhibits the leading features of the Reformed theology, but "disclaims Divine authority for any

fixed form of church government or worship." It also asks that "if anyone shall note in this our confession any articles or sentence repugnant of God's Holy Word, that it would please him of his gentleness and for Christian charity's sake, to admonish of the same in writing," promising that if the teaching cannot be proved, to reform it. Between this and the Westminster Confession must be noted the first Baptist confession, published in Amsterdam in 1611. It shows the influence of Arminian theology against Calvinism, which was vigorously upheld in the *Quin-particular* formula, put forward by the synod of Dort in 1619 to uphold the five points of Calvinism, after heated discussion, in which English delegates took part, of the problems of divine omniscience and human free-will.

Westminster Confession.

5. *The Westminster Confession* (1648), with its two catechisms, is perhaps the ablest of the reformed confessions from the standpoint of Calvinism. Its keynote is sovereignty. "The Decrees of God are His eternal Purpose according to the Counsel of His Will, whereby for His Own Glory He hath foreordained whatsoever comes to pass." Man's part is to accept them with submission. As the Anglican divines soon ceased to attend the assembly, and the Independents were few in number, it was the work of Presbyterians only, the Scottish members carrying their proposal to make it an independent document and not a mere revision of the Thirty-nine Articles. After discussions lasting for two years it was debated in parliament, finished on the 22nd of March 1648, and was adopted by the Scottish parliament in the following year. It is the only confession which has been imposed by authority of parliament on the whole of the United Kingdom. This lasted in England for ten years. In Scotland its influence has continued to the present day, contributing not a little to mould the high qualities of religious insight and courage and perseverance which have honourably distinguished Scottish Presbyterians all the world over. This was the last great effort in constructive theology of the Reformation period. When Cromwell before his death in 1658 allowed a conference to prepare a new confession of faith for the whole

commonwealth, the Westminster Confession was accepted as a whole with an added statement on church order and discipline. We must note, however, that the Baptist divines who were excluded from the Westminster Assembly issued a declaration of their principles under the title, "A Confession of Faith of seven Congregations or Churches in London which are commonly but unjustly called Anabaptists, for the Vindication of the Truth and Information of the Ignorant."

Two other declarations may be quoted to show how necessary such confessions are even to religious societies which refuse to be bound by them. In 1675 Robert Barclay published an "Apology for the Society of Friends," in which he declared what they held concerning revelation, scripture, the fall, redemption, the inward light, freedom of conscience.

In 1833 the Congregational Union published a Declaration or Confession of Faith, Church Order and Discipline. It was prepared by Dr George Redford of Worcester, and was presented, not as a scholastic or critical confession of faith, but merely such a statement as any intelligent member of the body might offer as containing its leading principles. It deals with the Bible as the final appeal in controversy, the doctrines of God, man, sin, the Incarnation, the Resurrection of our Lord Jesus Christ, "both the Son of man and the Son of God," the work of the Holy Spirit, justification by faith, the perpetual obligation of Baptism and the Lord's Supper, final judgment, the law of Christian fellowship. The same principles have been lucidly stated in the Evangelical Free Church catechism.

6. *Confessions in the Eastern Orthodox Church.*—The Eastern Church has no general doctrinal tests beyond the Nicene Creed, but from time to time synods have approved expositions of the faith such as the Athanasian Creed (without the words "And the Son"), and the Orthodox Confession of the Catholic and Apostolic Eastern Church. This was the work of Petrus Mogilas, metropolitan of Kiev, and other theologians. It was written in 1640 in Russian, was translated

Greek church.

into Greek, and approved by the council of Jassy and the patriarchs of Constantinople, Alexandria, Antioch and Jerusalem. It was affirmed by the council of Jerusalem in 1672, which also affirmed the Confession of Dositheus, patriarch of Jerusalem. Both of these confessions were drawn up to confute the teaching of a remarkable man who had been patriarch of Constantinople, Cyril Lucar. He was a student of Western theology, a correspondent of Archbishop Laud, and had travelled in Germany and Switzerland. In 1629 he published a confession in which he attempted to incorporate ideas of the reformers while preserving the leading ideas of Eastern traditional theology. The controversy chiefly turned on the question of the necessity of episcopacy. Dositheus taught that the existence of bishops is as necessary to the Church as "breath to a man and the sun to the world." Christ is the universal and perpetual Head of the Church, but he exercises his rule by means of "the holy Fathers," that is, the bishops whom the Holy Ghost has appointed to be in charge of local churches.

Mention may also be made of the longer catechism of the Orthodox Catholic Church compiled by Philaret, metropolitan of Moscow, revised and adopted by the Russian Holy Synod in 1839. The Church is defined as "a divinely-instituted community of men, united by the orthodox faith, the law of God, the hierarchy and the sacraments."

7. *Roman Catholic Formularies.*—For our present purpose the distinctive features of Roman Catholicism may be said to be summed up in the decrees of the council of Trent and the creed of Pope Pius IV. The council sat at intervals from 1545-1563, but there was a marked divergence between the opinions advocated by prominent members of the council and its final decrees. Cardinal Pole had to leave the council because he advocated the doctrine of justification by faith. Even at the later sessions the cardinal of Lorraine with the French prelates supported the German representatives in requests for the cup for the laity, the permission of the marriage of priests, and the revision of the

Roman Catholic.

breviary. Finally the decisions of the council were promulgated in a declaration of XII. articles, usually called the Creed of Pius IV., which reaffirmed the Nicene Creed, and dealt with the preservation of the apostolic and ecclesiastical traditions, the interpretation of the Holy Scriptures "according to the sense which our Holy Mother Church has held," the seven sacraments, the offering of the mass, transubstantiation, purgatory, the veneration of saints, relics, images, the efficacy of indulgences, the supremacy of the Roman Church and of the bishop of Rome as vicar of Christ. To this summary of doctrine should be added the dogmas of the immaculate conception of the Blessed Virgin declared in 1854, and of papal infallibility decreed by the Vatican council of 1870.

Conclusion.—In this survey of Christian confessions it has been impossible to do more than barely name many which deserve discussion. This is a subject which has grown in importance and is likely to grow further. The very intensity of that phase of modern thought which declaims fervently against all creeds, and would maintain what George Eliot called "the right of the individual to general haziness," is likely to draw all Christian thinkers nearer to one another in sympathy through acceptance of the Apostles' Creed as the common basis of Christian thought. In the words of Hilary of Poitiers, "Faith gathers strength through opposition."

The question at once arises. Can the simple historic faith be maintained without adding theological interpretations, those arid wastes of dogma in which the springs of faith and reverence run dry? The answer is No. We cannot ask to be as if through nineteen centuries no one had ever asked a question about the relation of the Lord Jesus Christ to the Father and the Holy Spirit. If we could come back to the Bible and use biblical terms only, as Cyril of Jerusalem wished in his early days, we know from experience that the old errors would reappear in the form of new questions, and that we should have to pass through the dreary wilderness of controversy from implicit to explicit dogma, from "I believe that Jesus is the Lord" to the

confession that the Only Begotten Son is “of one substance with the Father.” In the words of Hilary again:

"Faithful souls would be contented with the word of God which bids us: 'Go teach all nations, baptizing them in the name of the Father and of the Son and of the Holy Ghost.' But also we are drawn by the faults of our heretical opponents to do things unlawful, to scale heights inaccessible, to speak out what is unspeakable, to presume where we ought not. And whereas it is by faith alone that we should worship the Father and reverence the Son, and be filled with the Spirit, we are now obliged to strain our weak human language in the utterance of things beyond its scope; forced into this evil procedure by the evil procedure of our foes. Hence what should be matter of silent religious meditation must now needs be imperilled by exposition in words."

The province of reverent theology is to aid accurate thinking by the use of metaphysical or psychological terms. Its definitions are no more an end in themselves than an analysis of good drinking water, which by itself leaves us thirsty but encourages us to drink. So the Nicene Creed is the analysis of the river of the water of life of which the Sermon on the Mount is a description, flowing on from age to age, freely offered to the thirsty souls of men.

This justification of the ancient creeds carries with it the justification of later confessions so far as they answered questions which would be fatal to religion if they were not answered. As Principal Stewart puts it very clearly: "The answer given is based on the philosophy or science of the period. It does not necessarily form part of the religion itself, but is the best which with the materials at its command, in its own defence and in its love for truth, the religion (and its advocates) can give. But the answers may be superseded by better answers, or they may be rendered unnecessary because the questions are no longer asked. Thus the Calvinism of the 16th and 17th centuries elaborated answers to questions, which if no attempt had been made to answer them, would have perplexed earnest souls and condemned the system; but many parts of the system are now obsolete, because the conditions which suggested the questions which they sought to answer no longer exist or have no longer any interest or importance."

LITERATURE.—See J. Pearson, *Exposition of the Creed* (new ed., 1849); A. E. Burn, *Introduction to the Creeds* (1899), and *The Athanasian Creed* in vol. iv. of *Texts and Studies* (1896); H. B. Swete, *The Apostles' Creed* (1899); F. Kattenbusch, *Das apostolische Symbol* (1894-1900); C. A. Heurtley, *Harmonia Symbolica* (1858): C. P. Caspari, *Quellen zur Geschichte des Taufsymbols und der Glaubensregel* (Christiania, 1866); and *Alte und neue Quellen* (1879). T. Zahn, *Das apostolische Symbolum* (1893); C. A. Swainson, *The Nicene and Apostles' Creed* (1875); G. D. W. Ommanney, *The Athanasian Creed* (1897); B. F. Westcott, *The Historic Faith* (1882); J. Jayne, *The Athanasian Creed* (1905); J. A. Robinson, *The Athanasian Creed* (1905); E. C. S. Gibson, *The Three Creeds* (1908); F. J. A. Hort, *Two Dissertations* (1876); D. Waterland, *Crit. Hist.* edited by E. King (Oxford, 1870); F. Loofs and A. Harnack articles in Herzog-Hauck's *Realencyklopädie* ("Athanasianum" and "Konstantino-politanisches Symbol") (1896), &c.; K. Künstle, *Antipriscilliana* (Freiburg i. B., 1905); A. Stewart, *Croall Lectures* (in the press); S. G. Green, *The Christian Creed* (1898); P. Hall, *Harmony of Protestant Confessions* (London, 1842); F. Kattenbusch, *Confessionskunde* (Freiburg i. B., 1890); Winex's *Confessions of Christendom* (Eng. trans., Edinburgh, 1865); A. Seeberg, *Der Katechismus der Urchristenheit* (Leipzig, 1903); F. Wiegand, *Die Stellung des apostolischen Symbols* (Leipzig, 1899); H. Goodwin, *The Foundations of the Creed* (London, 1889); T. H. Bindley, *The Oecumenical Documents of the Faith* (London, 1906); J. Kunze, *Das nicänisch-konstantinopolitanische Symbol*; S. Baeumer, *Das apostolische Glaubensbekenntnis* (Mainz, 1893); B. Döxholt, *Das Taufsymbol. der alten Kirche* (Paderborn, 1898); L. Hahn, *Bibliothek der Symbole u. Glaubensregeln* (Breslau, 1897); A. C. McGiffert, *The Apostles' Creed* (Edinburgh, 1902); and F. Loofs, *Symbolik* (Leipzig, 1902).

(A. E. B.)

1 Jevons, *Introd. to the History of Religion*, p. 394.

2 *Sacred Books of the East*, xxxi.

3 *Personality, Human and Divine* (cheap edition), p. 36.

4 Ib. p. 38.

5 *Der Katechismus der Urchristenheit*, p. 85. Zahn's reasoned argument stands in contrast to the blind reliance on tradition shown by Macdonald, *The Symbol of the Apostles*, and the fanciful reconstruction of the primitive creed by Baeumer, Harnack or Seeberg.

6 McGiffert, on the other hand, argues that the Roman Creed was composed to meet the errors of Marcion, p. 58 ff. He omits, however, to mention this, which is Zahn's strongest argument.

7 It is probable that "one" has dropped out of the first clause. Zahn acutely suggests that it was omitted in the time of Zephyrinus to counteract Monarchian teaching such as the formula: "believe in one God, Jesus Christ."

8 *Anecdota Maredsolana*, iii. iii. p. 199.

9 Dörholt has shown that Petavius (d. 1652) was the first to remark that the so-called Constantinopolitan form was quoted by Epiphanius before the Council met, but was not able to explain the fact.

10 Burn, "Note on the Old Latin text," *Journal of Theol. Studies.*

11 *e.g.* Cod. Escurial J.c. 12, *saec.* x. xi. In Cod. Matritensis, p. 21 (1872), *saec.* x. xi., and Cod. Matritensis 10041 (begun in the year A.D. 948), the words are omitted under the heading council of Constantinople but inserted under the heading council of Toledo, in the former MS., above the line and in a later hand, which shows conclusively how the interpolation crept in.

12 The first person who doubted the authorship seems to have been Joachim Camerarius, 1551, who was so fiercely attacked in consequence that he omitted the passage from his Latin edition. *Zeitschrift für K.G.* x. (1889), p. 497.

13 In response to an invitation issued by the archbishop of Canterbury, acting on a resolution of the Lambeth Conference of 1908, a committee of eminent scholars met in April and May 1909 for the purpose of preparing a new translation. Their report, issued on the 18th of October, stated that they had "endeavoured to represent the Latin original more exactly in a large number of cases." The general effect of the new version is to make the creed more comprehensible, *e.g.* by the substitution of "infinite" and "reasoning" for such archaisms as "incomprehensible" and "reasonable." The sense of the damnatory clauses has, however, not been weakened. [Ed.]

14 Illingworth, *Personality, Human and Divine*, p. 40.

15 *The Christian Creed and the Creeds of Christendom*, p. 181.

16 Gibson, *The Thirty-nine Articles*, p. 2.

CREEK (Mid. Eng. *crike* or *creke*, common to many N. European languages), a small inlet on a low coast, an inlet in a river formed by the mouth of a small stream, a shallow narrow harbour for small vessels. In America and Australia especially there are many long streams which can be everywhere forded and sometimes dry up, and are navigable only at their tidal estuaries, mere brooks in width which are of great economic importance. They form complete river-systems, and are the only supply of surface water over many thousand square miles. They are at some seasons a mere chain of "water-holes," but occasionally they are strongly flooded. Since exploration began at the coast and advanced inland, it is probable that the explorers, advancing up the narrow inlets or "creeks," used the same word for the streams which flowed into these as they followed their courses upward into the country. The early settlers would use the same word for that portion of the stream which flowed through their own land, and in Australia particularly the word has the same local meaning as brook in England. On a map the whole system is called a river, *e.g.* the river Wakefield in South Australia gives its name to Port Wakefield, but the stream is always locally called "the creek."

CREEK or **MUSKOGEE** (MUSCOGEE) **INDIANS** (Algonquin *maskoki*, "creeks," in reference to the many creeks and rivulets running through their country), a confederacy of North American Indians, who formerly occupied most of Alabama and Georgia. The confederacy seems to have been in existence in 1540, and then included the Muskogee, the ruling tribe, whose language was generally spoken, the Alabama, the Hichiti, Koasati and others of the Muskogean stock, with the Yuchi and the Natchez, a large number of Shawano and the Seminoles of Florida as a branch. The Creeks were agriculturists living in villages of log houses. They were brave fighters, but during the 18th century only had one struggle, of little importance, with the settlers. The Creek War of 1813-14 was, however, serious. The confederacy was completely defeated in three hard-fought battles, and the peace treaty which followed involved the cession to the United States government of most of the Creek country. In the Civil War the Creeks were divided in their allegiance and suffered heavily in the campaigns. The so-called Creek nation is now settled in Oklahoma, but independent government virtually ceased in 1906. In 1904 they numbered some 16,000, some two-thirds being of pure or mixed Creek blood.

CREETOWN, a seaport of Kirkcudbrightshire, Scotland. Pop. (1901) 991. It is situated near the head of Wigtown Bay, 18 m. W. of Castle Douglas, but 23½ m. by the Portpatrick and Wigtownshire Railway. The granite quarries in the vicinity constitute the leading industry, the stone for the Liverpool docks and other public works having been obtained from them. The village dates from 1785, and it became a burgh of barony in 1792. Sir Walter Scott laid part of the scene of *Guy Mannering* in this neighbourhood. Dr Thomas Brown, the metaphysician (1778-1820), was a native of the parish (Kirkmabreck) in which Creetown lies.

CREEVEY, THOMAS (1768-1838), English politician, son of William Creevey, a Liverpool merchant, was born in that city in March 1768. He went to Queen's College, Cambridge, and graduated as seventh wrangler in 1789. The same year he became a student at the Inner Temple, and was called to the bar in 1794. In 1802 he entered parliament through the duke of Norfolk's nomination as member for Thetford, and married a widow with six children, Mrs Ord, who had a life interest in a comfortable income. Creevey was a Whig and a follower of Fox, and his active intellect and social qualities procured him a considerable intimacy with the leaders of this political circle. In 1806, when the brief "All the Talents" ministry was formed, he was given the office of secretary to the Board of Control; in 1830, when next his party came into power, Creevey, who had lost his seat in parliament, was appointed by Lord Grey treasurer of the ordnance; and subsequently Lord Melbourne made him treasurer of Greenwich hospital. After 1818, when his wife died, he had very slender means of his own, but he was popular with his friends and was well looked after by them; Greville, writing of him in 1829, remarks that "old Creevey is a living proof that a man may be perfectly happy and exceedingly poor. I think he is the only man I know in society who possesses nothing." He died in February 1838. He is remembered through the *Creevey Papers*, published in 1903 under the editorship of Sir Herbert Maxwell, which, consisting partly of Creevey's own journals and partly of correspondence, give a lively and valuable picture of the political and social life of the late Georgian era, and are characterized by an almost Pepysian outspokenness. They are a useful addition and correction to the

Croker Papers, written from a Tory point of view. For thirty-six years Creevey had kept a "copious diary," and had preserved a vast miscellaneous correspondence with such people as Lord Brougham, and his step-daughter, Elizabeth Ord, had assisted him, by keeping his letters to her, in compiling material avowedly for a collection of Creevey Papers in the future. At his death it was found that he had left his mistress, with whom he had lived for four years, his sole executrix and legatee, and Greville notes in his *Memoirs* the anxiety of Brougham and others to get the papers into their hands and suppress them. The diary, mentioned above, did not survive, perhaps through Brougham's success, and the papers from which Sir Herbert Maxwell made his selection came into his hands from Mrs Blackett Ord, whose husband was the grandson of Creevey's eldest step-daughter.

CREFELD, or KREFELD, a town of Germany, in the Prussian Rhine province, on the left side of and 3 m. distant from the Rhine, 32 m. N.W. from Cologne, and 15 m. N.W. from Düsseldorf, with which it is connected by a light electric railway. Pop. (1875) 62,905; (1905) 110,410. The town is one of the finest in the Rhine provinces, being well and regularly built, and possessing several handsome squares and attractive public gardens. A striking point about the inner town is that it forms a large rectangle, enclosed by four wide boulevards or "walls." This feature, rare in German towns, is due to the fact that Crefeld was always an "open place," and that therefore the circular form of a fortress town could be dispensed with. It has six Roman Catholic and four Evangelical churches (of which the Gothic Friedenskirche with a lofty spire, and the modern church of St Joseph, in the Romanesque style, are alone worth special mention); there are also a Mennonite and an Old Catholic church. The town hall, decorated with frescoes by P. Janssen (b. 1844), and the Kaiser Wilhelm Museum are the most noteworthy secular buildings. In the promenades are monuments to Moltke, Bismarck and Karl Wilhelm, the composer of the *Wacht am Rhein*. Among the schools and scientific institutions of the town the most important is the higher grade technical school for the study of the textile industries, which is attended by students from all parts of the world. Connected with this are subsidiary schools, notably one for dyeing and finishing.

Crefeld is the most important seat of the silk and velvet manufactures in Germany, and in this industry the larger part of the population of town and neighbourhood is employed. There are upwards of 12,000 silk power-looms in operation, and the value of the annual output in this branch alone is estimated at £3,000,000. A special feature is the manufacture of silk for covering umbrellas; while of its velvet manufacture that of velvet ribbon is the chief. The other industries of the town, notably dyeing, stuff-printing and stamping, are very considerable, and there are also engineering and machine shops, chemical, cellulose, soap, and other factories, breweries, distilleries and tanneries. The surrounding fertile district is almost entirely laid out in market gardens. Crefeld is an important railway centre, and has direct communication with Cologne, Rheydt, München-Gladbach and Holland (via Zevenaar).

Crefeld is first mentioned in records of the 12th century. From the emperor Charles IV. it received market rights in 1361 and the status of a town in 1373. It belonged to the counts of Mörs, and was annexed to Prussia, with the countship, in 1702. It remained a place of little importance until the 17th century, when religious persecution drove to it a number of Calvinists and Separatists from Jülich and Berg (followed later by Mennonites), who introduced the manufacture of linen. The number of such immigrants still further increased in the 18th century, when, the silk industry having been introduced from Holland, the town rapidly developed. The French occupation in 1795 and the resulting restriction of trade weighed for a while heavily upon the new industry; but with the termination of the war and the re-establishment of Prussian rule the old prosperity returned.

CREIGHTON, MANDELL (1843-1901), English historian and bishop of London, was born at Carlisle on the 5th of July 1843, being the eldest son of Robert Creighton, a well-to-do upholsterer of that city. He was educated at Durham grammar school and at Merton College, Oxford, where he was elected to a postmastership in 1862. He obtained a first-class in *literae humaniores*, and a second in law and modern history in 1866. In the same year he became tutor and fellow of Merton. He was ordained deacon, on his fellowship, in 1870, and priest in 1873; in 1872 he had married Louise, daughter of Robert von Glehn, a London merchant (herself a writer of several successful books of history). Meanwhile he had published several small historical works; but his college and university duties left little time for writing, and in 1875 he accepted the vicarage of Embleton, a parish on the coast of Northumberland, near Dunstanburgh, with an ancient and beautiful church and a fortified parsonage house, and within reach of the fine library in Bamburgh Keep. Here he remained for nearly ten years, acquiring that experience of parochial work which afterwards stood him in good stead, taking private pupils, studying and writing, as well as taking an active part in diocesan business. Here too he planned and wrote the first two volumes of his chief historical work, the *History of the Papacy*; and it was in part this which led to his being elected in 1884 to the newly-founded Dixie professorship of ecclesiastical history at Cambridge, where he went into residence early in 1885. At Cambridge his influence at once made itself felt, especially in the reorganization of the historical school. His lectures and conversation classes were extraordinarily good, possessing as he did the rare gift of kindling the enthusiasm without curbing the individuality of his pupils. In 1886 he combined with other leading historians to found the *English Historical Review*, of which he was editor for five years. Meanwhile the vacations were spent at Worcester, where he had been nominated a canon residentiary in 1885. In 1891 he was made canon of Windsor; but he never went into residence, being appointed in the same year to the see of Peterborough. He threw himself with characteristic energy into his new work, visiting, preaching and lecturing in every part of his diocese. He also found time to preach and lecture elsewhere, and to deliver remarkable speeches at social functions; he worked hard with Archbishop Benson on the Parish Councils Bill (1894); he became the first president of the Church Historical Society (1894), and continued in that office till his death; he took part in the Laud Commemoration (1895); he represented the English Church at the coronation of the tsar (1896). He even found time for academical work, delivering the Hulsean lectures (1893-1894) and the Rede lecture (1894) at Cambridge, and the Romanes lecture at Oxford (1896).

In 1897, on the translation of Dr Temple to Canterbury, Bishop Creighton was transferred to London. During Dr Temple's episcopate ritual irregularities of all kinds had grown up, which left a very difficult task to his successor, more especially in view of the growing public agitation on the subject, of which he had to bear the brunt. As was only natural, his studied fairness did not satisfy partisans on either side; and his efforts towards conciliation laid him open to much misunderstanding. His administration, none the less, did much to preserve peace. He strained every nerve to induce his clergy to accept his ruling on the questions of the reservation of the Sacrament and of the ceremonial use of incense in accordance with the archbishop's judgment in the Lincoln case; but when, during his last illness, a prosecutor brought proceedings against the clergy of five recalcitrant churches, the bishop, on the advice of his archdeacons, interposed his veto. One other effort on behalf of peace may be mentioned. In accordance with a vote of the diocesan conference, the bishop arranged the "Round Table Conference" between representative members of various parties, held at Fulham in October 1900, on "the doctrine of the Holy Eucharist and its expression in ritual," and a report of its proceedings was published with a preface by him. The true work of his episcopate was, however, positive, not negative. He was an excellent administrator; and his wide knowledge, broad sympathies, and sound common sense, though they placed him outside the point of view common to most of

his clergy, made him an invaluable guide in correcting their too often indiscreet zeal. He fully realized the special position of the English Church in Christendom, and firmly maintained its essential teaching. Yet he was no narrow Anglican. His love for the English Church never blinded him to its faults, and no man was less insular than he. As he was a historian before he became a bishop, so it was his historical sense which determined his general attitude as a bishop. It was this, together with a certain native taste for ecclesiastical pomp, which made him—while condemning the unhistorical extravagances of the ultra-ritualists—himself a ritualist. He was the first bishop of London, since the Reformation, to "pontificate" in a mitre as well as the cope, and though no man could have been less essentially "sacerdotal" he was always careful of correct ceremonial usage. His interests and his sympathies, however, extended far beyond the limits of the church. He took a foremost part in almost every good work in his diocese, social or educational, political or religious; while he found time also to cultivate friendly relations with thinking men and women of all schools, and to help all and sundry who came to him for advice and assistance. It was this multiplicity of activities and interests that proved fatal to him. By degrees the work, and especially the routine work, began to tell on him. He fell seriously ill in the late summer of 1900, and died on the 14th of January 1901. He was buried in St Paul's cathedral, where a statue surmounts his tomb.

He was a man of striking presence and distinguished by a fine courtesy of manner. His irrepressible and often daring humour, together with his frank distaste for much conventional religious phraseology, was a stumbling-block to some pious people. But beneath it all lay a deep seriousness of purpose and a firm faith in what to him were the fundamental truths of religion.

Bishop Creighton's principal published works are: *History of the Papacy during the Period of the Reformation* (5 vols., 1882-1897, new ed.); *History of the Papacy from the Great Schism to the Sack of Rome* (6 vols., 1897); *The Early Renaissance in England* (1895); *Cardinal Wolsey* (1895); *Life of Simon de Montfort* (1876, new ed. 1895); *Queen Elizabeth* (1896). He also edited the series of *Epochs of English History*, for which he wrote "The Age of Elizabeth" (13th ed., 1897); *Historical Lectures and Addresses by Mandell Creighton, &c.*, edited by Mrs Creighton, were published in 1903.

See *Life and Letters of Mandell Creighton, &c.*, by his wife (2 vols., 1904); and the article "Creighton and Stubbs" in *Church Quarterly Review* for Oct. 1905.

CREIL, a town of northern France, in the department of Oise, 32 m. N. of Paris on the Northern railway, on which it is an important junction. Pop. (1906) 9234. The town is situated on the Oise, on which it has a busy port. The manufacture of machinery, heavy iron goods and nails, and copper and iron founding, are important industries, and there are important metallurgical and engineering works at Montataire, about 2 m. distant; bricks and tiles and glass are also manufactured, and the Northern railway has workshops here. The church (12th to 15th centuries) is in the Gothic style. There are some traces of a castle in which Charles VI. resided during the period of his madness. Creil played a part of some importance in the wars of the 14th, 15th and 16th centuries.

CRELL (or KRELL), **NICHOLAS** (c. 1551-1601), chancellor of the elector of Saxony, was born at Leipzig, and educated at the university of his native town. About 1580 he entered the service of Christian, the eldest son of Augustus I., elector of Saxony, and when Christian succeeded his father as elector in 1586, became his most influential counsellor. Crell's religious views were Calvinistic or Crypto-Calvinistic, and both before and after his appointment as chancellor in 1589 he sought to substitute his own form of faith for the Lutheranism which was the accepted religion of electoral Saxony. Calvinists were appointed to many important ecclesiastical and educational offices; a translation of the Bible with Calvinistic annotations was brought out; and other measures were taken by Crell to attain his end. In foreign politics, also, he sought to change the traditional policy of Saxony, acting in unison with John Casimir, administrator of the Rhenish Palatinate, and promising assistance to Henry IV. of France. These proceedings, coupled with the jealousy felt at Crell's high position and autocratic conduct, made the chancellor very unpopular, and when the elector died in October 1591 he was deprived of his offices and thrown into prison by order of Frederick William, duke of Saxe-Altenburg, the regent for the young elector Christian II. His trial was delayed until 1595, and then, owing partly to the interference of the imperial court of justice (*Reichskammergericht*), dragged on for six years. At length it was referred by the emperor Rudolph II. to a court of appeal at Prague, and sentence of death was passed. This was carried out at Dresden on the 9th of October 1601.

See A. V. Richard, *Der kurfürstliche sächsische Kanzler Dr Nicolaus Krell* (Frankfort, 1860); B. Bohnenstädt, *Das Prozessverfahren gegen den kursächsischen Kanzler Dr Nikolaus Krell* (Halle, 1901); F. Brandes, *Der Kanzler Krell, ein Opfer des Orthodoxismus* (Leipzig, 1873); and E. L. T. Henke, *Caspar Peucer und Nicolaus Krell* (Marburg, 1865).

CREMA, a town and episcopal see of Lombardy, Italy, in the province of Cremona, 26 m. N.E. by rail from the town of Cremona. Pop. (1901) town, 8027; commune, 9609. It is situated on the right bank of the Serio, 240 ft. above sea-level, in the centre of a rich agricultural district. The cathedral has a fine Lombard Gothic façade of the second half of the 14th century; the campanile belongs to the same period; the rest of the church has been restored in the baroque style. The clock tower opposite dates from the period of Venetian dominion in the 16th and 17th centuries. The castle, which was one of the strongest in Italy, was demolished in 1809. The church of S. Maria, ¾ m. E. of the town, was begun in 1490 by Giov. Batt. Battaggio; it is in the form of a Greek cross, with a central dome, and the exterior is a fine specimen of polychrome Lombard work (E. Gussalli in *Rassegna d'arte*, 1905, p. 17).

The date of the foundation of Crema is uncertain. In the 10th century it appears to have been the principal place of the territory known as Isola Fulcheria. In the 12th century it was allied with Milan and attacked by Cremona, but was taken and sacked by Barbarossa in 1160. It was rebuilt in 1185. It fell under the Visconti in 1338, and joined the Lombard republic in 1447; but was taken by the Venetians in 1449, and, except from 1509 to 1529, remained under their dominion until 1797.

CREMATION (Lat. *cremare*, to burn), the burning of human corpses. This method of disposal of the dead may be said to have been the general practice of the ancient world, with the important exceptions of Egypt, where bodies were embalmed, Judaea, where they were buried in sepulchres, and China, where they were buried in the earth. In Greece, for instance, so well ascertained was the law that only suicides, unteethed children, and persons struck by lightning were denied the right to be burned. At Rome, one of the XII. Tables said, "Hominem mortuum in urbe ne sepelito, neve urito"; and in fact, from the close of the republic to the end of the 4th Christian century, burning on the pyre or rogus was the general rule.[1] Whether in any of these cases cremation was adopted or rejected for sanitary or for superstitious reasons, it is difficult to say. Embalming would probably not succeed in climates less warm and dry than the Egyptian. The scarcity of fuel might also be a consideration. The Chinese are influenced by the doctrine of Feng-Shui, or incomprehensible wind water; they must have a properly placed grave in their own land, and with this view their corpses are sent home from long distances abroad. Even the Jews used cremation in the vale of Tophet when a plague came; and the modern Jews of Berlin and the Spanish and Portuguese Jews at Mile End cemetery were among the first to welcome the lately revived process. Probably also, some nations had religious objections to the pollution of the sacred principle of fire, and therefore practised exposure, suspension, throwing into the sea, cave-burial, desiccation or envelopment.[2] Some at least of these methods must obviously have been suggested simply by the readiest means at hand. Cremation is still practised over a great part of Asia and America, but not always in the same form. Thus, the ashes may be stored in urns, or buried in the earth, or thrown to the wind, or (as among the Digger Indians) smeared with gum on the heads of the mourners. In one case the three processes of embalming, burning and burying are gone through; and in another, if a member of the tribe die at a great distance from home, some of his money and clothes are nevertheless burned by the family. As food, weapons, &c., are sometimes buried with the body, so they are sometimes burned with the body, the whole ashes being collected.[3] The Siamese have a singular institution, according to which, before burning, the embalmed body lies in a temple for a period determined by the rank of the dead man,—the king for six months, and so downwards. If the poor relatives cannot afford fuel and the other necessary preparations, they bury the body, but exhume it for burning when an opportunity occurs.

There can be little doubt that the practice of cremation in modern Europe was at first stopped, and has since been prevented in great measure, by the Christian doctrine of the resurrection of the body; partly also by the notion that the Christian's body was redeemed and purified.[4] Some clergymen, however, as the late Mr Haweis in his *Ashes to Ashes, a Cremation Prelude* (London, 1874), have been prominent in favour of cremation. The objection of the clergy was disposed of by the philanthropist Lord Shaftesbury when he asked, "What would in such a case become of the blessed martyrs?" The very general practice of burying bodies in the precincts of a church in order that the dead might take benefit from the prayers of persons resorting to the church, and the religious ceremony which precedes both European burials and Asiatic cremations, have given the question a religious aspect. It is, however, in the ultimate resort, really a sanitary one. The disgusting results of pit-burial made cemeteries necessary. But cemeteries are equally liable to overcrowding, and are often nearer to inhabited houses than the old churchyards. It is possible, no doubt, to make a cemetery safe approximately by selecting a soil which is dry, close and porous, by careful drainage, and by rigid enforcement of the rules prescribing a certain depth (8 to 10 ft.) and a certain superficies (4 yds.) for graves. But a great mass of sanitary objections may be brought against even recent cemeteries in various countries. A dense clay, the best soil for preventing the levitation of gas, is the worst for the process of decomposition. The danger is strikingly illustrated in the careful planting of trees and shrubs to absorb the carbonic acid. Vault-burial in metallic coffins, even when sawdust charcoal is used, is still more dangerous than ordinary burial. It must also be remembered that the cemetery system can only be temporary. The soil is gradually filled with bones; houses crowd round; the law itself permits the reopening of graves at the expiry of fourteen years. We shall not, indeed, as Browne says, "be knaved out of our graves to have our skulls made drinking bowls and our bones turned into pipes!" But on this ground of sentiment cremation would certainly prevent any

interruption of that “sweet sleep and calm rest” which the old prayer that the earth might lie lightly has associated with the grave. And in the meantime we should escape the horror of putrefaction and of the “small cold worm that fretteth the enshrouded form.”

In Europe Christian burial was long associated entirely with the ordinary practice of committing the corpse to the grave. But in the middle of the 19th century many distinguished physicians and chemists, especially in Italy, began prominently to advocate cremation. In 1874, a congress called to consider the matter at Milan resolved to petition the Chamber of Deputies for a clause in the new sanitary code, permitting cremation under the supervision of the syndics of the commune. In Switzerland Dr Vegmann Ercolani was the champion of the cause (see his *Cremation the most Rational Method of Disposing of the Dead*, 4th ed., Zurich, 1874). So long ago as 1797 cremation was seriously discussed by the French Assembly under the Directory, and the events of the Franco-Prussian War again brought the subject under the notice of the medical press and the sanitary authorities. The military experiments at Sédan, Chalons and Metz, of burying large numbers of bodies with quicklime, or pitch and straw, were not successful, but very dangerous. The matter was considered by the municipal council of Paris in connexion with the new cemetery at Méry-sur-Oise; and the prefect of the Seine in 1874 sent a circular asking information to all the cremation societies in Europe. In Britain the subject had slumbered for two centuries, since in 1658 Sir Thomas Browne published his quaint *Hydriotaphia, or Urn-burial*, which was mainly founded on the *De funere Romanorum* of the learned Kirchmannus. In 1817 Dr J. Jamieson gave a sketch of the “Origin of Cremation” (*Proc. Royal Soc. Edin.*, 1817), and for many years prior to 1874 Dr Lord, medical officer of health for Hampstead, continued to urge the practical necessity for the introduction of the system.

It was Sir Henry Thompson, however, who first brought the question prominently before the public. Thompson’s problem was—“Given a dead body, to resolve it into carbonic acid, water and ammonia, rapidly, safely and not unpleasantly.” To solve this problem, experiments were made by Dr Polli at the Milan gas works, fully described in Dr Pietra Santa’s book, *La Crémation des morts en France et à l’étranger*, and by Professor Brunetti, who exhibited an apparatus at the Vienna Exhibition of 1873, and who stated his results in *La Cremazione dei cadaveri* (Padua, 1873). Polli obtained complete incineration or calcination of dogs by the use of coal-gas mixed with atmospheric air, applied to a cylindrical retort of refracting clay, so as to consume the gaseous products of combustion. The process was complete in two hours, and the ashes weighed about 5% of the weight before cremation. Brunetti used an oblong furnace of refracting brick with side-doors to regulate the draught, and above a cast-iron dome with movable shutters. The body was placed on a metallic plate suspended on iron wire. The gas generated escaped by the shutters, and in two hours carbonization was complete. The heat was then raised and concentrated, and at the end of four hours the operation was over; 180 ℔ of wood costing 2s. 4d. sterling was burned. In a reverberating furnace used by Sir Henry Thompson a body, weighing 144 ℔, was reduced in fifty minutes to about 4 ℔ of lime dust. The noxious gases, which were undoubtedly produced during the first five minutes of combustion, passed through a flue into a second furnace and were entirely consumed. In the ordinary Siemens regenerative furnace (which was adapted by Reclam in Germany for cremation, and also by Sir Henry Thompson) only the hot-blast was used, the body supplying hydrogen and carbon; or a stream of heated hydrocarbon mixed with heated air was sent from a gasometer supplied with coal, charcoal, peat or wood,—the brick or iron-cased chamber being thus heated to a high degree before cremation begins.

Steps were at once taken to form an English society to promote the practice of cremation. A declaration of its objects was drawn up and signed on the 13th January 1874 by the following persons—Shirley Brooks, William Eassie, Ernest Hart, the Rev. H. R. Haweis, G. H. Hawkins, John Cordy Jeaffreson, F. Lehmann, C. F. Lord, W. Shaen, A. Strahan, (Sir) Henry Thompson, Major Vaughan, Rev. C. Voysey and (Sir) T. Spencer Wells; and they frequently met to consider the necessary steps in order to attain their object. The laws and regulations having been

thoroughly discussed, the membership of the society was constituted by an annual contribution for expenses, and a subscription to the following declaration:—

> "We disapprove the present custom of burying the dead, and desire to substitute some mode which shall rapidly resolve the body into its component elements by a process which cannot offend the living, and shall render the remains absolutely innocuous. Until some better method is devised, we desire to adopt that usually known as cremation."

Finally, on 29th April a meeting was held, a council was formed, and Sir H. Thompson was elected president and chairman. Mr Eassie (who in 1875 published a valuable work on *Cremation of the Dead*) was at the same time appointed honorary secretary.[5] In 1875 the following were added:—Mrs Rose Mary Crawshay, Mr Higford Burr, Rev. J. Long, Mr W. Robinson and the Rev. Brooke Lambert. Subsequently followed Lord Bramwell, Sir Chas. Cameron, Dr Farquharson, Sir Douglas Galton, Lord Playfair, Mr Martin Ridley Smith, Mr James A. Budgett, Mr Edmund Yates, Mr J. S. Fletcher, Mr J. C. Swinburne-Hanham, the duke of Westminster (on Lord Bramwell's death), and Sir Arthur Arnold. These may be considered the pioneers of the movement for reform.

On account of difficulties and prejudices[6] the council was unable to purchase a freehold until 1878, when an acre was obtained at Woking, not far distant from the cemetery. At this time the furnace employed by Professor Gorini of Lodi, Italy, appeared to be the best for working with on a small scale; and he was invited to visit England to superintend its erection. This was completed in 1879, and the body of a horse was cremated rapidly and completely without any smoke or effluvia from the chimney. No sooner was this successful step taken than the president received a communication from the Home Office, which resulted in a personal interview with the home secretary; the issue of which was that if the society desired to avoid direct hostile action, an assurance must be given that no cremation should be attempted without leave first obtained from the minister. This of course was given, no further building took place, and the society's labours were confined to employing means to diffuse information on the subject. Sir Spencer Wells brought it before the annual meeting of the British Medical Association in 1880, when a petition to the home secretary for permission to adopt cremation was largely signed by the leading men in town and country, but without any immediate result. The next important development was an application to the council in 1882, by Captain Hanham in Dorsetshire, to undertake the cremation of two deceased relatives who had left express instructions to that effect. The home secretary was applied to, and refused. The bodies were preserved, and Captain Hanham erected a crematorium on his estate, and the cremation took place there. He himself, dying a year later, was cremated also; in both cases the result was attained under the supervision of Mr J. C. Swinburne-Hanham, who succeeded Mr Eassie in 1888 as honorary secretary to the society. The government took no notice. But in 1883 a cremation was performed in Wales by a man on the body of his child, and legal proceedings were taken against him. Mr Justice Stephen, in February 1884, delivered his well-known judgment at the Assizes there, declaring cremation to be a legal procedure, provided no nuisance were caused thereby to others. The council of the society at once declared themselves absolved from their promise to the Home Office, and publicly offered to perform cremation, laying down strict rules for careful inquiry into the cause of death in every case. They stated that they were fully aware that the chief practical objection to cremation was that it removed traces of poison or violence which might have caused death. Declining to trust the very imperfect statement generally made respecting the cause of death in the ordinary death certificate (unless a coroner's inquest had been held), they adopted a system of very stringent inquiry, the result of which in each case was to be submitted to the president, to be investigated and approved by him before cremation could take place, with the right to decline or require an inquest if he thought proper; and this course has been followed ever since the first cremation.

It was on 26th March 1885 that the first cremation at Woking took place, the subject being a lady.[7] In 1888 it became necessary, nearly 100 bodies having been by this date cremated, to build a large hall for religious service, as well as waiting-rooms, in connexion with the crematorium there. The dukes of Bedford and Westminster headed the appeal for funds, each with £105. The former (the 9th duke of Bedford) especially took great interest in the progress of the society, and offered to furnish further donations to any extent necessary. During the next two years he generously defrayed costs to the amount of £3500, and built a smaller crematorium adjacent for himself and family. The latter building was first used on the 18th of January 1891, a few days after the duke's own death. The number of cremations slowly increased year by year, and the total at the end of 1900 was 1824. Many of these were persons of distinction—by rank, or by attainments in art, literature and science, or in public life.

Death certification.

The council next turned their attention to the need for a national system of death certification, to be enforced by law as an essential and much-needed reform in connexion with cremation. On the 6th of January 1893 the duke of Westminster introduced a deputation to the secretary of state for the home department, Mr Asquith, and the president of the Cremation Society opened the case, showing that no less than 7% of the burials in England took place without any certificate, while in some districts it was far greater. In consequence of this the home secretary appointed a select committee of the House of Commons, which was presided over by Sir Walter Foster, of the Local Government Board, to "inquire into the sufficiency of the existing law as to the disposal of the dead ... and especially for detecting the causes of death due to poison, violence, and criminal neglect." After a prolonged inquiry and careful consideration of the evidence, a full report and conclusions drawn therefrom were unanimously agreed to, and published as a blue-book in the autumn of 1893.[8]

> The following conclusions are quoted from this volume:—Page iii. "So far as affording a record of the true cause of death and the detection of it in cases where death may have been due to violence, poison, or where criminal neglect is concerned, the class of certified deaths leaves much to be desired." Page iv. Certification is extremely important as a deterrent of crime, and numerous proofs are given at length in support of the statement.... "Contrast this class with that of uncertified deaths, when the result is such as to force upon your Committee the conviction that vastly more deaths occur annually from foul play and criminal neglect than the law recognizes." Page vii. Great uncertainty in resorting to the coroner's court, and want of system in connexion with the practice of it, are affirmed to exist. Page x. It is stated that the opportunity for perpetrating crime is great in the considerable class of uncertified cases ... "in short, the existing procedure plays into the hands of the criminal classes." "Your Committee are much impressed with the serious possibilities implied in a system which permits death and burial to take place without the production of satisfactory medical evidence of the cause of death." Page xii. "Your Committee have arrived at the conclusion that the appointment of medical officials, who should investigate all cases of death which are not certified by a medical practitioner in attendance, is a proposal which deserves their support."
>
> In considering cremation, the committee reported as follows:—Page xxii. "Your Committee are of opinion that there is only one question in connexion with this method of disposing of a dead body to which it is necessary for them to refer. That question is the supposed danger to the community arising from the fact that with the destruction of the body the possibility of obtaining evidence of the cause of death by *post-mortem* examination also disappears." The mode of proceeding adopted by the Cremation Society of England having been described, "your Committee are of opinion that with the precautions adopted in connexion with cremation, as carried out by the Cremation Society, there is little probability that cases of crime would escape detection, but inasmuch as these precautions are purely voluntary, your Committee consider that in the interests of public safety such regulations should be enforced by law."

The Cremation Society felt that this report much strengthened the case for legislation amending the law of death certification. In August 1894 the president of the society laid the results of the select committee before the British Medical Association at Bristol, and a unanimous vote was obtained in favour of the suggestions made by it. In November a second deputation waited on Mr Asquith, in which the president of the society begged him to carry out the system recommended. The home secretary replied that the business belonged to the department of the Local Government Board, and that it was already dealing with the question and bringing it to a satisfactory solution. Soon afterwards, however, the government changed, other questions became pressing and further consideration of the subject was postponed.

> With reference to the recommendations of the select committee before mentioned, the regulations necessary for registration of death and the disposal of the dead may be outlined as follows:— (1) That no body should be buried, cremated, or otherwise disposed of without a medical certificate of death signed, after personal knowledge and observation, or by information obtained after investigation made by a qualified medical officer appointed for the purpose. (2) A qualified medical man should be appointed as official certifier in every parish, or district of neighbouring parishes, his duty being to inquire into all cases of death and report the cause in writing, together with such other details as may be deemed necessary. This would naturally fall within the duties of the medical officer of health for the district, and registration should be made at his office. (3) If the circumstances of death obviously demand a coroner's inquest, the case should be transferred to his court and the cause determined, with or without autopsy. If there appears to be no ground for holding an inquest, and autopsy be necessary to the furnishing of a certificate, the official certifier should make it, and state the result in his report. (4) No person or company should be henceforth permitted to construct or use an apparatus for cremating human bodies without license from the Local Government Board or other authority. (5) No crematory should be so employed unless the site, construction, and system of management have been approved after survey by an officer appointed by government for the purpose. But the licence to construct or use a crematory should not be withheld if guarantees are given that the conditions required are or will be complied with. All such crematories to be subject at all times to inspection by an officer appointed by the government. (6) The burning of a human body, otherwise than in an officially recognized crematory, should be illegal, and punishable by penalty. (7) No human body should be cremated unless the official examiner added the words "Cremation permitted." This he should be bound to do if, after due inquiry, he can certify that the deceased has died from natural causes, and not from ill-treatment, poison or violence.

The Cremation Act 1902 (2 Ed. VII. ch. 8), and the regulations[9] made thereunder by the home secretary, have since given legislative effect to some of the foregoing recommendations and have laid down a code of laws applicable and binding where cremation is resorted to. But the amendments in the law of death certification generally, so long pressed for by the Cremation Society of England and recommended by the select committee, are none the less necessary.

Undoubtedly in populous communities and in crowded districts the burial of dead bodies is liable to be a source of danger to the living. As early as 1840 a commission had been appointed, including some of the earliest authorities on sanitary science,—namely, Drs Southwood Smith, Chadwick, Milroy, Sutherland, Waller Lewis and others,—to conduct a searching inquiry into the state of the burial-grounds of London and large provincial towns. By the report[10] the existence of such a danger was strikingly demonstrated, and intramural interments were in consequence made illegal. The advocates of burial then declared that interment in certain light soils would safely and efficiently decompose the putrefying elements which begin to be developed the moment death takes place, and which rapidly become dangerous to the living, still more so in the case of deaths from contagious disease. But these light dry soils and elevated spots are precisely those best adapted for human habitation; to say nothing of

their value for food-production. Granted the efficiency of such burial, it only effects in the course of a few years what exposure to a high temperature accomplishes with absolute safety in an hour. In a densely populated country the struggle between the claims of the dead and the living to occupy the choicest sites becomes a serious matter. All decaying animal remains give off effluvia—gases—which are transferred through the medium of the atmosphere to become converted into vegetable growth of some kind—trees, crops, garden produce, grass, &c. Every plant absorbs these gases by its leaves, each one of which is provided with hundreds of stomata—open mouths—by which they fix or utilize the carbon to form woody fibre, and give off free oxygen to the atmosphere. Thus it is that the air we breathe is kept pure by the constant interaction between the animal and vegetable kingdoms. It may be taken as certain that the gaseous products arising from a cremated body—amounting, although invisible, to no less than 97% of its weight, 3% only remaining as solids, in the form of a pure white ash—become in the course of a few hours integral and active elements in some form of vegetable life. The result of this reasoning has been that, by slow degrees, crematoria have been constructed at many of the populous cities in Great Britain and abroad (see *Statistics* below).

The subject of employing cremation for the bodies of those who die of contagious disease is a most important one. Sir H. Thompson advocated this course in a paper read before the International Congress of Hygiene held in London in 1891; and a resolution strongly approving the practice was carried unanimously at a large meeting of experts and medical officers of health. Such diseases are small-pox, scarlet fever, diphtheria, consumption, malignant cholera, enteric, relapsing and puerperal fevers, the annual number of deaths from which in the United Kingdom is upwards of 80,000. Complete disinfection takes place by means of the high temperature to which the body is exposed. At the present day it is compulsory to report any case in the foregoing list, whenever it occurs, to the medical officer of health for the district; and it is customary to disinfect the rooms themselves, as well as the clothes and furniture used by the patient if the case be fatal; but the body, which is the source and origin of the evil, and is itself loaded with the germs of a specific poison, is left to the chances which attach to its preservation in that condition, when buried in a fit or unfit soil or situation.

The process of preparing a body for cremation requires a brief notice. The plan generally adopted is to place it (in the usual shroud) in a light pine shell, discarding all heavy oak or other coffin, and to introduce it into the furnace in that manner. Thus there is no handling or exposure of the body after it reaches the crematorium. The type of furnace in general use is on the reverberatory principle, the body being consumed in a separate chamber heated to over 2000° Fahr. by a coke fire. In a few instances a furnace burning ordinary illuminating gas instead of coke is in use.

(H. Th.)

Statistics.—The following statistics show the history of modern cremation and its progress at home and abroad:—

Foreign Countries.—The first experiment in Italy was made by Brunetti in 1869, his second and third in 1870. Gorini and Polli published their first cases in 1872. Brunetti exhibited his at Vienna in 1873. All were performed in the open air. The next in Europe was a single case at Breslau in 1874. Soon after, an English lady was cremated in a closed apparatus (Siemens) at Dresden. The next cremation in a closed receptacle took place at Milan in 1876. In the same year a Cremation Society was formed, a handsome building was erected, and two Gorini furnaces were at work in 1880. In 1899 the total number of cremations was 1355. In Italy 28 crematoria exist, viz. at Alessandria, Asti, Bologna, Bra, Brescia, Como, Cremona, Florence, Genoa, Leghorn, Lodi, Mantua, Milan, Modena, Novara, Padua, Perugia, Pisa, Pistoia, Rome, San Remo, Siena, Spezia, Turin, Udine, Verona and Venice. The total number of cremations in Italy in 1906 was 440.

In Germany the first crematorium was erected at Gotha; it was opened in 1878, and the total cremations down to September 1st, 1907, numbered 4584. At Ohlsdorf, Hamburg, the crematorium was opened in November 1892, and the total cremations down to September 1st, 1907, numbered 2521. At Heidelberg the crematorium was opened in 1891, and the total cremations down to September 1st, 1907, numbered 1741. Throughout the German empire there are, in addition to the above, crematoria at Bremen, Eisenach, Jena, Karlsruhe, Mannheim, Mainz, Offenbach, Heilbronn, Ulm, Chemnitz and Stuttgart, besides over eighty societies for promoting cremation. The total number of cremations which took place in Germany in 1906 was 2057, making a total of 13,614 down to September 1st, 1907.

Other societies exist in Denmark, Holland, Belgium, Sweden, Norway and Switzerland. At the crematorium at Copenhagen 77 bodies were cremated in 1906, the total being 500. The Stockholm crematorium was opened in October 1887, and the cremations in 1906 numbered 56. The Gothenburg crematorium (also in Sweden) was opened in January 1890, and the cremations there in 1906 were 14. Switzerland has four crematoria, viz. at Basel, Geneva, Zurich and St Gallen—524 cremations took place in that country in 1906.

In Paris a cremation society was founded in 1880, and in 1886-1887 a large crematorium was constructed by the municipal council at Père Lachaise, containing three Gorini furnaces. It was first used in October 1887 for two men who died of small-pox. The demand became large; an improved furnace was soon devised, the unclaimed bodies at the hospitals and the remains at the dissecting rooms being cremated there, besides a large number of embryos. In 1906 the number, including the last-named class, was 6906. The total number of incinerations at Père Lachaise down to December 31st, 1906 (including both classes) was 86,962; but the employment of cremation for the purposes named has deterred a resort to it by many. Had a separate establishment been organized for the public, its success would have been greater. A magnificent edifice has been constructed by the municipality of Paris for the conservation of the ashes of persons who have been cremated. Crematoria have been established also at Rouen, Rheims and Marseilles, and the construction of crematoria in other of the great provincial centres of France was in contemplation.

In Buenos Aires, since 1844, the bodies of all persons dying of contagious disease are cremated, and there is also a separate establishment for the use of the public.

At Tokio in Japan no fewer than 22 crematoria exist, and about an equal number of cremations and burials in earth take place.

At Calcutta a crematorium was opened in 1906.

At Montreal, Canada, there is a crematorium which began operations in 1902, and completed 44 cremations up to the 31st of December 1905.

United States.—There were 33 crematoria in the United States on September 1st, 1907. At Fresh Pond, New York, erected in 1885, the total number of cremations to December 31st, 1906, being 8514. At Buffalo, N.Y., the first cremation taking place in 1885, and the total number down to December 31st, 1905, being 787. At Troy (Earl Crematorium), N. Y., the first cremation taking place in 1890, and the total number down to December 31st, 1905, 249. At Swinburne Island, N.Y., cremations beginning in 1890, total to December 31st, 1905, 123. At Waterville, N.Y., cremations beginning in 1893, total to December 31st, 1906, 62. At St Louis, Missouri, cremations beginning in 1888, total to September 1st, 1907, 2151. At Philadelphia, Penn., cremations beginning in 1888, total to September 1st, 1907, 1685. At San Francisco, Cal., “Odd Fellows,” opened in 1895, total to December 31st, 1906, 6151. Also at San Francisco, Cal., “Cypress Lawn,” opened in 1893, total to December 31st, 1905, 1492. At Los Angeles, Cal., No. 1, Rosedale, opened in 1887, total to

December 31st, 1905, 866; No. 2, Evergreen, opened in 1902, total to December 31st, 1905, 413; No. 3, Gower Street, opened in 1907 with 54 down to September 1st. At Boston, Mass., opened in 1893, total to September 1st, 1907, 2493. At Cincinnati, Ohio, opened in 1887, total to September 1st, 1907, 1245. At Chicago, opened in 1893, total to September 1st, 1907, 2188. At Detroit, Michigan, opened in 1887, total to December 31st, 1905, 689. At Pittsburg, Penn., opened in 1886, total to September 1st, 1907, 377. At Baltimore, opened in 1889, total to December 31st, 1905, 263. At Lancaster, Penn., opened in 1884, total to December 31st, 1906, 106. At Davenport, Iowa, opened in 1891, total to September 1st, 1907, 331. At Milwaukee, opened in 1896, total to October 1905, 442. At Washington, opened in 1897, total to December 31st, 1905, 275. The Le Moyne (Washington, Pa.) crematory, the first in the United States, was erected by Dr F. Julius le Moyne in 1876, for private use. The first cremation was that of the baron de Palin, of New York, December 6th, 1876. Dr F. Julius le Moyne died October 1879, and his remains were cremated in his own crematory. Total number of cremations (to 1907) 41. At Pasadena, Cal., opened in 1895, total to September 1st, 1907, 491. At St. Paul, Minn., opened in 1897, total to December 31st, 1905, 145. At Fort Wayne, Ind., opened in 1897, total to September 1st, 1907, 41. At Cambridge, Mass., opened in 1900, total to September 1st, 1907, 1090. At Cleveland, Ohio, opened in 1901, total to December 31st, 1905, 283. At Denver, Col., opened in 1904, total to December 31st, 1905, 109. At Indianapolis, opened in 1904, total to December 31st, 1905, 32. At Oakland, Cal., opened in 1902, total to September 1st, 1907, 2196. At Portland, Ore., opened in 1901, total to December 31st, 1905, 327. At Seattle, Washington, opened in 1905, with 21 to the end of that year.

United Kingdom.—There were 13 crematoria in operation in the United Kingdom on September 1st, 1907. The oldest is that at Woking, Surrey, which was first used for the cremation of human remains in 1885. In that year three cremations took place there, the number gradually increasing each year until in 1901 301 bodies were cremated. Up to September 1st, 1907, the total number of cremations at Woking was 2939. Then followed the crematorium at Manchester, opened in 1892 with 90 in 1906 and a total of 1085; at Glasgow, opened in 1895 with 45 in 1906 and a total of 252; at Liverpool, opened in 1896, with 46 in 1906 and a total of 374; at Hull, opened in 1901 (the first municipal crematorium), with 17 in 1906 and a total of 116; at Darlington, also opened in 1901, with 13 in 1906 and a total of 33. The Leicester Corporation crematorium was opened in 1902, with 12 in 1906 and a total of 50. Next in order came the Golder's Green crematorium, Hampstead, London, which was opened in December 1902. In 1906 298 cremations took place there, making a total of 1091. After this followed the Birmingham crematorium, opened in 1903, with 21 in 1906 and a total of 84; the City of London crematorium at Little Ilford, opened in 1905, with 23 for 1906 and a total of 46; the Leeds crematorium, opened in 1905, with 15 in 1906 and a total of 42; the Bradford Corporation crematorium, opened in 1905, with 13 in 1906, and a total of 20; and the Sheffield Corporation crematorium, opened in 1905, with 6 in 1906 and a total of 26. Thus there were 739 cremations in the United Kingdom in 1906, making a total at the above crematoria down to September 1st, 1907, of 6158. The Golder's Green crematorium, situated on the northern boundary of Hampstead Heath, stands in its own grounds of 12 acres, and is but 35 minutes' drive from Oxford Circus. London thus has two crematoria within driving distance of its centre, and the Woking crematorium within easy reach of the south-west suburbs.

(J. C. S.-H.)

---

1 Macrobius says it was disused in the reign of the younger Theodosius (Gibbon v. 411).

2 The Colchians, says Sir Thos. Browne, made their graves in the air, *i.e.* on trees.

3 In the case of a great man there was often a burnt offering of animals and even of slaves (see Caesar, *De bell. Gall.* iv.).

4 A temple of the Holy Ghost (see Tertullian, *De anima*, c. 51, cited in Müller, *Lex. des Kirchenrechts*, s.v. "Begräbniss").

5 This was the first society formed in Europe for the promotion of cremation.

6 For a full account of these, see *Modern Cremation: Its History and Practice to the Present Date*, by Sir H. Thompson, Bart., F.R.C.S., &c. (4th ed., Smith, Elder, Waterloo Place, 1901).

7 *The Times*, 27th March 1885.

8 *Reports on Death Certification* (1893), Eyre & Spottiswoode, London (373,472).

9 *Statutory Rules and Orders*, 1903, No. 286, Eyre & Spottiswoode.

10 *A Special Inquiry into the Practice of Interment in Towns*, by Edwin Chadwick (London, 1843), is replete with evidence, and should be read by those who desire to pursue the inquiry further.

CREMER, JAKOBUS JAN (1837-1880), Dutch novelist, born at Arnhem in September 1837, started life as a painter, but soon exchanged the brush for the pen. The great success of his first novelettes (*Betuwsche Novellen* and *Overbetuwsche Novellen*), published about 1855—reprinted many times since, and translated into German and French—showed Cremer the wisdom of his new departure. These short stories of Dutch provincial life are written in the quaint dialect of the Betuwe, the large flat Gelderland island, formed by the Rhine, the name recalling the presumed earliest inhabitants, the Batavi. Cremer is strongest in his delineation of character. His picturesque humour, coming out, perhaps, most forcibly in his numerous readings of the Betuwe novelettes, soon procured him the name of the "Dutch Fritz Reuter." In his later novels Cremer abandons both the language and the slight love-stories of the Betuwe, depicting the Dutch life of other centres in the national tongue. The principal are: *Anna Rooze* (1867), *Dokter Helmond en zijn Vrouw* (1870), *Hanna de Freule* (1873), *Daniel Sils*, &c. Cremer was less successful as a playwright, and his two comedies, *Peasant and Nobleman* and *Emma Bertholt*, did not enhance his fame; nor did a volume of poems, published in 1873. He died at the Hague in June 1880. His collected novels have appeared at Leiden. An English novel, founded by Albert Vandam upon *Anna Rooze*, considered by many his best work, was published in London (1877, 3 vols.) under the title of *An Everyday Heroine*.

CREMERA (mod. *Fosso della Valchetta*), a small stream in Etruria which falls into the Tiber about 6 m. N. of Rome. The identification with the Fosso della Valchetta is fixed as correct by the account in Livy ii. 49, which shows that the Saxa Rubra were not far off, and this we know to be the Roman name of the post station of Prima Porta, about 7 m. from Rome on the Via Flaminia. It is famous for the defeat of the three hundred Fabii, who had established a fortified post on its banks.

CRÉMIEUX, ISAAC MOÏSE [known as ADOLPHE] (1796-1880), French statesman, was born at Nîmes, of a rich Jewish family. He began life as an advocate in his native town. After the revolution of 1830 he came to Paris,

formed connexions with numerous political personages, even with King Louis Philippe, and became a brilliant defender of Liberal ideas in the law courts and in the press,—witness his *Éloge funèbre* of the bishop Grégoire (1830), his *Mémoire* for the political rehabilitation of Marshal Ney (1833), and his plea for the accused of April (1835). Elected deputy in 1842, he was one of the leaders in the campaign against the Guizot ministry, and his eloquence contributed greatly to the success of his party. On the 24th of February 1848 he was chosen by the Republicans as a member of the provisional government, and as minister of justice he secured the decrees abolishing the death penalty for political offences, and making the office of judge immovable. When the conflict between the Republicans and Socialists broke out he resigned office, but continued to sit in the constituent assembly. At first he supported Louis Napoleon, but when he discovered the prince's imperial ambitions he broke with him. Arrested and imprisoned on the 2nd of December 1851, he remained in private life until November 1869, when he was elected as a Republican deputy by Paris. On the 4th of September 1870 he was again chosen member of the government of national defence, and resumed the ministry of justice. He then formed part of the Delegation of Tours, but took no part in the completion of the organization of defence. He resigned with his colleagues on the 14th of February 1871. Eight months later he was elected deputy, then life senator in 1875. He died on the 10th of February 1880. Crémieux did much to better the condition of the Jews. He was president of the Universal Israelite Alliance, and while in the government of the national defence he secured the franchise for the Jews in Algeria. This famous *Décret Crémieux* was the origin of the anti-Semitic movement in Algiers. Crémieux published a *Recueil* of his political cases (1869), and the *Actes de la délégation de Tours et de Bordeaux* (2 vols., 1871).

CREMONA, LUIGI (1830-1903), Italian mathematician, was born at Pavia on the 7th of December 1830. In 1848, when Milan and Venice rose against Austria, Cremona, then only a lad of seventeen, joined the ranks of the Italian volunteers, and remained with them, fighting on behalf of his country's freedom, till, in 1849, the capitulation of Venice put an end to the hopeless campaign. He then returned to Pavia, where he pursued his studies at the university under Francesco Brioschi, and determined to seek a career as teacher of mathematics. His first appointment was as elementary mathematical master at the gymnasium and lyceum of Cremona, and he afterwards obtained a similar post at Milan. In 1860 he was appointed to the professorship of higher geometry at the university of Bologna, and in 1866 to that of higher geometry and graphical statics at the higher technical college of Milan. In this same year he competed for the Steiner prize of the Berlin Academy, with a treatise entitled "Memoria sulle superficie de terzo ordine," and shared the award with J. C. F. Sturm. Two years later the same prize was conferred on him without competition. In 1873 he was called to Rome to organize the college of engineering, and was also appointed professor of higher mathematics at the university. Cremona's reputation had now become European, and in 1879 he was elected a corresponding member of the Royal Society. In the same year he was made a senator of the kingdom of Italy. He died on the 10th of June 1903.

As early as 1856 Cremona had begun to contribute to the *Annali di scienze matematiche e fisiche*, and to the *Annali di matematica*, of which he became afterwards joint editor. Papers by him have appeared in the mathematical journals of Italy, France, Germany and England, and he has published several important works, many of which have been translated into other languages. His manual on *Graphical Statics* and his *Elements of Projective Geometry* (translated by C. Leudesdorf), have been published in English by the Clarendon Press. His life was devoted to the study of higher geometry and reforming the more advanced mathematical teaching of Italy.

His reputation mainly rests on his *Introduzione ad una teoria geometrica delle curve piane*, which proclaims him as a follower of the Steinerian or synthetical school of geometricians. He notably enriched our knowledge of curves and surfaces.

CREMONA, a city and episcopal see of Lombardy, Italy, the capital of the province of Cremona, situated on the N. bank of the Po, 155 ft. above sea-level, 60 m. by rail S.E. of Milan. Pop. (1901) town, 31,655; commune, 39,344. It is oval in shape, and retains its medieval fortifications. The line of the streets is as a rule irregular, but the town as a whole is not very picturesque.

The finest building is the cathedral, in the Lombard Romanesque style, begun in 1107 and consecrated in 1190. The wheel window of the main façade dates from 1274. The transepts, added in the 13th and 14th centuries (before 1370), have picturesque brick façades, with fine terra-cotta ornamentation. The great Torrazzo, a tower 397 ft. high, which stands by the cathedral, and is connected with it by a series of galleries, dates from 1267-1291. It is square below, with an octagonal summit of a slightly later period. The main façade of the cathedral was largely altered in 1491, to which date the statues upon it belong; the portico in front was added in 1497. The building would be much improved by isolation, which it is hoped may be effected. The interior is fine, and is covered with frescoes by Cremonese masters of the 16th century (Boccaccio Boccaccino, Romanino, Pordenone, the Campi, &c.), which are not of first-rate importance. The choir has fine stalls of 1489-1490, upon one of which there is a view of the façade of the cathedral before its alteration in 1491. The treasury contains a richly worked silver crucifix 9 ft. high, of 1478, the base of which was added in 1774-1775. It contains 408 statues and busts altogether, the central three of which belong to an earlier cross of 1231. Adjacent to the cathedral is the octagonal baptistery of 1167, 92 ft. in height and 75 ft. in external diameter, also in the Lombard Romanesque style. The so-called Campo Santo, close to the baptistery, contains a mosaic pavement with emblematic figures belonging probably to the 8th and 9th centuries, and running under the cathedral. Of the other churches, S. Michele has a simple and good Lombard Romanesque 13th-century façade, and a plain interior of the 10th century; and S. Agata a good campanile in the former style. Many of them contain paintings by the later Cremonese masters, especially Galeazzo Campi (d. 1536) and his sons Giulio and Antonio. The latter are especially well represented in S. Sigismondo, 1½ m. outside the town to the E. On the side of the Piazza del Comune opposite to the cathedral are two 13th-century Gothic palaces in brick, the Palazzo Comunale and the former Palazzo dei Giureconsulti, now the seat of the commissioners for the water regulation of the district. Another palace of the same period is now occupied by the Archivio Notarile. The modern Palazzo Ponzoni contains a museum and a technical institute. In front of it is a statue of the composer Amilcare Ponchielli, who was a native of Cremona. The Palazzo Fodri, now the Monte di Pietà, has a beautiful 15th-century frieze of terra-cotta bas-reliefs, as have some other palaces in private hands.

Cremona was founded by the Romans in 218 B.C. (the same year as Placentia) as an outpost against the Gallic tribes. It was strengthened in 190 B.C. by the sending of 6000 new settlers and soon became one of the most flourishing towns of upper Italy. It probably acquired municipal rights in 90 B.C., but Augustus, owing to the fact that it did not support him, assigned a part of its territory to his veterans in 41 B.C., and henceforth it is once more called *colonia*. It remained prosperous (we may note that Virgil came here to school from Mantua) until it was taken and destroyed by the troops of Vespasian after the second battle of Betriacum (Bedriacum) in A.D. 69; the temple of Mefitis alone being left standing (see Tacitus, *Hist.* iii. 15 seq.). One of the bronze plates which

decorated the exterior of the war-chest of the *legio III. Macedonica*, one of the legions which had been defeated at Betriacum, has been found near Cremona itself (F. Barnabei in *Notiz. scavi*, 1887, p. 210). Vespasian ordered its immediate reconstruction, but it never recovered its former prosperity, though its position on the N. bank of the Po, at the meeting-point of roads from Placentia, Mantua (the Via Postumia in both cases), Brixellum (where the roads from Cremona and Mantua to Parma met and crossed the river), Laus Pompeia and Brixia, still gave it considerable importance. It was destroyed once more by the Lombards under Agilulf in A.D. 605, and rebuilt in 615, and was ruled by dukes; but in the 9th century the bishops of Cremona began to acquire considerable temporal power. Landulf, a German to whom the see was granted by Henry II., was driven out in 1022, and his palace destroyed, but other Germans were invested with the see afterwards. The commune of Cremona is first mentioned in a document of 1098, recording its investiture by the countess Matilda with the territory known as Isola Fulcheria. It had to sustain many wars with its neighbours in order to maintain itself in its new possessions. In the war of the Lombard League against Barbarossa, Cremona, after having shared in the destruction of Crema in 1160 and Milan in 1162, finally joined the league, but took no part in the battle of Legnano, and thus procured itself the odium of both sides. In the Guelph and Ghibelline struggles Cremona took the latter side, and defeated Parma decisively in 1250. It was during this period that Cremona erected its finest buildings. There was, however, a Guelph reaction in 1264; the city was taken and sacked by Henry VII. in 1311, and was a prey to struggles between the two parties, until Galeazzo Visconti took possession of it in 1322. In 1406 it fell under the sway of Cabrino Fondulo, who received with great festivities both the emperor Sigismund and Pope John XXIII., the latter on his way to the council at Constance; he, however, handed it over to Filippo Maria Visconti in 1419. In 1499 it was occupied by Venetians, but in 1512 it came under Massimiliano Sforza. In 1535, like the rest of Lombardy, it fell under Spanish domination, and was compelled to furnish large money contributions. The population fell to 10,000 in 1668. The surprise of the French garrison on the 2nd of February 1702, by the Imperialists under Prince Eugene, was a celebrated incident of the War of the Spanish Succession. The Imperialists were driven from Cremona after a sharp struggle, but captured Marshal Villeroi, the French commander. Hence the celebrated verse:

"Français, rendons grâce à Bellone;
Notre bonheur est sans égal;
Nous avons conservé Cremoneé,
Et perdu notre général."

In the 18th century the prosperity of Cremona revived. In the Italian republic it was the capital of the department of the upper Po. Like the rest of Lombardy it fell under Austria in 1814, and became Italian in 1859.

See *Guida di Cremona* (Cremona, 1904).

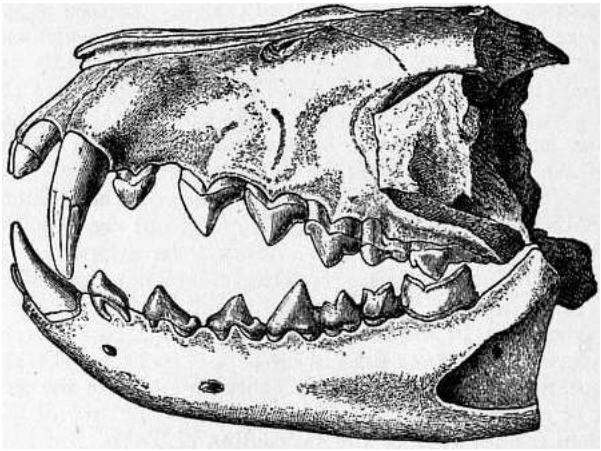
(T. As.)

CREMORNE GARDENS, formerly a popular resort by the side of the Thames in Chelsea, London, England. Originally the property of the earl of Huntingdon (c. 1750), father of Steele's "Aspasia," who built a mansion here, the property passed through various hands into those of Thomas Dawson, Baron Dartrey and Viscount Cremorne (1725-1813), who greatly beautified it. It was subsequently sold and converted into a proprietary place of entertainment, being popular as such from 1845 to 1877. It never, however, acquired the fashionable fame of

Vauxhall, and finally became so great an annoyance to residents in the neighbourhood that a renewal of its licence was refused; and the site of the gardens was soon built over. The name survives in Cremorne Road.

CRENELLE (an O. Fr. word for "notch," mod. *créneau*; the origin is obscure; cf. "cranny"), a term generally considered to mean an embrasure of a battlement, but really applying to the whole system of defence by battlements. In medieval times no one could "crenellate" a building without special licence from his supreme lord.

CREODONTA, a group of primitive early Tertiary Carnivora, characterized by their small brains, the non-union in most cases of the scaphoid and lunar bones of the carpus, and the general absence of a distinct pair of "sectorial" teeth (see CARNIVORA). In many respects the Lower Eocene creodonts come very close to the primitive ungulates, or Condylarthra (see PHENACODUS), from which, however, they are distinguished by the approximation in the form of the skull to the carnivorous type, the more trenchant teeth (at least in most cases) and the more claw-like character of the terminal joints of the toes. The general character of the dentition in the more typical forms, such as *Hyaenodon* (see fig.), recalls that of the carnivorous marsupials, this being especially the case with the Patagonian species, which have been separated as a distinct group under the name of Sparassodonta (*q.v.*). The skull, however, is not of the marsupial type, and in the European forms at any rate there is a complete replacement of the milk-molars by pre-molars, while the minute structure of the enamel of the teeth is of the carnivorous as distinct from the marsupial type. The head is large in proportion to the body, the lumbar region is unusually rigid, owing to the complexity of the articulations, and the tail and hind-limbs are relatively long and powerful. In life the tail probably passed almost imperceptibly into the body, as in the Tasmanian thylacine.



Dentition of *Hyaenodon leptorhynchus*, from the Lower Oligocene of France. The last upper molar is concealed by the penultimate tooth.

That the Creodonta are the ancestors of the modern Carnivora is now generally admitted. They are apparently the most generalized and primitive of all (placental?) mammals, and probably the direct descendants of the mammal-like anomodont or theromorphous reptiles of the Triassic epoch; the evolution from that group having perhaps taken place in Africa or in the lost area connecting that continent with India. The relationship of the creodonts to the carnivorous marsupials is not yet determined, but it seems scarcely probable that the remarkable resemblance existing between the teeth of the two groups can be solely due to parallelism; and it has been suggested by Dr L. Wortman that both creodonts and marsupials are descended from a common non-placental stock. In other words, the latter are a side-branch from the anomodont-creodont line of descent. Dr C. W. Andrews has pointed out that certain of the Egyptian creodonts appear to have been aquatic or subaquatic in their habits; and it is possible that from such types are derived the true seals, or *Phocidae*.

With the exception of Australasia, and perhaps South Africa, creodonts (on the supposition that the Patagonian forms are rightly included) appear to have had a nearly world-wide distribution. In Europe and North America they date from the Lowest Eocene and lived till the early Oligocene, while in India they apparently survived till a much later epoch. Some of the Oligocene forms, alike as regards dentition, the union of the scaphoid and lunar of the carpus, and the complexity of the brain, approximated to modern Carnivora.

As regards classification Mr W. D. Matthew includes in the typical family *Hyaenodontidae* not only the widely spread genera *Hyaenodon* and *Pterodon*, but likewise *Sinopa* (*Stypolophus*), *Cynohyaenodon* and *Proviverra*; but *Viverravus* (*Didymictis*) and *Vulpavus* (*Miacis*) are assigned to a separate family (*Viverravidae*). It is these latter forms which come nearest to modern Carnivora, most of them being of Oligocene age. The American and European *Oxyaena* apparently represents a family by itself, as does the American *Oxyclaena*; and *Palaeonictis* and *Patriofelis* are assigned to yet another family; while the North American Lower Eocene and Eocene *Arctocyon* typifies a family characterized by the somewhat bear-like type of dentition. *Mesonyx* is also a very distinct type, from the North American Eocene and Oligocene. Some of the species of *Patriofelis* and *Hyaenodon* attained the size of a tiger, although with long civet-like skulls. In the earlier forms the claws often retained somewhat of a hoof-like character.

The South American *Borhyaenidae* include *Borhyaena*, *Prothylacinus*, *Amphiproviverra*, and allied forms from the Santa Cruz beds of Patagonia, and have been referred to a distinct group, the Sparassodonta, mainly on account of the alleged replacement of some only of the milk-molars by premolars. By their first describer, Dr F. Ameghino, they were regarded as nearly related to the marsupials, to which group they were definitely referred in 1905 by Mr W. J. Sinclair, by whom they are considered near akin to *Thylacinus*, but this view seems to be disproved by the investigations of Mr C. S. Tomes into the structure of the dental enamel.

It should be added that Dr J. L. Wortman transfers *Viverravus* and its allies, together with *Palaeonictis*, to the true Carnivora, the latter genus being regarded as the ancestral type of the sabre-toothed cats (see MACHAERODUS).

AUTHORITIES.—J. L. Wortman, "Eocene Mammalia in the Peabody Museum, pt. i. Carnivora," *Amer. J. Sci.* vols. xi.-xiv. (1901-1902); W. D. Matthew, "Additional Observations on the Creodonta," *Bull. Amer. Mus.* vol. xiv. p. i. (1901); C. W. Andrews, *Descriptive Catalogue of the Tertiary Vertebrata of the Fayum*, British Museum (1906); W. J. Sinclair, "The Marsupial Fauna of the Santa Cruz Beds," *Proc. Amer. Phil. Soc.* vol. xlix. p. 73 (1905).

(R. L.*)

CREOLE (the Fr. form of *criollo*, a West Indian, probably a negro corruption of the Span, *criadillo*, the dim. of *criado*, one bred or reared, from *criar*, to breed, a derivative of the Lat. *creare*, to create), a word used originally (16th century) to denote persons born in the West Indies of Spanish parents, as distinguished from immigrants direct from Spain, aboriginals, negroes or mulattos. It is now used of the descendants of non-aboriginal races born and settled in the West Indies, in various parts of the American mainland and in Mauritius, Reunion and some other places colonized by Spain, Portugal, France, or (in the case of the West Indies) by England. In a similar sense the name is used of animals and plants. The use of the word by some writers as necessarily implying a person of mixed blood is totally erroneous; in itself "creole" has no distinction of colour; a Creole may be a person of European, negro, or mixed extraction—or even a horse.

Local variations occur in the use of the word as applied to people. In the West Indies it designates the descendants of any European race; in the United States the French-speaking native portion of the white race in Louisiana, whether of French or Spanish origin. The French Canadians are never termed creoles, nor is the word now used of the South Americans of Spanish or Portuguese descent, but in Mexico whites of pure Spanish extraction are still called creoles. In all the countries named, when a non-white creole is indicated the word negro is added. In Mauritius, Reunion, &c., on the other hand, creole is commonly used to designate the black population, but is also occasionally used of the inhabitants of European descent. The difference in type between the white creoles and the European races from whom they have sprung, a difference often considerable, is due principally to changed environment—especially to the tropical or semi-tropical climate of the lands they inhabit. The many patois founded on French and Spanish, and used chiefly by creole negroes, are spoken of as creole languages, a term extended by some writers to include similar dialects spoken in countries where the word creole is rarely used.

See G. W. Cable, *The Creoles of Louisiana* (1884); A. Coelho, "Os Dialetos romanicos on neo latinos na Africa, Asia e America," *Bol. Soc. Geo. Lisboa* (1884-1886), with bibliography. For the Creole French of Haiti see an article by Sir H. H. Johnston in *The Times*, April 10th, 1909.

CREON, in Greek legend, son of Lycaethus, king of Corinth and father of Glauce or Creusa, the second wife of Jason.

CREON, in Greek legend, son of Menoeceus, king of Thebes after the death of Laius, the husband of his sister Jocasta. Thebes was then suffering from the visitation of the Sphinx, and Creon offered his crown and the hand of the widowed queen to whoever should solve the fatal riddle. Oedipus, the son of Laius, ignorant of his parentage, successfully accomplished the task and married Jocasta, his mother. By her he had two sons, Eteocles and Polyneices, who agreed after their father's death to reign in alternative years. Eteocles first ascended the throne, being the elder, but at the end of the year refused to resign, whereupon his brother attacked him at the head of an army of Argives. The war was to be decided by a single combat between the brothers, but both fell. Creon, who

had resumed the government during the minority of Leodamas, the son of Eteocles, commanded that the Argives, and above all Polyneices, the cause of all the bloodshed, should not receive the rites of sepulture, and that any one who infringed this decree should be buried alive. Antigone, the sister of Polyneices, refused to obey, and sprinkled dust upon her brother's corpse. The threatened penalty was inflicted; but Creon's crime did not escape unpunished. His son, Haemon, the lover of Antigone, killed himself on her grave; and he himself was slain by Theseus. According to another account he was put to death by Lycus, the son or descendant of a former ruler of Thebes (Euripides, *Herc. Fur.* 31; Apollodorus iii. 5, 7; Pausanias ix. 5).

CREOPHYLUS of Samos, one of the earliest Greek epic poets. According to an epigram of Callimachus (quoted in Strabo xiv. p. 638) he was the author of a poem called Οἰχαλίας ἅλωσις , which told the story of the conquest of Oechalia by Heracles. Creophylus was said to have been a friend or relative of Homer, who, according to another tradition, was himself the author of the ῞Αλωσις, and presented it to Creophylus in return for the latter's hospitality.

See F. G. Welcker, *Der epische Cyclus* (1865-1882).

CREOSOTE, Creasote or Kreasote (from Gr. κρέας, flesh, and σώζειν, to preserve), a product of the distillation of coal, bone oil, shale oil, and wood-tar (more especially that made from beech-wood). The creosote is extracted from the distillate by means of alkali, separated from the filtered alkaline solution by sulphuric acid, and then distilled with dilute alkali; the distillate is again treated with alkali and acid, till its purification is effected; it is then redistilled at 200° C., and dried by means of calcium chloride. It is a highly refractive, colourless, oily liquid, and was first obtained in 1832 by K. Reichenbach from beech-wood tar. It consists mainly of a mixture of phenol, cresol, guaiacol, creosol, xylenol, dimethyl guaiacol, ethyl guaiacol, and various methyl ethers of pyrogallol. Creosote has a strong odour and hot taste, and burns with a smoky flame. It dissolves sulphur, phosphorus, resins, and many acids and colouring matters; and is soluble in alcohol, ether, and carbon disulphide, and in 80 parts by volume of water. It is distinguished from carbolic acid by the following properties:—it rotates the plane of polarized light to the right, forms with collodion a transparent fluid, and is nearly insoluble in glycerin; whereas carbolic acid has no effect on polarized light, gives with about two-thirds of its volume of collodion a gelatinous mass, and is soluble in all proportions in glycerin; further, alcohol and ferric chloride produce with creosote a green solution, turned brown by water, with carbolic acid a brown, and on the addition of water a blue solution. Creosote, like carbolic acid, is a powerful antiseptic, and readily coagulates albuminous matter; wood-smoke and pyroligneous acid or wood-vinegar owe to its presence their efficacy in preserving animal and vegetable substances from putrefaction.

Creosote oil is the name generally applied to the fraction of the coal tar distillate which boils between 200° and 300° C. (see Coal Tar). It is a greenish-yellow fluorescent liquid, usually containing phenol, cresol, naphthalene, anthracene, pyridine, quinoline, acridine and other substances. Its chief use is for the preservation of timber.

Pharmacology and Therapeutics.—Creosote derived from wood-tar is given medicinally in doses of from one to five minims, either suspended in mucilage, or in capsules. It should always be administered after a meal, when the gastric contents dilute it and prevent irritation. Creosote and carbolic acid (*q.v.*) have a very similar pharmacology; but there is one conspicuous exception. Beech-wood creosote alone should be used in medicine, as its composition renders it much more valuable than other creosotes. Its constituents circulate unchanged in the blood and are excreted by the lungs. Although carbolic acid has no value in phthisis (pulmonary tuberculosis) or in any other bacterial condition of the lungs, creosote, having volatile constituents which are excreted in the expired air and which are powerfully antiseptic, may well be of much value in these conditions. In phthisis creosote is now superseded by both its carbonate (creosotal)—given in the same doses—which causes less gastric disturbance, and by guaiacol itself, which may be given in doses up to thirty minims in capsules. The phosphate (phosote or phosphote), phosphite (phosphotal), and valerianate (eosote) also find application. Similarly the carbonate of guaiacol may be given in doses even as large as a drachm. Creosote may also be used as an inhalation with a steam atomizer. It is applicable not only in phthisis but in bronchiectasis, bronchitis, broncho-pneumonia, lobar pneumonia and all other bacterial lung diseases. Like carbolic acid, creosote may be used in toothache, and the local antiseptic and anaesthetic action which it shares with that substance is often of value in relieving gastric pain due to simple ulcer or cancer, and in those forms of vomiting which are due to gastric irritation.

For the determination and separation of the various constituents of creosote see F. Tiemann, *Ber.* (1881), 14, p. 2005; A. Béhal and C. Choay, *Comptes rendus* (1893), 116, p. 197; and L. F. Kebler, *Amer. Jour. Pharm.* (1899), p. 409.

CREPUSCULAR (from Lat. *crepusculum*, twilight), of or belonging to the twilight, hence indistinct or glimmering; in zoology the word is used of animals that appear before sunrise or nightfall.

CRÉQUY, a French family which originated in Picardy, and took its name from a small lordship in the present Pas-de-Calais. Its genealogy goes back to the 10th century, and from it originated the noble houses of Blécourt, Canaples, Heilly and Royon. Henri de Créquy was killed at the siege of Damietta in 1240; Jacques de Créquy, marshal of Guienne, was killed at Agincourt with his brothers Jean and Raoul; Jean de Créquy, lord of Canaples, was in the Burgundian service, and took part in the defence of Paris against Joan of Arc in 1429, received the order of the Golden Fleece in 1431, and was ambassador to Aragon and France; Antoine de Créquy was one of the boldest captains of Francis I., and died in consequence of an accident at the siege of Hesdin in 1523. Jean VIII., sire de Créquy, prince de Poix, seigneur de Canaples (d. 1555), left three sons, the eldest of whom, Antoine de Créquy (1535-1574), inherited the family estates on the death of his brothers at St Quentin in 1557. He was raised to the cardinalate, and his nephew and heir, Antoine de Blanchefort, assumed the name and arms of Créquy.

Charles I. de Blanchefort, marquis de Créquy, prince de Poix, duc de Lesdiguières (1578-1638), marshal of France, son of the last-named, saw his first fighting before Laon in 1594, and was wounded at the capture of Saint

Jean d'Angély in 1621. In the next year he became a marshal of France. He served through the Piedmontese campaign in aid of Savoy in 1624 as second in command to the constable, François de Bonne, duc de Lesdiguières, whose daughter Madeleine he had married in 1595. He inherited in 1626 the estates and title of his father-in-law, who had induced him, after the death of his first wife, to marry her half-sister Françoise. He was also lieutenant-general of Dauphiné. In 1633 he was ambassador to Rome, and in 1636 to Venice. He fought in the Italian campaigns of 1630, 1635, 1636 and 1637, when he helped to defeat the Spaniards at Monte Baldo. He was killed on the 17th of March 1638 in an attempt to raise the siege of Crema, a fortress in the Milanese. He had a quarrel extending over years with Philip, the bastard of Savoy, which ended in a duel fatal to Philip in 1599; and in 1620 he defended Saint-Aignan, who was his prisoner of war, against a prosecution threatened by Louis XIII. Some of his letters are preserved in the Bibliothèque Nationale in Paris, and his life was written by N. Chorier (Grenoble, 1683).

His eldest son, François, comte de Sault, due de Lesdiguières (1600-1677), governor and lieutenant-general of Dauphiné, took the name and arms of Bonne. The younger, Charles II. de Créquy, seigneur de Canaples, was killed at the siege of Chambéry in 1630, leaving three sons—Charles III., sieur de Blanchefort, prince de Poix, duc de Créquy (1623?-1687); Alphonse de Créquy, comte de Canaples (d. 1711), who became on the extinction of the elder branch of the family in 1702 duc de Lesdiguières, and eventually succeeded also to his younger brother's honours; and François, chevalier de Créquy and marquis de Marines, marshal of France (1625-1687).

The last-named was born in 1625, and as a boy took part in the Thirty Years' War, distinguishing himself so greatly that at the age of twenty-six he was made a *maréchal de camp*, and a lieutenant-general before he was thirty. He was regarded as the most brilliant of the younger officers, and won the favour of Louis XIV. by his fidelity to the court during the second Fronde. In 1667 he served on the Rhine, and in 1668 he commanded the covering army during Louis XIV.'s siege of Lille, after the surrender of which the king rewarded him with the marshalate. In 1670 he overran the duchy of Lorraine. Shortly after this Turenne, his old commander, was made marshal-general, and all the marshals were placed under his orders. Many resented this, and Créquy, in particular, whose career of uninterrupted success had made him over-confident, went into exile rather than serve under Turenne. After the death of Turenne and the retirement of Condé, he became the most important general officer in the army, but his over-confidence was punished by the severe defeat of Conzer Brück (1675) and the surrender of Trier and his own captivity which followed. But in the later campaigns of this war (see Dutch Wars) he showed himself again a cool, daring and successful commander, and, carrying on the tradition of Turenne and Condé, he was in his turn the pattern of the younger generals of the stamp of Luxembourg and Villars. He died in Paris on the 3rd of February 1687.

Alphonse de Créquy had not the talent of his brothers, and lost his various appointments in France. He went to London in 1672, where he became closely allied with Saint Évremond, and was one of the intimates of King Charles II.

Charles III. de Créquy served in the campaigns of 1642 and 1645 in the Thirty Years' War, and in Catalonia in 1649. In 1646, after the siege of Orbitello, he was made lieutenant-general by Louis. By faithful service during the king's minority he had won the gratitude of Anne of Austria and of Mazarin, and in 1652 he became duc de Créquy and a peer of France. The latter half of his life was spent at court, where he held the office of first gentleman of the royal chamber, which had been bought for him by his grandfather. In 1659 he was sent to Spain with gifts for the infanta Maria Theresa, and on a similar errand to Bavaria in 1680 before the marriage of the dauphin. He was ambassador to Rome from 1662 to 1665, and to England in 1677; and became governor of Paris in 1675. He died in Paris on the 13th of February 1687. His only daughter, Madeleine, married Charles de la Trémoille (1655-1709).

The marshal François de Créquy had two sons, whose brilliant military abilities bade fair to rival his own. The elder, François Joseph, marquis de Créquy (1662-1702), already held the grade of lieutenant-general when he was killed at Luzzara on the 13th of August 1702; and Nicolas Charles, sire de Créquy, was killed before Tournai in 1696 at the age of twenty-seven.

A younger branch of the Créquy family, that of Hémont, was represented by Louis Marie, marquis de Créquy (1705-1741), author of the *Principes philosophiques des saints solitaires d'Égypte* (1779), and husband of the marquise separately noticed below, and became extinct with the death in 1801 of his son, Charles Marie, who had some military reputation.

For a detailed genealogy of the family and its alliances see Moreri, *Dictionnaire historique; Annuaire de la noblesse française* (1856 and 1867). There is much information about the Créquys in the *Mémoires* of Saint-Simon.

CRÉQUY, RENÉE CAROLINE DE FROULLAY, MARQUISE DE (1714-1803), was born on the 19th of October 1714, at the château of Monfleaux (Mayenne), the daughter of Lieutenant-General Charles François de Froullay. She was educated by her maternal grandmother, and married in 1737 Louis Marie, marquis de Créquy (see above), who died four years after the marriage. Madame de Créquy devoted herself to the care of her only son, who rewarded her with an ingratitude which was the chief sorrow of her life. In 1755 she began to receive in Paris, among her intimates being D'Alembert and J. J. Rousseau. She had none of the frivolity generally associated with the women of her time and class, and presently became extremely religious with inclinations to Jansenism. D'Alembert's visits ceased when she adopted religion, and she was nearly seventy when she formed the great friendship of her life with Sénac de Meilhan, whom she met in 1781, and with whom she carried on a correspondence (edited by Édouard Fournier, with a preface by Sainte-Beuve in 1856). She commented on and criticized Meilhan's works and helped his reputation. She was arrested in 1793 and imprisoned in the convent of Les Oiseaux until the fall of Robespierre (July 1794). The well-known *Souvenirs de la marquise de Créquy* (1710-1803), printed in 7 volumes, 1834-1835, and purporting to be addressed to her grandson, Tancrède de Créquy, was the production of a Breton adventurer, Cousin de Courchamps. The first two volumes appeared in English in 1834 and were severely criticized in the *Quarterly Review*.

See the notice prefixed by Sainte-Beuve to the *Lettres*; P. L. Jacob, *Énigmes et découvertes bibliographiques* (Paris, 1866); Quérard, *Supercheries littéraires*, s.v. "Créquy"; *L'Ombre de la marquise de Créquy aux lecteurs des souvenirs* (1836) exposes the forgery of the *Mémoires*.

CRESCAS, HASDAI BEN ABRAHAM (1340-1410), Spanish philosopher. His work, *The Light of the Lord* (*'Or 'Adonai*), deeply affected Spinoza, and thus his philosophy became of wide importance. Maimonides (*q.v.*) had brought Jewish thought entirely under the domination of Aristotle. The work of Crescas, though it had no

immediate success, ended in effecting its liberation. He refused to base Judaism on speculative philosophy alone; there was a deep emotional side to his thought. Thus he based Judaism on love, not on knowledge; love was the bond between God and man, and man's fundamental duty was love as expressed in obedience to God's will. Spinoza derived from Crescas his distinction between attributes and properties; he shared Crescas's views on creation and free will, and in the whole trend of his thought the influence of Crescas is strongly marked.

See E. G. Hirsch, *Jewish Encyclopaedia*, iv. 350.

(I. A.)

CRESCENT (Lat. *crescens*, growing), originally the waxing moon, hence a name applied to the shape of the moon in its first quarter. The crescent is employed as a charge in heraldry, with its horns vertical; when they are turned to the dexter side of the shield, it is called increscent, when to the sinister, decrescent. A crescent is used as a difference to denote the second son of a house; thus the earls of Harrington place a crescent upon a crescent, as descending from the second son of a second son. An order of the crescent was instituted by Charles I. of Naples and Sicily in 1268, and revived by René of Anjou in 1464. A Turkish order or decoration of the crescent was instituted by Sultan Selim III. in 1799, in memory of the diamond crescent which he had presented to Nelson after the battle of the Nile, and which Nelson wore on his coat as if it were an order.

The crescent is the military and religious symbol of the Ottoman Turks. According to the story told by Hesychius of Miletus, during the siege of Byzantium by Philip of Macedon the moon suddenly appeared, the dogs began to bark and aroused the inhabitants, who were thus enabled to frustrate the enemy's scheme of undermining the walls. The grateful Byzantines erected a statue to "torch-bearing" Hecate, and adopted the lunar crescent as the badge of the city. It is generally supposed that it was in turn adopted by the Turks after the capture of Constantinople in 1453, either as a badge of triumph, or to commemorate a partial eclipse of the moon on the night of the final attack. In reality, it seems to have been used by them long before that event. Ala ud-din, the Seljuk sultan of Iconium (1245-1254), and Ertoghrul, his lieutenant and the founder of the Ottoman branch of the Turkish race, assumed it as a device, and it appeared on the standard of the janissaries of Sultan Orkhan (1326-1360). Since the new moon is associated with special acts of devotion in Turkey—where, as in England, there is a popular superstition that it is unlucky to see it through glass—it may originally have been adopted in consequence of its religious significance. According to Professor Ridgeway, however, the Turkish crescent, like that seen on modern horse-trappings, has nothing to do with the new moon, but is the result of the base-to-base conjunction of two claw or tusk amulets, an example of which has been brought to light during the excavations of the site of the temple of Artemis Orthia at Sparta (see *Athenaeum*, March 21, 1908). There is nothing distinctively Turkish in the combination of crescent and star which appears on the Turkish national standard; the latter is shown by coins and inscriptions to have been an ancient Illyrian symbol, and is of course common in knightly and decorative orders. It is doubtful whether any opposition between crescent and cross, as symbols of Islam and Christianity, was ever intended by the Turks; and it is an historical error to attribute the crescent to the Saracens of crusading times or the Moors in Spain.

Crescent is also the name of a Turkish musical instrument. In architecture, a crescent is a street following the arc of a circle; the name in this sense was first used in the Royal Crescent at Bath.

CRESCIMBENI, GIOVANNI MARIO (1663-1728), Italian critic and poet, was born at Macerata in 1663. Having been educated by a French priest at Rome, he entered the Jesuits' college of his native town, where he produced a tragedy on the story of Darius, and versified the *Pharsalia*. In 1679 he received the degree of doctor of laws, and in 1680 he removed again to Rome. The study of Filicaja and Leonico having convinced him that he and all his contemporaries were working in a wrong direction, he resolved to attempt a general reform. In 1690, in conjunction with fourteen others, he founded the celebrated academy of the Arcadians, and began the contest against false taste and its adherents. The academy was most successful; branch societies were opened in all the principal cities of Italy; and the influence of Marini, opposed by the simplicity and elegance of such models as Costanzo, soon died away. Crescimbeni officiated as secretary to the Arcadians for thirty-eight years. In 1705 he was made canon of Santa Maria; in 1715 he obtained the chief curacy attached to the same church; and about two months before he died (1728) he was admitted a member of the order of Jesus.

His principal work is the *Istoria della volgar poesia* (Rome, 1698), an estimate of all the poets of Italy, past and contemporary, which may yet be consulted with advantage. The most important of his numerous other publications are the *Commentarij* (5 vols., Rome, 1702-1711), and *La Bellezza della volgar poezia* (Rome, 1700).

CRESILAS, a Cretan sculptor of Cydonia. He was a contemporary of Pheidias, and one of the sculptors who vied in producing statues of amazons at Ephesus (see GREEK ART) about 450 B.C. As his amazon was wounded (*volnerata*; Pliny, *Nat. Hist.* xxxiv. 75), we may safely identify it with the figure, of which several copies are extant, who is carefully removing her blood-stained garment from a wound under the right breast. Another work of Cresilas of which copies survive is the portrait of Pericles, the earliest Greek portrait which has been with certainty identified, and which fully confirms the statement of ancient critics that Cresilas was an artist who idealized and added nobility to men of noble type. An extant portrait of Anacreon is also derived from Cresilas.

CRESOLS or METHYL PHENOLS, C_7H_8O or $C_6H_4 \cdot CH_3 \cdot OH$. The three isomeric cresols are found in the tar obtained in the destructive distillation of coal, beech-wood and pine. The crude cresol obtained from tar cannot be separated into its different constituents by fractional distillation, since the boiling points of the three isomers are very close together. The pure substances are best obtained by fusion of the corresponding toluene sulphonic acids with potash.

Ortho-cresol, $CH_3(1) \cdot C_6H_4 \cdot OH(2)$, occurs as sulphate in the urine of the horse. It may be prepared by fusion of ortho-toluene sulphonic acid with potash; by the action of phosphorus pentoxide on carvacrol; or by the action of zinc chloride on camphor. It is a crystalline solid, which melts at 30° C. and boils at 190.8° C. Fusion with alkalis converts it into salicylic acid.

Meta-cresol, $CH_3(1)\cdot C_6H_4\cdot OH(3)$, is formed when thymol (para-isopropyl-meta-cresol) is heated with phosphorus pentoxide. Propylene is liberated during the reaction, and the phosphoric acid ester of meta-cresol which is formed is then fused with potash. It can also be prepared by distilling meta-oxyuvitic acid with lime, or by the action of air on boiling toluene in the presence of aluminium chloride (C. Friedel and J. M. Crafts, *Ann. Chim. Phys.*, 1888 [6], 14, p. 436). It solidifies in a freezing mixture, on the addition of a crystal of phenol, and then melts at 3°-4° C. It boils at 202°.8 C. Its aqueous solution is coloured bluish-violet by ferric chloride.

Para-cresol, $CH_3(1)\cdot C_6H_4\cdot OH(4)$, occurs as sulphate in the urine of the horse. It is also found in horse's liver, being one of the putrefaction products of tyrosine. It may be prepared by the fusion of para-toluene sulphonic acid with potash; by the action of nitrous acid on para-toluidine; or by heating para-oxyphenyl acetic acid with lime. It crystallizes in prisms which melt at 36° C. and boil at 201°.8 C. It is soluble in water, and the aqueous solution gives a blue coloration with ferric chloride. When treated with hydrochloric acid and potassium chlorate, no chlorinated quinones are obtained (M. S. Southworth, *Ann.* (1873), 168, p. 271), a behaviour which distinguishes it from ortho- and meta-cresol.

On the composition of commercial cresylic acid see A. H. Allen, *Jour. Soc. Chem. Industry* (1890), 9, p. 141. See also CREOSOTE.

CRESPI, DANIELE (1590-1630), Italian historical painter, was born near Milan, and studied under Giovanni Battista Crespi and Giulio Procaccini. He was an excellent colourist; his drawing was correct and vigorous, and he grouped his compositions with much ability. His best work, a series of pictures from the life of Saint Bruno, is in the monastery of the Carthusians at Milan. Among the most famous of his paintings is a "Stoning of St Stephen" at Brera, and there are several excellent examples of his work in the city of his birth and at Pavia.

CRESPI, GIOVANNI BATTISTA (1557-1663), called Il Cerano, Italian painter, sculptor, and architect, was born at Cerano in the Milanese. He was a scholar of considerable attainments, and held a position of dignity in his native city. He was head of the Milanese Academy founded by Cardinal Frederigo Borromeo, and he was the teacher of Guercino. He is most famous as a painter; and, though his figures are neither natural nor graceful, his colouring is good, and his designs full of ideal beauty.

CRESPI, GIUSEPPE MARIA (1665-1747), Italian painter, called "Lo Spagnuolo" from his fondness for rich apparel, was born at Bologna, and was trained under Angelo Toni, Domenico Canuti and Carlo Cignani. He then

went through a course of copying from Correggio and Barocci; this he followed up with a journey to Venice for the sake of Titian and Paul Veronese; and late in life he proclaimed himself a follower of Guercino and Pietro da Cortona. He was a good colourist and a facile executant, and was wont to employ the camera obscura with great success in the treatment of light and shadow; but he was careless and unconscientious. He was a clever portrait-painter and a brilliant caricaturist; and his etchings after Rembrandt and Salvator are in some demand. His greatest work, a "Massacre of the Innocents," is at Bologna; but the Dresden gallery possesses twelve examples of him, among which is his celebrated series of the Seven Sacraments.

CRESS, in botany. "Garden Cress" (*Lepidium sativum*) is an annual plant (nat. ord. Cruciferae), known as a cultivated plant at the present day in Europe, North Africa, western Asia and India, but its origin is obscure. Alphonse de Candolle (*L'Origine des plantes cultivées*) says its cultivation must date from ancient times and be widely diffused, for very different names for it exist in the Arab, Persian, Albanian, Hindustani and Bengali tongues. He considered the plant to be of Persian origin, whence it may have spread after the Sanskrit epoch (there is no Sanskrit name for it) into the gardens of India, Syria, Greece and North Africa. It is used in salads, the young plants being cut and eaten while still in the seed-leaf, forming, along with plants of the white mustard in the same stage of growth, what is commonly called "small salad." The seeds should be sown thickly broadcast or in rows in succession every ten or fourteen days, according to the demand. The sowings may be made in the open ground from March till October, the earliest under hand-glasses, and the summer ones in a cool moist situation, where water from trees, shrubs, walls, &c., cannot fall on or near them. The grit thrown up by falling water pierces the tender tissues of the cress, and cannot be thoroughly removed by washing. During winter they must be raised on a slight hotbed, or in shallow boxes or pans placed in any of the glass-houses where there is a temperature of 60° or 65°. Cress is subject to the attack of a fungus (*Pythium debaryanum*) if kept too close and moist. The pest very quickly infects a whole sowing. There is no cure for it; preventive measures should therefore be taken by keeping the sowings fairly dry and well ventilated. The seed should be sown on new soil, and should not be covered.

The "Golden" or "Australian" cress is a dwarf, yellowish-green, mild-flavoured sort, which is cut and eaten when a little more advanced in growth but while still young and tender. It should be sown at intervals of a month from March onwards, the autumn sowing, for winter and spring use, being made in a sheltered situation.

The "curled" or "Normandy" cress is a very hardy sort, of good flavour. In this, which is allowed to grow like parsley, the leaves are picked for use while young; and, being finely cut and curled, they are well adapted for garnishing. It should be sown thinly, in drills, in good soil in the open borders, in March, April and May, and for winter and spring use at the foot of a south wall early in September, and about the middle of October.

Water-cress.—"Water-cress" (*Nasturtium officinale*) is a member of the same natural order, and a native of Great Britain. Although now so largely used, it does not appear to have been cultivated in England prior to the 19th century, though in Germany, especially near Erfurt, it had been grown long previously. Its flavour is due to an essential oil containing sulphur. Water-cress is largely cultivated in shallow ditches, prepared in wet, low-lying meadows, means being provided for flooding the ditches at will. Where the amount of water available is limited, the ditches are arranged at successively higher levels, so as to allow of the volume admitted to the upper ditch being passed successively to the others. The ditches are usually puddled with clay, which is covered to the depth of 9 to 12 in. with well-manured soil.

A stock of plants may be raised in two ways—by cuttings, and by seeds. If a stock is to be raised from cuttings, the desired quantity of young shoots is gathered—those sold in bunches for salad serve the purpose well—and reduced where necessary to about 3 in. in length, the basal and frequently rooted portion being rejected. They are dibbled thickly into one of the ditches, and only enough water admitted to just cover the soil. If the start is made in late spring, the cuttings will be rooted in a week. They are allowed to remain for another week or two, and are then taken up and dropped about 9 in. apart into the other ditches, which have been slightly flooded to receive them. There is no need to plant them—the young roots will very soon be securely anchored. The volume of water is increased as the plants grow. If raised from seed, the seed-bed is prepared as for cuttings, and seed sown either in drills or broadcast. No flooding is done until the seedlings are up. Water is then admitted, the level being raised as the plants grow. When 5 or 6 in. high, they are taken up and dropped into their permanent quarters precisely like those raised from cuttings.

Cultivated as above described, the plants afford frequent cuttings of large clean cress of excellent flavour for market purposes. Sooner or later growth will become less vigorous and flowering shoots will be produced. This will be accompanied by a pronounced deterioration of the remaining vegetative shoots. These signs will be interpreted by the grower to mean that his plants, as a market crop, are worn out. He will therefore take steps to repeat the routine of culture above described. In the winter the ditches are flooded to protect the cress from frost.

The best-flavoured water-cress is produced in the pure water of running streams over chalk or gravel soil. Should the water be contaminated by sewage or other undesirable matter, the plants not only absorb some of the impurities but also serve to anchor much of the solid particles washed as scum among them. This is extremely difficult to dislodge by washing, and renders the cress a source of danger as food.

Water-cress for domestic use may be raised as a kitchen-garden crop if frequently watered overhead. Beds to afford cress during the summer should be made in broad trenches on a border facing north. It may also be raised in pots or pans stood in saucers of water and frequently watered overhead.

In recent years in America attention has been paid to the injury done to water-cress beds by the “water-cress sow-bug” (*Mancasellus brachyurus*), and the “water-cress leaf-beetle” (*Phaedon aeruginosa*). Another species of *Phaedon* is known in England as “blue beetle” or “mustard beetle,” and is a pest also of mustard, cabbage and kohlrabi (see F. H. Chittenden, in *Bulletin* 66, part ii. of Bureau of Entomology, United States Department of Agriculture, 1907).

The name “nasturtium” is applied in gardens, but incorrectly, to species of *Tropaeolum*.

CRESSENT, CHARLES (1685-1768), French furniture-maker, sculptor and *fondeur-ciseleur*. As the second son of François Cressent, *sculpteur du roi*, and grandson of Charles Cressent, a furniture-maker of Amiens, who also became a sculptor, he inherited the tastes and aptitudes which were likely to make a finished designer and craftsman. Even more important perhaps was the fact that he was a pupil of André Charles Boulle. Trained in such surroundings, it is not surprising that he should have reached a degree of achievement which has to a great extent justified the claim that he was the best decorative artist of the 18th century. Cressent’s distinction is closely connected with the regency, but his earlier work had affinities with the school of Boulle, while his later pieces were full of originality. He was an artist in the widest sense of the word. He not only designed and made furniture,

but created the magnificent gilded enrichments which are so characteristic of his work. He was likewise a sculptor, and among his plastic work is known to have been a bronze bust of Louis, duc d'Orléans, the son of the regent, for whom Cressent had made one of the finest examples of French furniture of the 18th century—the famous *médaillier* now in the Bibliothèque Nationale. Cressent's bronze mounts were executed with a sharpness of finish and a grace and vigour of outline which were hardly excelled by his great contemporary Jacques Caffieri. His female figures placed at the corners of tables are indeed among the most delicious achievements of the great days of the French metal worker. Much of Cressent's work survives, and can be identified; the Louvre and the Wallace collection are especially rich in it, and his commode at Hertford House with gilt handles representing Chinese dragons is perhaps the most elaborate piece he ever produced. The work of identification is rendered comparatively easy in his case by the fact that he published catalogues of three sales of his work. These catalogues are highly characteristic of the man, who shared in no small degree the personal *bravoura* of Cellini, and could sometimes execute almost as well. He did not hesitate to describe himself as the author of "a clock worthy to be placed in the very finest cabinets," "the most distinguished bronzes," or pieces of "the most elegant form adorned with bronzes of extra richness." He worked much in marqueterie, both in tortoiseshell and in brilliant coloured woods. He was indeed an artist to whom colour appealed with especial force. The very type and exemplar of the "feeling" of the regency, he is worthy to have given his own name to some of the fashions which he deduced from it.

CRESSWELL, SIR CRESSWELL (1794-1863), English judge, was a descendant of an old Northumberland family, and was born at Newcastle in 1794. He was educated at the Charterhouse and at Emmanuel College, Cambridge. He graduated B.A. in 1814, and M.A. four years later. Having chosen the profession of the law he studied at the Middle Temple, and was called to the bar in 1819. He joined the northern circuit, and was not long in earning a distinguished position among his professional brethren. In 1837 he entered parliament as Conservative member for Liverpool, and he soon gained a reputation as an acute and learned debater on all constitutional questions. In January 1842 he was made a judge of the court of common pleas, being knighted at the same time; and this post he occupied for sixteen years. When the new court for probate, divorce and matrimonial causes was established (1858), Sir Cresswell Cresswell was requested by the Liberal government to become its first judge and undertake the arduous task of its organization. Although he had already earned a right to retire, and possessed large private wealth, he accepted this new task, and during the rest of his life devoted himself to it most assiduously and conscientiously, with complete satisfaction to the public. In one case only, out of the very large number on which he pronounced judgment, was his decision reversed. His death was sudden. By a fall from his horse on the 11th of July 1863 his knee-cap was injured. He was recovering from this when on the 29th of the same month he died of disease of the heart.

See Foss's *Lives of the Judges*; E. Manson, *Builders of our Law* (1904).

CRESSY, HUGH PAULINUS DE (c. 1605-1674), English Benedictine monk, whose religious name was Serenus, was born at Wakefield, Yorkshire, about 1605. He went to Oxford at the age of fourteen, and in 1626 became a fellow of Merton College. Having taken orders, he rose to the dignity of dean of Leighlin, Ireland, and canon of Windsor. He also acted as chaplain to Lord Wentworth, afterwards the celebrated earl of Strafford. For some time he travelled abroad as tutor to Lord Falmouth, and in 1646, during a visit to Rome, joined the Roman Catholic Church. In the following year he published his *Exomologesis* (Paris, 1647), or account of his conversion, which was highly valued by Roman Catholics as an answer to William Chillingworth's attacks. Cressy entered the Benedictine Order in 1649, and for four years resided at Somerset House as chaplain to Catherine of Braganza, wife of Charles II. He died at West Grinstead on the 10th of August 1674. Cressy's chief work, *The Church History of Brittanny or England, from the beginning of Christianity to the Norman Conquest* (1st vol. only published, Rouen, 1668), gives an exhaustive account of the foundation of monasteries during the Saxon heptarchy, and asserts that they followed the Benedictine rule, differing in this respect from many historians. The work was much criticized by Lord Clarendon, but defended by Antony à Wood in his *Athenae Oxoniensis*, who supports Cressy's statement that it was compiled from original MSS. and from the *Annales Ecclesiae Britannicae* of Michael Alford, *Dugdale's Monasticon*, and the *Decem Scriptores Historiae Anglicanae*. The second part of the history, which has never been printed, was discovered at Douai in 1856. To Roman Catholics Cressy's name is familiar as the editor of Walter Hilton's *Scale of Perfection* (London, 1659); of Father A. Baker's *Sancta Sophia* (2 vols., Douai, 1657); and of Juliana of Norwich's *Sixteen Revelations on the Love of God* (1670). These books, which would have been lost but for Cressy's zeal, have been frequently reprinted, and have been favourably regarded by a section of the Anglican Church.

For a complete list of Cressy's works see J. Gillow's *Bibl. Dict. of Eng. Catholics*, vol. i.

CREST, a town of south-eastern France, in the department of Drôme, on the right bank of the Drôme, 20 m. S.S.E. of Valence by rail. Pop. (1906) town, 3971; commune, 5660. It carries on silk-worm breeding, silk-spinning, and the manufacture of woollens, paper, leather and cement. There is trade in truffles. On the rock which commands the town stands a huge keep, the sole survival of a castle (12th century) to which Crest was indebted for its importance in the middle ages and the Religious Wars. The rest of the castle was destroyed in the first half of the 17th century, after which the keep was used as a state prison. Crest ranked for a time as the capital of the duchy of Valentinois, and in that capacity belonged before the Revolution to the prince of Monaco. The communal charter, graven on stone and dating from the 12th century, is preserved in the public archives. Ten miles south-east of Crest lies the picturesque Forest of Saon.

CREST (Lat. *crista*, a plume or tuft), the "comb" on an animal's head, and so any feathery tuft or excrescence, the "cone" of a helmet (by transference, the helmet itself), and the top or summit of anything. In heraldry (*q.v.*) a

crest is a device, originally borne as a cognizance on a knight's helmet, placed on a wreath above helmet and shield in armorial bearings, and used separately on a seal or on articles of property.

Cresting, in architecture, is an ornamental finish in the wall or ridge of a building, which is common on the continent of Europe. An example occurs at Exeter cathedral, the ridge of which is ornamented with a range of small *fleurs-de-lis* in lead.

CRESTON, a city and the county-seat of Union county, Iowa, U.S.A., about 60 m. S.W. of Des Moines, at the crossing of the main line and two branches of the Chicago, Burlington & Quincy railway. Pop. (1890) 7200; (1900) 7752; (1905, state census) 8382 (753 foreign-born); (1910) 6924. The city is on the crest of the divide between the Mississippi and the Missouri basins at an altitude of about 1310 ft.—whence its name. It is situated in a fine farming and stock-raising region, for which it is a shipping point. The site was chosen in 1869 by the Burlington & Missouri River Railroad Company (subsequently merged in the Chicago, Burlington & Quincy Railroad Company) for the location of its shops. Creston was incorporated as a town in 1869, and was chartered as a city in 1871.

CRESWICK, THOMAS (1811-1869), English landscape-painter, was born at Sheffield, and educated at Hazelwood, near Birmingham. At Birmingham he first began to paint. His earliest appearance as an exhibitor was in 1827, at the Society of British Artists in London; in the ensuing year he sent to the Royal Academy the two pictures named "Llyn Gwynant, Morning," and "Carnarvon Castle." About the same time he settled in London; and in 1836 he took a house in Bayswater. He soon attracted some attention as a landscape-painter, and had a career of uniform and encouraging, though not signal success. In 1842 he was elected an associate, and in 1850 a full member of the Royal Academy, which, for several years before his death, numbered hardly any other full members representing this branch of art. In his early practice he set an example, then too much needed, of diligent study of nature out of doors, painting on the spot all the substantial part of several of his pictures. English and Welsh streams may be said to have formed his favourite subjects, and generally British rural scenery, mostly under its cheerful, calm and pleasurable aspects, in open daylight. This he rendered with elegant and equable skill, colour rather grey in tint, especially in his later years, and more than average technical accomplishment; his works have little to excite, but would, in most conditions of public taste, retain their power to attract. Creswick was industrious and extremely prolific; he produced, besides a steady outpouring of paintings, numerous illustrations for books. He was personally genial—a dark, bulky man, somewhat heavy and graceless in aspect in his later years. He died at his house in Bayswater, Linden Grove, on the 28th of December 1869, after a few years of declining health. Among his principal works may be named "England" (1847); "Home by the Sands, and a Squally Day" (1848); "Passing Showers" (1849); "The Wind on Shore, a First Glimpse of the Sea, and Old Trees" (1850); "A Mountain Lake, Moonrise" (1852); "Changeable Weather" (1865); also the "London Road, a Hundred Years ago"; "The Weald of Kent"; the "Valley Mill" (a Cornish subject); a "Shady Glen"; the "Windings of a River"; the "Shade of

the Beech Trees"; the "Course of the Greta"; the "Wharfe"; "Glendalough," and other Irish subjects, 1836 to 1840; the "Forest Farm." Frith for figures, and Ansdell for animals, occasionally worked in collaboration with Creswick.

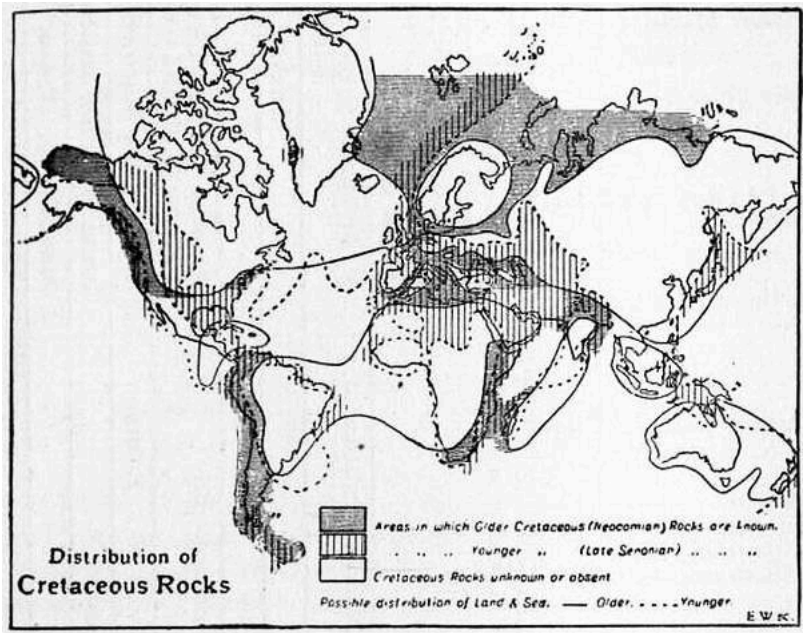
In 1873 T. O. Barlow, the engraver, published a catalogue of Creswick's works.

CRESWICK, a borough of Talbot county, Victoria, Australia. 85½ m. by rail N.W. of Melbourne. Pop. (1901) 3060. It is the centre of a mining, pastoral and agricultural district. Gold is found both in alluvial and quartz formations, the quartz being especially rich. The surrounding country is fertile and well-timbered, and there is a government plantation and nursery in connexion with the forests department.

CRETACEOUS SYSTEM, in geology, the group of stratified rocks which normally occupy a position above the Jurassic system and below the oldest Tertiary deposits; therefore it is in this system that the closing records of the great Mesozoic era are to be found. The name furnishes an excellent illustration of the inconvenience of employing a local lithological feature in the descriptive title of a wide-ranging rock-system. The white chalk (Lat. *creta*), which gives its name to the system, was first studied in the Anglo-Parisian basin, where it takes a prominent place; but even in this limited area there is a considerable thickness and variety of rocks which are not chalky, and the Cretaceous system as a whole contains a remarkable diversity of types of sediment.

Classification.—The earlier subdivisions of the Cretaceous rocks were founded upon the uncertain ground of similarity in lithological characters, assisted by observed stratigraphical sequence. This method yielded poor results even in a circumscribed area like Great Britain, and it breaks down utterly when applied to the correlation of rocks of similar age in Europe and elsewhere. Study of the fossils, however, has elicited the fact that certain forms characterize certain "zones," which are preceded and succeeded by other zones each bearing a peculiar species or distinctive assemblage of species. By these means the Cretaceous rocks of the world have now been correlated zone with zone, with a degree of exactitude proportional to the palaeontological information gained in the several areas of occurrence.

The Cretaceous system falls naturally into two divisions, an upper and a lower, in all but a few limited regions. In the table on page 288 the names of the principal stages are enumerated; these are capable of world-wide application. The sub-stages are of more local value, and too much importance must not be attached to them for the correlation of distant deposits. The general table is designed to show the relative position in the system of some of the more important and better-known formations; but it must be remembered that the Cretaceous rocks of Europe can now be classified in considerable detail by their fossils, the most accurate group for this purpose being the cephalopods. The smaller table was compiled by T. C. Chamberlin and R. D. Salisbury to show the main subdivisions of the North American Cretaceous rocks. The correlation of the minor subdivisions of Europe and America are only approximate.



Relation of the Cretaceous Strata to the Systems above and below.—In central and northern Europe the boundary between the Cretaceous and Tertiary strata is sharply defined by a fairly general unconformity, except in the Danian and Montian beds, where there is a certain commingling of Tertiary with Cretaceous fossils. The relations with the underlying Jurassic rocks are not so clearly defined, partly because the earliest Cretaceous rocks are obscured by too great a thickness of younger strata, and partly because the lowest observable rocks of the system are not the oldest, but are higher members of the system that have overlapped on to much older rocks. However, in the south of England, in the Alpine area, and in part of N.W. Germany the passage from Jurassic to Cretaceous is so gradual that there is some divergence of opinion as to the best position for the line of separation. In the Alpine region this passage is formed by marine beds, in the other two by brackish-water deposits. In a like manner the Potomac beds of N. America grade downwards into the Jurassic; while in the Laramie formation an upward passage is observed into the Eocene deposits. There is a very general unconformity and break between the Lower and Upper Cretaceous; this has led Chamberlin and Salisbury to suggest that the Lower Cretaceous should be regarded as a separate period with the title "Comanchean."

Physiographical Conditions and Types of Deposit.—With the opening of the Cretaceous in Europe there commenced a period of marine transgression; in the central and western European region this took place from the S. towards the N., slow at first and local in effect, but becoming more decided at the beginning of the upper division. During the earlier portion of the period, S. England, Belgium and Hanover were covered by a great series of estuarine sands and clays, termed the Wealden formation (*q.v.*), the delta of a large river or rivers flowing probably from the N.W. Meanwhile, in the rest of Europe alternations of marine and estuarine deposits were being laid down; but over the Alpine region lay the open sea, where there flourished coral reefs and great banks of clam-like molluscs. The sea gradually encroached upon the estuarine Wealden area, and at the time of the Aptian deposits uniform marine conditions prevailed from western Europe through Russia into Asia. This extension of the sea is illustrated in England by the overlap of the Gault over the Lower Greens and on to the older rocks, and by similar occurrences in N. France and Germany.

Almost throughout the Upper Cretaceous period the marine invasion continued, varied here and there by slight movements in the opposite sense which did not, however, interfere with the quiet general advance of the sea. This

marine extension made itself felt over the old central plateau of France, the N. of Great Britain, the Spanish peninsula, the Armorican peninsula, and also in the Bavarian Jura and Bohemia; it affected the northern part of Africa and East Africa; in N. America the sea spread over the entire length of the Rocky Mountain region; and in Brazil, eastern Asia and western Australia, Upper Cretaceous deposits are found resting directly upon much older rocks. Indeed, at this time there happened one of the greatest changes in the distribution of land and water that have been recorded in geological history.

We have seen that in early Cretaceous times marine limestones were being formed in southern Europe, while estuarine sands and muds were being laid down in the Anglo-German delta, and that beds of intermediate character were being made in parts of N. France and Germany. During later Cretaceous times this striking difference between the northern and southern facies was maintained, notwithstanding the fact that the later deposits were of marine origin in both regions. In the northern region the gradual deepening and accompanying extension of the sea caused the sandy deposits to become finer grained in N.W. Europe. The sandy beds and clays then gave way to marly deposits, and in these early stages glauconitic grains are very characteristically present both in the sand and in the marls. In their turn these marly deposits in the Anglo-Parisian basin were succeeded gradually and somewhat intermittently by the purer, soft limestone of the chalk sea, and by limestones, similar in character, in N. France, extra-Alpine Germany, S. Scandinavia, Denmark and Russia. Meanwhile, the S. European deposits maintained the characters already indicated; limestones (not chalk) prevailed, except in certain Alpine and Carpathian tracts where detrital sandstones were being laid down.

The great difference between the lithological characters of the northern and southern deposits is accompanied by an equally striking difference between their respective organic contents. In the north, the genera *Inoceramus* and *Belemnitella* are particularly abundant. In the south, the remarkable, large, clam-like, aberrant pelecypods, the *Hippuritidae*, *Rudistes*, *Caprotina*, &c., attained an extraordinary development; they form great lenticular banks, like the clam banks of warm seas, or like our modern oyster-beds; they appear in successive species in the different stages of the Cretaceous system of the south, and can be used for marking palaeontological horizons as the cephalopods are used elsewhere. Certain genera of ammonites, *Haploceras*, *Lytoceras*, *Phylloceras*, rare in the north, are common in the south; and the southern facies is further characterized by the peculiar group of swollen belemnites (*Dumontia*), by the gasteropods *Actionella*, *Nerinea*, &c., and by reef-building corals. The southern facies is far more widespread and typical of the period than is the chalk; it not only covers all southern Europe, but spreads eastwards far into Asia and round the Mediterranean basin into Africa. It is found again in Texas, Alabama, Mexico, the West Indies and Colombia; though limestones of the chalk type are found in Texas, New Zealand, and locally in one or two other places. The marine deposits are organically formed limestones, in which foraminifera and large bivalve mollusca play a leading part, marls and sandstones; dolomite and oolitic and pisolitic limestones are also known.

	European Classification.		Britain.	Germany, &c., several other parts of Europe.	Hippur limesto of Southe Franc and Mediterra Regio
	Stages.	Sub-stages.			
Upper Cretaceous.	Montian.	(placed by some in the Tertiary).		Marls and pisolitic Limestone of Meudon.	
	Danian.		Chalk of Trimingham.	Limestone of Saltholm and Faxö (Denmark).	
		Maestrichtian (Dordonian).	Upper Chalk with Flints.		
	Aturian.			Upper Quader Sandstone.	
		Campanian.			
	Senonian.				

	Emscherian. Turonian. Cenomanian.	Santonian. Coniacian. Angoumian. Ligerian. Carentonian. Rothomagian.	Middle Chalk without Flints. Grey Chalk. Chalk marl. Cambridge Greensand.	Quader Marls and Pläner Marls. Upper Pläner. Lr. Pläner and Lr. Quader. Tourtia of Mons, &c.
Lower Cretaceous.	Albian. Aptian. Barremian. Neocomian.	Gault. Gargasian. Bedoulian. Hauterivian. Valangian. Berriasian.	Selbornian. Gault and Upper Greensand. _____ Lower Greensand. Weald Clay and Hastings sands. Marine Beds of Specton.	Flammen mergel. Clay of N. Germany. Urgonian Requienia (caprotina) Kalk or Schrattenkalk. North German Hills formation

	Upper Cretaceous.	Lower Cretaceous.
Alpine Region.	Aptychenkalk in E. Alps ... Cretaceous Flysch... Biancone of S. Alps.	... Cretaceous Flysch ... Carpathian and Vienna Sandstones, Gosau formation of E. Alps. Seewan beds of N. Alps. Scaglia of S. Alps.
Africa.	Nubian Sandstone of ... Uitenhage Beds S. Africa.	... N. Africa and Syria. Pondoland Beds S. Africa.
India.	Oomia and Utatur Group.	Arialoor Beds (Deccan Trap).
Australia.	Rolling Down Formation.	Desert Sandstone.
New Zealand.	Thick conglomeratic Series with Bitumous coals.	Waipara Beds and Limestones, Chalk, with Flints, Marls and Greensand.
S. America.	Puegiredon Series. Belgrano ...	... Series. San Martin Series.
Japan.	Torinosa Limestone and Ryoseki Series.	Izumi Sandstone and Hokkaido Series.
Greenland.	Kome Group.	Atani Group. Patoot Group (part).

Note to Table.

Montian	from	Mons in Belgium.
Danian	”	Denmark = *Garumnien* of Leymerie.
Aturian	”	Adour.
Maestrichtian	”	Maestricht.
Campanian	”	Champagne.
Emscherian	”	Emscher river in Westphalia.
Santonian	”	Saintonge.
Coniacian	”	Cognac.
Senonian	”	Sens in department of Yonne.
Turonian	”	Touraine.
Angoumian	”	Angoumois.
Ligerian	”	the Loire.
Cenomanian	”	Le Mans (Cenomanum).
Carentonian	”	Charente.
Rothomagian	”	Rouen (*Rothomagus*).
Albian	”	dept. of Aube.
Selbornian	”	Selborne in Hampshire.
Aptian	”	Apt in Vaucluse.
Gargasian	”	Gargas near Apt.
Bedoulian	”	la Bedoule (Var) = *Rhodanien* of Renevie
Barremian	”	Barrême in Basses Alpes.
Hauterivian	”	Hauterive on Lake of Neuchâtel.
Valangian	”	Château de Valangin near Neuchâtel.
Neocomian	”	Neuchâtel (*Neocomum*).
Berriasian	”	Berrias (*Ardéche*) near Besseges.
Urgonian	”	Orgon near Arles.

The Cretaceous seas were probably comparatively shallow; this was certainly the case where the deposits are sandy, and in the regions occupied by the hippuritic fauna. Much discussion has taken place as to the depth of the chalk sea. Stress has been laid upon the resemblance of this deposit to the modern deep-sea globigerina-ooze; but on the whole the evidence is in favour of moderate depth, perhaps not more than 1000 fathoms; the freedom of the deposit from detrital matter being regarded as due to the low elevation of the surrounding land, and the main lines of drainage being in other directions. Sandy and shore deposits are common throughout the system in every region. Besides the Weald, there were great lacustrine and terrestrial deposits in N. America (the Potomac, Kootenay, Morrison, Dakota and Laramie formations) as well as in N. Spain, and in parts of Germany, &c. The general distribution of land and sea is indicated in the map.

Earth Movements and Vulcanicity.—During the greater part of the Cretaceous period crustal movements had been small and local in effect, but towards the close a series of great deformative movements was inaugurated and continued into the next period. These movements make it possible to discriminate between the Cretaceous and Tertiary rocks, because the conditions of sedimentation were profoundly modified by them, and in most parts of the world there resulted a distinct break in the sequence of fossil remains. Great tracts of our modern continental land areas gradually emerged, and several mountainous tracts began to be elevated, such as the Appalachians, parts of the Cordilleras, and the Rocky Mountains, and their northern continuation, and indeed the greater part of the western N. American continent was intensely affected; the uplifting was associated with extensive faulting. Volcanic activity was in abeyance in Europe and in much of Asia, but in America there were many eruptions and intrusions of igneous rock towards the close of the period. Diabases and peridotites had been formed during the Lower Cretaceous in the San Luis Obispo region. Great masses of ash and conglomerate occur in the Crow's Nest Pass in Canada; porphyries and porphyritic tuffs of later Cretaceous age are important in the Andes; while similar rocks are found in the Lower Cretaceous of New Zealand. It is, however, in the Deccan lava flows of India that we find eruptions on a scale more vast than any that have been recorded either before or since. These outpourings of lava cover 200,000 sq. m. and are from 4000 to 6000 ft. thick. They lie upon an eroded Cenomanian surface and are to some extent interbedded with Upper Cretaceous sediments.

	Atlantic Coast.	Eastern Gulf Region.	Western Gulf Region.	Western Interior.	Pacific Coa
CRETACEOUS Upper Cretaceous.	Manasquan. Rancocas.	.....	.....	Denver, Livingstone, (possibly Eocene). &c. Laramie.	Not different or wanting
	Monmouth. Matawan.	Ripley. Selma. Eutaw.	Montana Series Navarro. Colorado Series 2. Austin 1. Eagle Ford	Montana Series 2. Fox Hills. 1. Fort Pierre and Belly River. Colorado Series. 2. Niobrara. 1. Benton.	Chico.
	.....	.....	Dakota. Woodbine.	Dakota.	
		Unconformity.			
COMANCHEAN Lower Cretaceous.		Tuskaloosa Series.	Washita. Fredericksburg.	Kootenay and Morrison (or Como).	Horsetown. Knoxville. Shastan.

	Potomac Series. 4. Raritan. 3. Patapsco. Jurassic? 2. Arundel 1. Patuxent		Trinity.		

Economic Products of Cretaceous Rocks.—Coal is one of the most important products of the rocks of this system. The principal Cretaceous coal-bearing area is in the western interior of N. America, where an enormous amount of coal—mostly lignitic, but in places converted into anthracite—lies in the rocks at the foot of the Rocky Mountains; most of this is of Laramie age. Similar beds occur locally in Montana. Coal seams of Lower Cretaceous age are found in the Black Hills (S. Dakota), Alaska, Greenland, and in New Zealand; and the "Upper Quader" of Löwenberg in Silesia also contains coal seams. Coals also occur in the brackish and fresh-water deposits of Carinthia, Dalmatia and Istria, while unimportant lignitic beds are known in many other regions. The Fort Pierre beds are oil-bearing at Boulder, Colorado; and the Trinity formation bears asphalt and bitumen. Important clay deposits are worked in the Raritan formation of New Jersey, &c., and pottery clays are found in the Löwenberg district in Germany. The Washita beds yield the well-known hone stone. Great beds of gypsum exist in the Cretaceous rocks of S. America. Near Salzburg a variety of the hippuritic limestone is quarried for marble. Lithographic stone occurs in the Pyrenees. The economic products peculiar to the chalk are mentioned in the article CHALK. Beds of iron ore are found in the Lower Cretaceous of Germany and England.

The Life of the Cretaceous Period.—The fossils from the Cretaceous series comprise marine, fresh-water and terrestrial animals and plants. Foremost in interest and importance is the appearance in the Lower Potomac (Lower Cretaceous) of eastern and central N. America of the earliest representatives of angiospermous dicotyledons, and undoubted monocotyledons, the progenitors of our modern flowering plants. The angiosperms spread outward from the Atlantic coast region of N. America, and first appeared in Europe in the Aptian of Portugal; towards the close of the Lower Cretaceous period they occupied parts of Greenland, the remaining land areas of N. America, and were steadily advancing in every quarter of the globe. At first the Jurassic plants, the Cycads, ferns and conifers, lived on and were the dominant plant forms. Gradually, however, they took a subordinate place, and by the close of the Cretaceous period the angiosperms had gained the upper hand. The earliest of these fossil angiosperms is not in a true sense a primitive form, and no records of such types have yet been discovered. Some of the early forms of the Lower Cretaceous are distinctly similar to modern genera, such as *Ficus*, *Sassafras* and *Aralia*; others bore leaves closely resembling our elm, maple, willow, oak, eucalyptus, &c. Before the close of the period many other representatives of living genera had appeared, beech, walnut, tamarisk, plane, laurel (*Laurus*), cinnamon, ivy, ilex, viburnum, buckthorn, breadfruit, oleander and others; there were also junipers, thujas, pines and sequoias and monocotyledons such as *Potamogeton* and *Arundo*. This flora was widely spread and uniform; there was great similarity between that of Europe and N. America, and in parts of the United States (Virginia and Maryland) the plants were very like those in Greenland. The general aspect of the flora was sub-tropical; the eucalyptus and other plants then common in Europe and N. America are now confined to the southern hemisphere.

The marine fauna comprised foraminifera which must have swarmed in the Chalk and some of the limestone seas; their shells have formed great thickness of rock. Common forms are the genera *Alveolina*, *Cristellaria*, *Rotalia*, *Textularia*, *Orbitolina*, *Globigerina*. Radiolarians were doubtless abundant, but their remains are rare. Sponges with calcareous (*Peronidilla*, *Barroisia*) and siliceous skeletons (*Siphonia*, *Coeloptychium*, *Ventriculites*) were very numerous in certain of the Cretaceous waters. Corals were comparatively rare, *Trochosmilia*, *Parasmilia*, *Holocystis* being typical genera; reefs were formed in the Maestricht beds of Denmark and Faxoe, in

the Neocomian and Turonian of France, in the Turonian of the Alps and Pyrenees, and also in the Gosau beds and in the Utatur group of India. Sea-urchins were a conspicuous feature, and many nearly allied forms are still living; *Cidaris*, *Micraster*, *Discoidea* are examples. Crinoids were represented by *Marsupites*, *Uintacrinus* and *Bourgueticrinus*; starfish (*Calliderma* and *Pentagonaster*) were not uncommon. Polyzoa were abundant; brachiopods were fairly common, though subordinate to the pelecypods; they were mostly rhynchonellids and terebratulids, which lived side by side with the ancient forms, like *Crania* and *Discina*. The bivalve mollusca were very important during this period, *Inoceramus*, *Ostrea*, *Spondylus*, *Gervillia*, *Exogyra*, *Pecten*, *Trigonia* being particularly abundant in the northern seas, while in the southern waters the remarkable *Hippurites*, *Radiolites*, *Caprotina*, *Caprina*, *Monopleura* and *Requienia* prevailed. Gasteropods were well represented and included many modern genera. Cephalopods were important as a group, but the ammonites, so vigorous in the foregoing period, were declining and were assuming curious degenerate forms, often with a tendency to uncoil the shell; *Baculites*, *Hoplites*, *Turrilites*, *Ptychoceras*, *Hamites* are some of the typical genera, while *Belemnites* and *Belemnitella* were abundant in the northern seas.

The vertebrate fauna of the Cretaceous period differed in many features from that of the present day; mammals appear to have been only poorly represented by puny forms, related to Triassic and Jurassic types; they were mainly marsupials (*Batodon*, *Cimolestes*) with a few monotreme-like forms; carnivores, rodents and ungulates were still unknown. As in Jurassic times, reptiles were the dominant forms, and not a few genera lived on from the former period into the Cretaceous; but, on the whole, the reptilian assemblage was no longer so varied, and most of the distinctive mesozoic types had passed away before the close of this period. Dinosaurs were represented by herbivorous and carnivorous genera as in the Jurassic period, but the latter were less abundant than before. The *Iguanodon* of the Sussex-Weald and Bernissart in Belgium is perhaps the best-known genus; but there were many others, their remains being particularly abundant and well-preserved in the Cretaceous deposits of N. America. *Titanosaurus*, *Acanthopholis*, *Megalosaurus* and *Hypsilophodon* may be mentioned, some of these being of great size, while *Diclonius* was a curious duck-billed creature; but most remarkable in appearance must have been the horned Dinosaurs, *Ceratops* and *Triceratops*, gross, unwieldy creatures, 25 to 30 ft. long, whose huge heads were grotesquely armed with horns and bony frills.

Coincident, perhaps, with the widespread extension of the sea was the development of aquatic habits and structures suitable thereto amongst all the reptilian groups including also the birds. The foremost place was undoubtedly taken by the pythonomorphs or sea-serpents, including *Mosasaurus* and many others; these were enormously elongated creatures, reaching up to 75 ft., with swimming flappers and powerful swimming tails, and they lived a predatory life in the open sea. Ichthyosaurians soon disappeared from Cretaceous waters; but the plesiosaurians (*Cimoliosaurus* and others) reached their maximum development in this period. The remarkable flying lizards, pterosaurs, likewise attained their great development and then passed away; they ranged in size from that of a pigeon to creatures with a wing-spread of 25 ft.; notable genera are *Pteranodon*, *Ornithocheirus*, *Nyctiosaurus*. Ordinary lizard-like forms were represented by *Coniosaurus*, *Dolichosaurus*, &c.; and true crocodiles, *Goniopholis*, *Suchosaurus*, appeared in this period, and continued to approximate to modern genera. The earliest known river turtles are found in the Belly River deposits of Canada; marine turtles also made their first appearance and were widely represented, some of them, *Archelon* and *Protostega*, being of great size. True snakes appeared later in the period.

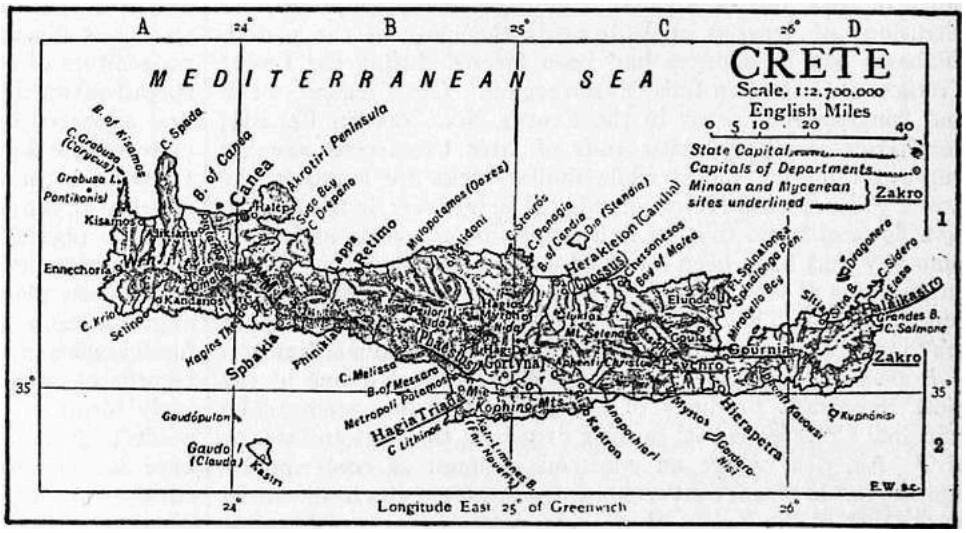
The birds, as far as existing evidence goes, were aquatic; some, like *Ichthyornis*, were built for powerful flight; others, like *Hesperornis*, were flightless. *Enaliornis* is a form well known from the Cambridge Greensand. They were toothed birds having structural affinities with the Dinosaurs and Pterodactyles.

Fish remains of this period show that a marked change was taking place; teleosteans (with bony internal skeleton) were taking a more prominent place, and although ganoids were still represented (*Macropoma*,

Lepidotus, *Amiopris*, &c.) they had quite ceased to be the dominant types before the close of Cretaceous times. Sharks and rays were of the modern types, though distinct in species. Amongst the early forms of Cretaceous teleosteans may be mentioned *Elopopsis*, *Ichthyodectes*, *Diplomystus* (herring), *Haplopteryx* and *Urenchelys* (eel).

For further information see the articles CHALK; GREENSAND; WEALDEN. Sir A. Geikie's *Text-book of Geology*, vol. ii. (4th ed., 1903), contains in addition to a full general account of the system very full references to the literature.

CRETE (Gr. Κρήτη; Turk. *Kirid*, Ital. *Candia*), after Sicily, Sardinia and Cyprus the largest island in the Mediterranean, situated between 34° 50′ and 35° 40′ N. lat. and between 23° 30′ and 26° 20′ E. long. Its north-eastern extremity, Cape Sidero, is distant about 110 m. from Cape Krio in Asia Minor, the interval being partly filled by the islands of Carpathos and Rhodes; its north-western, Cape Grabusa, is within 60 m. of Cape Malea in the Morea. Crete thus forms the natural limit between the Mediterranean and the Archipelago. The island is of elongated form; its length from E. to W. is 160 m., its breadth from N. to S. varies from 35 to 7½ m., its area is 3330 sq. m. The northern coast-line is much indented. On the W. two narrow mountainous promontories, the western terminating in Cape Grabusa or Busa (ancient Corycus), the eastern in Cape Spada, shut in the Bay of Kisamos; beyond the Bay of Canea, to the E., the rocky peninsula of Akrotiri shelters the magnificent natural harbour of Suda (8½ sq. m.), the only completely protected anchorage for large vessels which the island affords. Farther E. are the bays of Candia and Malea, the deep Mirabello Bay and the Bay of Sitia. The south coast is less broken, and possesses no natural harbours, the mountains in many parts rising almost like a wall from the sea; in the centre is Cape Lithinos, the southernmost point of the island, partly sheltering the Bay of Messará on the W. Immediately to the E. of Cape Lithinos is the small bay of Kali Liménes or Fair Havens, where the ship conveying St Paul took refuge (Acts xxvii. 8). Of the islands in the neighbourhood of the Cretan coast the largest is Gavdo (ancient Clauda, Acts xxvii. 16), about 25 m. from the south coast at Sphakia, in the middle ages the see of a bishop. On the N. side the small island of Dia, or Standia, about 8 m. from Candia, offers a convenient shelter against northerly gales. Three small islands on the northern coast—Grabusa at the N.W. extremity, Suda, at the entrance to Suda harbour, and Spinalonga, in Mirabello Bay—remained for some time in the possession of Venice after the conquest of Crete by the Turks. Grabusa, long regarded as an impregnable fortress, was surrendered in 1692, Suda (where the flags of Turkey and the four protecting powers are now hoisted) and Spinalonga in 1715.



Natural Features.—The greater part of the island is occupied by ranges of mountains which form four principal groups. In the western portion rises the massive range of the White Mountains (*Aspra Vouna*), directly overhanging the southern coast with spurs projecting towards the W. and N.W. (highest summit, Hagios Theodoros, 7882 ft.). In the centre is the smaller, almost detached mass of Psiloriti (Ὑψιλορειτίον, ancient Ida), culminating in Stavros (8193 ft.), the highest summit in the island. To the E. are the Lassithi mountains with Aphenti Christos (7165 ft.), and farther E. the mountains of Sitia with Aphenti Kavousi (4850 ft.). The Kophino mountains (3888 ft.) separate the central plain of Messará from the southern coast. The isolated peak of Iuktas (about 2700 ft.), nearly due S. of Candia, was regarded with veneration in antiquity as the burial-place of Zeus. The principal groups are for the greater part of the year covered with snow, which remains in the deeper clefts throughout the summer; the intervals between them are filled by connecting chains which sometimes reach the height of 3000 ft. The largest plain is that of Monofatsi and Messará, a fertile tract extending between Mt. Psiloriti and the Kophino range, about 37 m. in length and 10 m. in breadth. The smaller plain, or rather slope, adjoining Canea and the valley of Alikianú, through which the Platanos (ancient Iardanos) flows, are of great beauty and fertility. A peculiar feature is presented by the level upland basins which furnish abundant pasturage during the summer months; the more remarkable are the Omalo in the White Mountains (about 4000 ft.) drained by subterranean outlets (κατάβοθρα), Nida (εἰς τὴν Ἴδαν) in Psiloriti (between 5000 and 6000 ft.), and the Lassithi plain (about 3000 ft.), a more extensive area, on which are several villages. Another remarkable characteristic is found in the deep narrow ravines (φαράγγια), bordered by precipitous cliffs, which traverse the mountainous districts; into some of these the daylight scarcely penetrates. Numerous large caves exist in the mountains; among the most remarkable are the famous Idaean cave in Psiloriti, the caves of Melidoni, in Mylopotamo, and Sarchu, in Malevisi, which sheltered hundreds of refugees after the insurrection of 1866, and the Dictaean cave in Lassithi, the birth-place of Zeus. The so-called Labyrinth, near the ruins of Gortyna, was a subterranean quarry from which the city was built. The principal rivers are the Metropoli Potamos and the Anapothiari, which drain the plain of Monofatsi and enter the southern sea E. and W. respectively of the Kophino range; the Platanos, which flows northwards from the White Mountains into the Bay of Canea; and the Mylopotamo (ancient Oaxes) flowing northwards from Psiloriti to the sea E. of Retimo.

Geology.[1]—The metamorphic rocks of western Crete form a series some 9000 to 10,000 ft. in thickness, of very varied composition. They include gypsum, dolomite, conglomerates, phyllites, and a basic series of

eruptive rocks (gabbros, peridotites, serpentines). Glaucophane rocks are widely spread. In the centre of the folds fossiliferous beds with crinoids have been found, and the black slates at the top of the series contain *Myophoria* and other fossils, indicating that the rocks are of Triassic age. It is, however, not impossible that the metamorphic series includes also some of the Lias. The later beds of the island belong to the Jurassic, Cretaceous and Tertiary systems. At the western foot of the Ida massif calcareous beds with corals, brachiopods (*Rhynchonella inconstans*, &c.) have been found, the fossils indicating the horizon of the Kimmeridge clay. Lower Cretaceous limestones and schists, with radiolarian cherts, arc extensively developed; and in many parts of the island Upper Cretaceous limestones with *Rudistes* and Eocene beds with nummulites have been found. All these are involved in the earth movements to which the mountains of the island owe their formation, but the Miocene beds (with *Clypeaster*) and later deposits lie almost undisturbed upon the coasts and the low-lying ground. With the Jurassic beds is associated an extensive series of eruptive rocks (gabbro, peridotite, serpentine, diorite, granite, &c.); they are chiefly of Jurassic age, but the eruptions may have continued into the Lower Cretaceous.

The structure of the island is complex. In the west the folds run from north to south, curving gradually westward towards the southern and western coasts; but in the east the folds appear to run from west to east, and to be the continuation of the Dinaric folds of the Balkan peninsula. The structure is further complicated by a great thrust-plane which has brought the Jurassic and Lower Cretaceous beds upon the Upper Cretaceous and Eocene beds.

Vegetation.—The forests which once covered the mountains have for the most part disappeared and the slopes are now desolate wastes. The cypress still grows wild in the higher regions; the lower hills and the valleys, which are extremely fertile, are covered with olive woods. Oranges and lemons also abound, and are of excellent quality, furnishing almost the whole supply of continental Greece and Constantinople. Chestnut woods are found in the Selino district, and forests of the valonia oak in that of Retimo; in some parts the carob tree is abundant and supplies an important article of consumption. Pears, apples, quinces, mulberries and other fruit-trees flourish, as well as vines; the Cretan wines, however, no longer enjoy the reputation which they possessed in the time of the Venetians. Tobacco and cotton succeed well in the plains and low grounds, though not at present cultivated to any great extent.

Animals.—Of the wild animals of Crete, the wild goat or *agrimi (Capra aegagrus)* alone need be mentioned; it is still found in considerable numbers on the higher summits of Psiloriti and the White Mountains. The same species is found in the Caucasus and Mount Taurus, and is distinct from the ibex or bouquetin of the Alps. Crete, like several other large islands, enjoys immunity from dangerous serpents—a privilege ascribed by popular belief to the intercession of Titus, the companion of St Paul, who according to tradition was the first bishop of the island, and became in consequence its patron saint. Wolves also are not found in the island, though common in Greece and Asia Minor. The native breed of mules is remarkably fine.

Population.—The population of Crete under the Venetians was estimated at about 250,000. After the Turkish conquest it greatly diminished, but afterwards gradually rose, till it was supposed to have attained to about 260,000, of whom about half were Mahommedans, at the time of the outbreak of the Greek revolution in 1821. The ravages of the war from 1821 to 1830, and the emigration that followed, caused a great diminution, and the population was estimated by Pashley in 1836 at only about 130,000. In the next generation it again materially increased; it was calculated by Spratt in 1865 as amounting to 210,000. According to the census taken in 1881, the complete publication of which was interdicted by the Turkish authorities, the population of the island was 279,165, or 35.78 to the square kilometre. Of this total, 141,602 were males, 137,563 females; 33,173 were literate, 242,114 illiterate; 205,010 were orthodox Christians, 73,234 Moslems, and 921 of other religious persuasions. The Moslem element predominated in the principal towns, of which the population was—Candia, 21,368; Canea, 13,812;

Retimo, 9274. According to the census taken in June 1900, the population of the island was 301,273, the Christians having increased to 267,266, while the Moslems had diminished to 33,281. The Moslems, as well as the Christians, are of Greek origin and speak Greek.

Towns.—The three principal towns are on the northern coast and possess small harbours suitable for vessels of light draught. Candia, the former capital and the see of the archbishop of Crete (pop. in 1900, 22,501), is officially styled Herákleion; it is surrounded by remarkable Venetian fortifications and possesses a museum with a valuable collection of objects found at Cnossus, Phaestus, the Idaean cave and elsewhere. It has been occupied since 1897 by British troops. Canea (Xaviá), the seat of government since 1840 (pop. 20,972), is built in the Italian style; its walls and interesting galley-slips recall the Venetian period. The residence of the high commissioner and the consulates of the powers are in the suburb of Halepa. Retimo Ρέθυμνος is, like Canea, the see of a bishop (pop. 9311). The other towns, Hierapetra, Sitia, Kisamos, Selino and Sphakia, are unimportant.

Production and Industries.—Owing to the volcanic nature of its soil, Crete is probably rich in minerals. Recent experiments lead to the conclusion that iron, lead, manganese, lignite and sulphur exist in considerable abundance. Copper and zinc have also been found. A large number of applications for mining concessions have been received since the establishment of the autonomous government. The principal wealth of the island is derived from its olive groves; notwithstanding the destruction of many thousands of trees during each successive insurrection, the production is apparently undiminished, and will probably increase very considerably owing to the planting of young trees and the improved methods of cultivation which the Government is endeavouring to promote. The orange and lemon groves have also suffered considerably, but new varieties of the orange tree are now being introduced, and an impulse will be given to the export trade in this fruit by the removal of the restriction on its importation into Greece. Agriculture is still in a primitive condition; notwithstanding the fertility of the arable land the supply of cereals is far below the requirements of the population. A great portion of the central plain of Monofatsi, the principal grain-producing district, is lying fallow owing to the exodus of the Moslem peasantry. The cultivation of silk cocoons, formerly a flourishing industry, has greatly declined in recent years, but efforts are now being made to revive it. There are few manufactures. Soap is produced at fifteen factories in the principal towns, and there are two distilleries of cognac at Candia.

Commerce.—The expansion of Cretan commerce has been retarded by many drawbacks, such as the unsatisfactory condition of the harbours, the want of direct steamship lines to England and other countries, and the deficiency of internal communications. The total value of imports in the four years 1901-1904 was £1,756,888, of exports £1,386,777; excess of imports over exports, £370,111. Exports in 1904 were valued at £419,642, the principal items being agricultural products (oranges, lemons, carobs, almonds, grapes, valonia, &c.), value £153,858, olives and products of olives (oil, soap, &c.), £134,788, and wines and liquors, £48,544. The countries which accept the largest share of Cretan produce are Turkey, England, Egypt, Austria and Russia. Imports in 1904 were valued at £549,665, including agricultural products (mainly flour and corn), value £162,535, and textiles, £129,349. Cereals are imported from the Black Sea and Danube ports, ready-made clothing from Austria and Germany, articles of luxury from Austria and France, and cotton textiles from England. Imports are charged 8%, exports 1% *ad valorem* duty. According to a law published in 1899, Turkish merchandise became subjected to the same rates as that of foreign nations.

Constitution and Government.—During the past half-century the affairs of Crete have repeatedly occupied the attention of Europe. Owing to the existence of a strong Mussulman minority among its inhabitants, the warlike character of the natives, and the mountainous configuration of the country, which enabled a portion of the Christian population to maintain itself in a state of partial independence, the island has constantly been the scene of

prolonged and sanguinary struggles in which the numerical superiority of the Christians was counterbalanced by the aid rendered to the Moslems by the Ottoman troops. This unhappy state of affairs was aggravated and perpetuated by the intrigues set on foot at Constantinople against successive governors of the island, the conflicts between the Palace and the Porte, the duplicity of the Turkish authorities, the dissensions of the representatives of the great powers, the machinations of Greek agitators, the rivalry of Cretan politicians, and prolonged financial mismanagement. A long series of insurrections—those of 1821, 1833, 1841, 1858, 1866-1868, 1878, 1889 and 1896 may be especially mentioned—culminated in the general rebellion of 1897, which led to the interference of Greece, the intervention of the great powers, the expulsion of the Turkish authorities, and the establishment of an autonomous Cretan government under the suzerainty of the sultan. According to the autonomous constitution of 1899 the supreme power was vested in Prince George of Greece, acting as high commissioner of the protecting powers. The authority thus conferred was confided exclusively to the prince, and was declared liable to modification by law in the case of his successor. The modified constitution of February 1907 curtailed the large exceptional legislative and administrative powers then accorded. The high commissioner is irresponsible, but his decrees, except in certain specified cases, must be countersigned by a member of his council. He convokes, prorogues and dissolves the chamber, sanctions laws, exercises the right of pardon in case of political offences, represents the island in its foreign relations and is chief of its military forces. The chamber (βουλή), which is elected in the proportion of one deputy to every 5000 inhabitants, meets annually for a session of two months. New elections are held every two years. The chamber exercises a complete financial control, and no taxes can be imposed without its consent. The high commissioner is aided in the administration by a cabinet of three members, styled "councillors" (σύμβουλοι), who superintend the departments of justice, finance, education, public security and the interior. The councillors, who are nominated and dismissed by the high commissioner, are responsible to the chamber, which may impeach them before a special tribunal for any illegal act or neglect of duty.

In general the Cretan constitution is characterized by a conservative spirit, and contrasts with the ultra-democratic systems established in Greece and the Balkan States. A further point of difference is the more liberal payment of public functionaries in Crete. For administrative purposes the departmental divisions existing under the Turkish government have been retained. There are 5 *nomoi* or prefectures (formerly *sanjaks*) each under a prefect (νομάρχος), and 23 eparchies (formerly *kazas*) each under a sub-prefect (ἔπαρχος). All these functionaries are nominated by the high commissioner. The prefects are assisted by departmental councils. The system of municipal and communal government remains practically unchanged. The island is divided into 86 communes, each with a mayor, an assistant-mayor, and a communal council elected by the people. The councils assess within certain limits the communal taxes, maintain roads, bridges, &c., and generally superintend local affairs. Public order is maintained by a force of gendarmerie (χωροφυλακή) organized and at first commanded by Italian officers, who were replaced by Greek officers in December 1906. The constitution authorizes the formation of a militia (πολιτοφυλακή) to be enrolled by conscription, but in existing circumstances the embodiment of this force seems unnecessary.

Justice.—The administration of justice is on the French model. A supreme court of appeal, which also discharges the functions of a court of cassation, sits at Canea. There are two assize courts at Canea and Candia respectively with jurisdiction in regard to serious offences (κακουργήματα). Minor offences (πλημμελήματα) and civil causes are tried by courts of first instance in each of the five departments. There are 26 justices of peace, to whose decision are referred slight contraventions of the law (πταίσματα) and civil causes in which the amount claimed is below 600 francs. These functionaries also hold monthly sessions in the various communes. The judges are chosen without regard to religious belief, and precautions have been taken to render them independent of political parties. They are appointed, promoted, transferred or removed by order of the council of justice, a body composed of the five highest judicial dignitaries, sitting at Canea. An order for the removal of a judge must be based upon a conviction for some specified offence before a court of law. The jury system has not been introduced.

The Greek penal code has been adopted with some modifications. The Ottoman civil code is maintained for the present, but it is proposed to establish a code recently drawn up by Greek jurists which is mainly based on Italian and Saxon law. The Mussulman cadis retain their jurisdiction in regard to religious affairs, marriage, divorce, the wardship of minors and inheritance.

Religion and Education.—The vast majority of the Christian population belongs to the Orthodox (Greek) Church, which is governed by a synod of seven bishops under the presidency of the metropolitan of Candia. The Cretan Church is not, strictly speaking, autocephalous, being dependent on the patriarchate of Constantinople. There were in 1907 3500 Greek churches in the island with 53 monasteries and 3 nunneries; 55 mosques, 4 Roman Catholic churches and 4 synagogues. Education is nominally compulsory. In 1907 there were 547 primary schools (527 Christian and 20 Mahommedan), and 31 secondary schools (all Christian). About £20,000 is granted annually by the state for the purposes of education.

Finance.—Owing to the havoc wrought during repeated insurrections, the impoverishment of the peasants, the desolation of the districts formerly inhabited by the Moslem agricultural population, and the drain of gold resulting from the sale of Moslem lands and emigration of the former proprietors, together with other causes, the financial situation has been unsatisfactory. Notwithstanding the advance of £160,000 made by the four protecting powers after the institution of autonomous government and the profits (£61,937) derived from the issue of a new currency in 1900, there was at the beginning of 1906 an accumulated deficit of £23,470, which represents the floating debt. In addition to the above-mentioned debt to the powers, the state contracted a loan of £60,000 in 1901 to acquire the rights and privileges of the Ottoman Debt, to which the salt monopoly has been conceded for 20 years. In the budgets for 1905 and 1906 considerable economies were effected by the curtailment of salaries, the abolition of various posts, and the reduction of the estimates for education and public works. The estimated revenue and expenditure for 1906 were as follows:—

Revenue.		Expenditure.	
	Drachmae (gold).		Drachmae (gold).
Direct taxes	1,494,000	High Commissioner	200,000
Indirect taxes	1,715,000	Financial administration	694,670
Stamp dues	351,700	Interior (including gendarmerie)	1,678,566
Other sources	780,967	Education and Justice	1,453,500
	4,341,667		4,026,736

The salary of the high commissioner was reduced in 1907 to 100,000 drachmae.

Improved communications are much needed for the transport of agricultural produce, but the state of the treasury does not admit of more than a nominal expenditure on road-making and other public works. On these the average yearly expenditure between 1898 and 1905 was £13,404. The prosperity of the island depends on the development of agriculture, the acquirement of industrious habits by the people, and the abandonment of political agitation. The Cretans were in 1906 more lightly taxed than any other people in Europe. The tithe had been replaced by an export tax on exported agricultural produce levied at the custom-

houses, and the smaller peasant proprietors and shepherds of the mountainous districts were practically exempt from any contribution to the state. The communal tax did not exceed on the average two francs annually for each family. The poorer communes are aided by a state subvention. (J. D. B.)

Archaeology.

Early, Middle and Late "Minoan" periods.

The recent exploration and excavation of early sites in Crete have entirely revolutionized our knowledge of its remote past, and afforded the most astonishing evidence of the existence of a highly advanced civilization going far back behind the historic period. Great "Minoan" palaces have been brought to light at Cnossus and Phaestus, together with a minor but highly interesting royal abode at Hagia Triada near Phaestus. "Minoan" towns, some of considerable extent, have been discovered at Cnossus itself, at Gournia, Palaikastro, and at Zakro. The cave sanctuary of the Dictaean Zeus has been explored, and throughout the whole length and breadth of the island a mass of early materials has now been collected. The comparative evidence afforded by the discovery of Egyptian relics shows that the Great Age of the Cretan palaces covers the close of the third and the first half of the second millennium before our era. But the contents of early tombs and dwellings and indications supplied by such objects as stone vases and seal-stones show that the Cretans had already attained to a considerable degree of culture, and had opened out communication with the Nile valley in the time of the earliest Egyptian dynasties. This more primitive phase of the indigenous culture, of which several distinct stages are traceable, is known as the Early Minoan, and roughly corresponds with the first half of the third millennium B.C. The succeeding period, to which the first palaces are due and to which the name of Middle Minoan is appropriately given, roughly coincides with the Middle Empire of Egypt. An extraordinary perfection was at this time attained in many branches of art, notably in the painted pottery, often with polychrome decoration, of a class known as "Kamares" from its first discovery in a cave of that name on Mount Ida. Imported specimens of this ware were found by Flinders Petrie among XIIth Dynasty remains at Kahun. The beginnings of a school of wall painting also go back to the Middle Minoan period, and metal technique and such arts as gem engraving show great advance. By the close of this period a manufactory of fine faience was attached to the palace of Cnossus. The succeeding Late Minoan period, best illustrated by the later palace at Cnossus and that at Hagia Triada, corresponds in Egypt with the Hyksos period and the earlier part of the New Empire. In the first phase of this the Minoan civilization attains its acme, and the succeeding style already shows much that may be described as rococo. The later phase, which follows on the destruction of the Cnossian palace, and corresponds with the diffused Mycenaean style of mainland Greece and elsewhere, is already partly decadent. Late Minoan art in its finest aspect is best illustrated by the animated ivory figures, wall paintings, and *gesso duro* reliefs at Cnossus, by the painted stucco designs at Hagia Triada, and the steatite vases found on the same site with zones in reliefs exhibiting life-like scenes of warriors, toreadors, gladiators, wrestlers and pugilists, and of a festal throng perhaps representing a kind of "harvest home." Of the more conventional side of Late Minoan life a graphic illustration is supplied by the remains of miniature wall paintings found in the palace of Cnossus, showing groups of court ladies in curiously modern costumes, seated on the terraces and balustrades of a sanctuary. A grand "palace style" of vase painting was at the same time evolved, in harmony with the general decoration of the royal halls.

Minoan script.

It had been held till lately that the great civilization of prehistoric Greece, as first revealed to us by Schliemann's discoveries at Mycenae, was not possessed of the art of writing. In 1893, however, Arthur Evans observed some signs on seal-stones from Crete which led him to believe that a hieroglyphic system of writing had existed in Minoan times. Explorations carried out by him in Crete from 1894 onwards, for the purpose of investigating the prehistoric civilization of the island, fully corroborated this belief, and showed that a linear as well as a semi-pictorial form of writing was diffused in the island at a very early

period ("Cretan Pictographs and Prae-Phoenician Script," *Journ. of Hellenic Studies*, xiv. pt. 11). In 1895 he obtained a libation-table from the Dictaean cave with a linear dedication in the prehistoric writing ("Further Discoveries," &c., *J.H.S.* xvii.). Finally in 1900 all scepticism in the learned world was set at rest by his discovery in the palace of Cnossus of whole archives consisting of clay tablets inscribed both in the pictographic (hieroglyphic) and linear forms of the Minoan script (Evans, "Palace of Knossos," *Reports of Excavation, 1900-1905*; *Scripta Minoa*, vol. i., 1909). Supplementary finds of inscribed tablets have since been found at Hagia Triada (F. Halbherr, *Rapporto, &c., Monumenti antichi*, 1903) and elsewhere (Palaikastro, Zakro and Gournia). It thus appears that a highly developed system of writing existed in Minoan Crete some two thousand years earlier than the first introduction under Phoenician influence of Greek letters. In this, as in so many other respects, the old Cretan tradition receives striking confirmation. According to the Cretan version preserved by Diodorus (v. 74), the Phoenicians did not invent letters but simply altered their forms.

Earlier pictographic script.

There is evidence that the use in Crete of both linear and pictorial signs existed in the Early Minoan period, contemporary with the first Egyptian dynasties. It is, however, during the Middle Minoan age, the centre point of which corresponds with the XIIth Egyptian dynasty, according to the Sothic system of dating, c. 2000-1850 B.C., that a systematized pictographic or hieroglyphic script makes its appearance which is common both to signets and clay tablets. During the Third Middle Minoan period, the lower limits of which approach 1600 B.C., this pictographic script finally gives way to a still more developed linear system—which is itself divided into an earlier and a later class. The earlier class (A) is already found in the temple repositories of Cnossus belonging to the age immediately preceding the great remodelling of the palace, and this class is specially well represented in the tablets of Hagia Triada (M.M. iii. and L.M. i.). The later class (B) of the linear script is that used on the great bulk of the clay tablets of the Cnossian palace, amounting in number to nearly 2000.

These clay archives are almost exclusively inventories and business documents. Their general purport is shown in many cases by pictorial figures relating to various objects which appear on them—such as chariots and horses, ingots and metal vases, arms and implements, stores of corn, &c., flocks and herds. Many showing human figures apparently contain lists of personal names. A decimal system of numeration was used, with numbers going up to 10,000. But the script itself is as yet undeciphered, though it is clear that certain words have changing suffixes, and that there were many compound words. The script also recurs on walls in the shape of graffiti, and on vases, sometimes ink-written; and from the number of seals originally attached to perishable documents it is probable that parchment or some similar material was also used. In the easternmost district of Crete, where the aboriginal "Eteocretan" element survived to historic times (Praesus, Palaikastro), later inscriptions have been discovered belonging to the 5th and succeeding centuries B.C., written in Greek letters but in the indigenous language (Comparetti, *Mon. Ant.* iii. 451 sqq.; R. S. Conway, *British School Annual*, viii. 125 sqq. and ib. xl.). In 1908 a remarkable discovery was made by the Italian Mission at Phaestus of a clay disk with imprinted hieroglyphic characters belonging to a non-Cretan system and probably from W. Anatolia.

Character of Minoan religion.

The remains of several shrines within the building, and the religious element perceptible in the frescoes, show that a considerable part of the Palace of Cnossus was devoted to purposes of cult. It is clear that the rulers, as so commonly in ancient states, fulfilled priestly as well as royal functions. The evidence supplied by this and other Cretan sites shows that the principal Minoan divinity was a kind of *Magna Mater*, a Great Mother or nature goddess, with whom was associated a male satellite. The cult in fact corresponds in its main outlines with the early religious conceptions of Syria and a large part of Anatolia—a correspondence probably explained by a considerable amount of ethnic affinity existing between a large section of the primitive Cretan population and that of southern Asia Minor. The Minoan goddess is sometimes seen in her chthonic form with serpents, sometimes in a more celestial aspect with doves, at times with

lions. One part of her religious being survives in that of the later Rhea, another in that of Aphrodite, one of whose epithets, *Ariadne* (= the exceeding holy), takes us back to the earliest Cnossian tradition. Under her native name, Britomartis (= the sweet maiden) or Dictynna, she approaches Artemis and Leto, again associated with an infant god, and this Cretan virgin goddess was worshipped in Aegina under the name of Aphaea. It is noteworthy that whereas, in Greece proper, Zeus attains a supreme position, the old superiority of the Mother Goddess is still visible in the Cretan traditions of Rhea and Dictynna and the infant Zeus.

Although images of the divinities were certainly known, the principal objects of cult in the Minoan age were of the aniconic class; in many cases these were natural objects, such as rocks and mountain peaks, with their cave sanctuaries, like those of Ida or of Dicte. Trees and curiously shaped stones were also worshipped, and artificial pillars of wood or stone. These latter, as in the well-known case of the Lion's Gate at Mycenae, often appear with guardian animals as their supporters. The essential feature of this cult is the bringing down of the celestial spirit by proper incantations and ritual into these fetish objects, the dove perched on a column sometimes indicating its descent. It is a primitive cult similar to that of Early Canaan, illustrated by the pillow stone set up by Jacob, which was literally "Bethel" or the "House of God." The story of the *baetylus*, or stone swallowed by Saturn under the belief that it was his son, the Cretan Zeus, seems to cover the same idea and has been derived from the same Semitic word.

A special form of this "baetylic" cult in Minoan Crete was the representation of the two principal divinities in their fetish form by double axes. Shrines of the Double Axes have been found in the palace of Cnossus itself, at Hagia Triada, and in a small palace at Gournia, and many specimens of the sacred emblem occurred in the Cave Sanctuary of Dicte, the mythical birthplace of the Cretan Zeus. Complete scenes of worship in which libations are poured before the Sacred Axes are, moreover, given on a fine painted sarcophagus found at Hagia Triada.

The same cult survived to later times in Caria in the case of Zeus Labrandeus, whose name is derived from *labrys*, the native name for the double axe, and it had already been suggested on philological grounds that the Cretan "labyrinthos" was formed from a kindred form of the same word. The discovery that the great Minoan foundation at Cnossus was at once a palace and a sanctuary of the Double Axe and its associated divinities has now supplied a striking and it may well be thought an overwhelming confirmation of this view. We can hardly any longer hesitate to recognize in this vast building, with its winding corridors and subterranean ducts, the Labyrinth of later tradition; and as a matter of fact a maze pattern recalling the conventional representation of the Labyrinth in Greek art actually formed the decoration of one of the corridors of the palace. It is difficult, moreover, not to connect the repeated wall-paintings and reliefs of the palace illustrating the cruel bull sports of the Minoan arena, in which girls as well as youths took part, with the legend of the Minotaur, or bull of Minos, for whose grisly meals Athens was forced to pay annual tribute of her sons and daughters. It appears certain from the associations in which they are found at Cnossus, that these Minoan bull sports formed part of a religious ceremony. Actual figures of a monster with a bull's head and man's body occurred on seals of Minoan fabric found on this and other Cretan sites.

Labyrinth and Minotaur.

It is abundantly evident that whatever mythic element may have been interwoven with the old traditions of the spot, they have a solid substratum of reality. With such remains before us it is no longer sufficient to relegate Minos to the regions of sun-myths. His legendary presentation as the "Friend of God," like Abraham, to whom as to Moses the law was revealed on the holy mountain, calls up indeed just such a priest-king of antiquity as the palace-sanctuary of Cnossus itself presupposes. It seems possible even that the ancient tradition which recorded an earlier or later king of the name of Minos may, as suggested above, cover a dynastic title. The earlier and later palaces at Cnossus and Phaestus, and the interrupted phases of each, seem to point to a succession of dynasties, to which, as to its civilization as a whole, it is certainly convenient to apply the name "Minoan." It is interesting, as bringing out the

Historic substratum of Cretan myths.

personal element in the traditional royal seat, that an inscribed sealing belonging to the earliest period of the later palace of Cnossus bears on it the impression of two official signets with portrait heads of a man and of a boy, recalling the "associations" on the coinage of imperial Rome. It is clear that the later traditions in many respects accurately summed up the performances of the "Minoan" dynast who carried out the great buildings now brought to light. The palace, with its wonderful works of art, executed for Minos by the craftsman Daedalus, has ceased to belong to the realms of fancy. The extraordinary architectural skill, the sanitary and hydraulic science revealed in details of the building, bring us at the same time face to face with the power of mechanical invention with which Daedalus was credited. The elaborate method and bureaucratic control visible in the clay documents of the palace point to a highly developed legal organization. The powerful fleet and maritime empire which Minos was said to have established will no doubt receive fuller illustration when the sea-town of Cnossus comes to be explored. The appearance of ships on some of the most important seal-impressions is not needed, however, to show how widely Minoan influence made itself felt in the neighbouring Mediterranean regions.

Early relations with Egypt.

The Nilotic influence visible in the vases, seals and other fabrics of the Early Minoan age, seems to imply a maritime activity on the part of the islanders going back to the days of the first Egyptian dynasties. In a deposit at Kahun, belonging to the XIIth Dynasty, c. 2000 B.C., were already found imported polychrome vases of "Middle Minoan" fabric. In the same way the important part played by Cretan enterprise in the days of the New Egyptian empire is illustrated by repeated finds of Late Minoan pottery on Egyptian sites. A series of monuments, moreover, belonging to the early part of the XVIIIth Dynasty show the representatives of the Kefts or peoples of "The Ring" and of the "Lands to the West" in the fashionable costume of the Cnossian court, bearing precious vessels and other objects of typical Minoan forms. Farther to the east the recent excavations on the old Philistine sites like Gezer have brought to light swords and vases of Cretan manufacture in the later palace style. The principal Philistine tribe is indeed known in the biblical records as the Cherethims or Cretans, and the Minoan name and the cult of the Cretan Zeus were preserved at Gaza to the latest classical days. Similar evidence of Minoan contact, and indeed of wholesale colonization from the Aegean side, recurs in Cyprus. The culture of the more northerly Aegean islands, best revealed to us by the excavations of the British School at Phylakopi in Melos, also attest a growing influence from the Cretan side, which, about the time of the later palace at Cnossus, becomes finally predominant.

The Kefts and Philistines.

Early relations with Cyprus and N. Aegean.

Turning to the mainland of Greece we see that the astonishing remains of a highly developed prehistoric civilization, which Schliemann first brought to light in 1876 at Mycenae, and which from those discoveries received the general name of "Mycenaean," in the main represent a transmarine offshoot from the Minoan stock. The earlier remains both at Mycenae and Tiryns, still imperfectly investigated, show that this Cretan influence goes back to the Middle Minoan age, with its characteristic style of polychrome vase decoration. The contents of the royal tombs, on the other hand, reveal a wholesale correspondence with the fabrics of the first, and, to a less degree, the second Late Minoan age, as illustrated by the relics belonging to the Middle Period of the later palace at Cnossus and by those of the royal villa at Hagia Triada. The chronological centre of the great beehive tombs seems to be slightly lower. The ceiling of that of Orchomenos, and the painted vases and gold cups from the Vaphio tomb by Sparta, with their marvellous reliefs showing scenes of bull-hunting, represent the late palace style at Cnossus in its final development.

Minoan influence on mainland of Greece.

The leading characteristics of this mainland civilization are thus indistinguishable from the Minoan. The funeral rites are similar, and the religious representations show an identical form of worship. At the same time the local traditions and conditions differentiate the continental from the insular branch. In Crete, in the later period, when

the rulers could trust to the "wooden walls" of the Minoan navy, there is no parallel for the massive fortifications that we see at Tiryns or Mycenae. The colder winter climate of mainland Greece dictated the use of fixed hearths, whereas in the Cretan palaces these seem to have been of a portable kind, and the different usage in this respect again reacted on the respective forms of the principal hall or "Megaron."

Minoan culture under its mainland aspect left its traces on the Acropolis at Athens,—a corroboration of the tradition which made the Athenians send their tribute children to Minos. Similar traces extend through a large part of northern Greece from Cephallenia and Leucadia to Thessaly, and are specially well marked at Iolcus (near mod. Volo), the legendary embarking place of the Argonauts. This circumstance deserves attention owing to the special connexion traditionally existing between the Minyans of Iolcus and those of Orchomenus, the point of all others on this side where the early Cretan influence seems most to have taken root. The Minoan remains at Orchomenus which are traceable to the latest period go far to substantiate the philological comparison between the name of Minyas, the traditional ancestor of this ancient race, and that of Minos.

Minoan influences in N. Greece.

Still farther to the north-west a distinct Minoan influence is perceptible in the old Illyrian lands east of the Adriatic, and its traces reappear in the neighbourhood of Venice. It is well marked throughout southern Italy from Taranto to Naples. It was with Sicily, however, that the later history of Minos and his great craftsman Daedalus was in a special way connected by ancient tradition. Here, as in Crete, Daedalus executed great works like the temple of Eryx, and it was on Sicilian soil that Minos, engaged in a western campaign, was said to have met with a violent death at the hands of the native king Kokalos (Cocalus) and his daughters. His name is preserved in the Sicilian Minoa, and his tomb was pointed out in the neighbourhood of Agrigentum, with a shrine above dedicated to his native Aphrodite, the lady of the dove; and in this connexion it must be observed that the cult of Eryx perpetuates to much later times the characteristic features of the worship of the Cretan Nature goddess, as now revealed to us in the palace of Cnossus and elsewhere. These ancient indications of a Minoan connexion with Sicily have now received interesting confirmation in the numerous discoveries, principally due to the recent excavations of P. Orsi, of arms and painted vases of Late Minoan fabric in Bronze Age tombs of the provinces of Syracuse and Girgenti (Agrigentum) belonging to the late Bronze Age. Some of these objects, such as certain forms of swords and vases, seem to be of local fabric, but derived from originals going back to the beginning of the Late Minoan age.

Adriatic and Italian extension.

The abiding tradition of the Cretan aborigines, as preserved by Herodotus (vii. 171), ascribes the eventual settlement of the Greeks in Crete to a widespread desolation that had fallen on the central regions. It is certain that by the beginning of the 14th century B.C., when the signs of already decadent Minoan art are perceptible in the imported pottery found in the palace of Akhenaton at Tell el-Amarna, some heavy blows had fallen on the island power. Shortly before this date the palaces both of Cnossus and Phaestus had undergone a great destruction, and though during the ensuing period both these royal residences were partially reoccupied it was for the most part at any rate by poorer denizens, and their great days as palaces were over for ever. Elsewhere at Cnossus, in the smaller palace to the west, the royal villa and the town houses, we find the evidence of a similar catastrophe followed by an imperfect recovery, and the phenomenon meets us again at Palaikastro and other early settlements in the east of Crete. At the same time, to whatever cause this serious setback of Minoan civilization was owing, it would be very unsafe to infer as yet any large displacement of the original inhabitants by the invading swarms from the mainland or elsewhere. The evidence of a partial restoration of the domestic quarter of the palace of Cnossus tends to show a certain measure of dynastic continuity. There is evidence, moreover, that the script and with it the indigenous language did not die out during this period, and that therefore the days of Hellenic settlement at Cnossus were not yet. The recent exploration of a cemetery belonging to the close of the great palace period, and in a greater degree to the age

Minoan crisis: c. 1400 B.C.

succeeding the catastrophe, has now conclusively shown that there was no real break in the continuity of Minoan culture. This third Late Minoan period—the beginning of which may be fixed about 1400—is an age of stagnation and decline, but the point of departure continued to be the models supplied by the age that had preceded it. Art was still by no means extinct, and its forms and decorative elements are simply later derivatives of the great palace style. Not only the native form of writing, but the household arrangements, sepulchral usages, and religious rites remain substantially the same. The third Late Minoan age corresponds generally with the Late Mycenaean stage in the Aegean world (see AEGEAN CIVILIZATION). It is an age indeed in which the culture as a whole, though following a lower level, attains the greatest amount of uniformity. From Sicily and even the Spanish coast to the Troad, southern Asia Minor, Cyprus and Palestine,—from the Nile valley to the mouth of the Po, very similar forms were now diffused. Here and there, as in Cyprus, we watch the development of some local schools. How far Crete itself continued to preserve the hegemony which may reasonably be ascribed to it at an earlier age must remain doubtful. It is certain that towards the close of this third and concluding Late Minoan period in the island certain mainland types of swords and safety-pins make their appearance, which are symptomatic of the great invasion from that side that was now impending or had already begun.

Principal Minoan Sites.

It will be convenient here to give a general view of the more important Minoan remains recently excavated on various Cretan sites.

Cnossus.—The palace of Cnossus is on the hill of Kephala about 4 m. inland from Candia. As a scene of human settlement this site is of immense antiquity. The successive "Minoan" strata, which go well back into the fourth millennium B.C., reach down to a depth of about 17 ft. But below this again is a human deposit, from 20 to 26 ft. in thickness, representing a long and gradual course of Neolithic or Later Stone-Age development. Assuming that the lower strata were formed at approximately the same rate as the upper, we have an antiquity of from 12,000 to 14,000 years indicated for the first Neolithic settlement on this spot. The hill itself, like a Tell of Babylonia, is mainly formed of the debris of human settlements. The palace was approached from the west by a paved Minoan Way communicating with a considerable building on the opposite hill. This road was flanked by magazines, some belonging to the royal armoury, and abutted on a paved area with stepped seats on two sides (theatral area). The palace itself approximately formed a square with a large paved court in the centre. It had a N.S. orientation. The principal entrance was to the north, but what appears to have been the royal entrance opened on a paved court on the west side. This entrance communicated with a corridor showing frescoes of a processional character. The west side of the palace contained a series of 18 magazines with great store jars and cists and large hoards of clay documents. A remarkable feature of this quarter is a small council chamber with a gypsum throne of curiously Gothic aspect and lower stone benches round. The walls of the throne room show frescoes with sacred griffins confronting each other in a Nile landscape, and a small bath chamber—perhaps of ritual use—is attached. This quarter of the palace shows the double axe sign constantly repeated on its walls and pillars, and remains of miniature wall-paintings showing pillar shrines, in some cases with double axes stuck into the wooden columns. Here too were found the repositories of an early shrine containing exquisite faience figures and reliefs, including a snake goddess—another aspect of the native divinity—and her votaries. The central object of cult in this shrine was apparently a marble cross. Near the north-west angle of the palace was a larger bath chamber, and by the N. entrance were remains of great reliefs of bull-hunting scenes in painted *gesso duro*. South of the central court were found parts of a relief in the same material, showing a personage with a fleur-de-lis crown and collar. The east wing of the palace was the really residential part. Here was what seems to have been the basement of a very large hall or "Megaron," approached directly

from the central court, and near this were found further reliefs, fresco representations of scenes of the bull-ring with female as well as male toreadors, and remains of a magnificent gaming-board of gold-plated ivory with intarsia work of crystal plaques set on silver plates and blue enamel (*cyanus*). The true domestic quarter lay to the south of the great hall, and was approached from the central court by a descending staircase, of which three flights and traces of a fourth are preserved. This gives access to a whole series of halls and private rooms (halls "of the Colonnades," "of the Double Axes," "Queen's Megaron" with bath-room attached and remains of the fish fresco, "Treasury" with ivory figures and other objects of art), together with extensive remains of an upper storey. The drainage system here, including a water-closet, is of the most complete and modern kind. Near this domestic quarter was found a small shrine of the Double Axes, with cult objects and offertory vessels in their places. The traces of an earlier "Middle Minoan" palace beneath the later floor-levels are most visible on the east side, with splendid ceramic remains. Here also are early magazines with huge store jars. At the foot of the slope on this side, forming the eastern boundary of the palace, are massive supporting walls and a bastion with descending flights of steps, and a water-channel devised with extraordinary hydraulic science (Evans, "Palace of Knossos," "Reports of Excavations 1900-1905," in *Annual of British School at Athens*, vi. sqq.; *Journ. R.I.B.A.* (1902), pt. iv. For the palace pottery see D. Mackenzie, *Journ. of Hellenic Studies*, xxiii.). The palace site occupies nearly six acres. To the N.E. of it came to light a "royal villa" with staircase, and a basilica-like hall (Evans, *B.S. Annual*, ix. 130 seq.). To the N.W. was a dependency containing an important hoard of bronze vessels (ib. p. 112 sqq.). The building on the hill to the W. approached by the Minoan paved way has the appearance of a smaller palace (*B.S. Annual*, xii., 1906). Many remains of private houses belonging to the prehistoric town have also come to light (Hogarth, *B.S.A.* vi. [1900], p. 70 sqq.). A little N. of the town, at a spot called Zafer Papoura, an extensive Late Minoan cemetery was excavated in 1904 (Evans, *The Prehistoric Tombs of Knossus*, 1906), and on a height about 2 m. N. of this, a royal tomb consisting of a square chamber, which originally had a pointed vault of "Cyclopaean" structure approached by a forehall or rock-cut passage. This monumental work seems to date from the close of the Middle Minoan age, but has been re-used for interments at successive periods (Evans, *Archaeologia*, 1906, p. 136 sqq.). It is possibly the traditional tomb of Idomeneus. (For later discoveries see further Cnossus.)

Phaestus.—The acropolis of this historic city looks on the Libyan Sea and commands the extensive plain of Messara. On the eastern hill of the acropolis, excavations initiated by F. Halbherr on behalf of the Italian Archaeological Mission and subsequently carried out by L. Pernier have brought to light another Minoan palace, much resembling on a somewhat smaller scale that of Cnossus. The plan here too was roughly quadrangular with a central court, but owing to the erosion of the hillside a good deal of the eastern quarter has disappeared. The Phaestian palace belongs to two distinct periods, and the earlier or "Middle Minoan" part is better preserved than at Cnossus. The west court and entrance belonging to the earlier building show many analogies with those of Cnossus, and the court was commanded to the north by tiers of stone benches like those of the "theatral area" at Cnossus on a larger scale. Magazines with fine painted store jars came to light beneath the floor of the later "propylaeum." The most imposing block of the later building is formed by a group of structures rising from the terrace formed by the old west wall. A fine paved corridor running east from this gives access to a line of the later magazines, and through a columnar hall to the central court beyond, while to the left of this a broad and stately flight of steps leads up to a kind of entrance hall on an upper terrace. North of the central court is a domestic quarter presenting analogies with that of Cnossus, but throughout the later building there was a great dearth of the frescoes and other remains such as invest the Cnossian palace with so much interest. There are also few remaining traces here of upper storeys. It is evident that in this case also the palace was overtaken by a great catastrophe, followed by a partial

reoccupation towards the close of the Late Minoan age (L. Pernier, *Scavi della missione italiana a Phaestos; Monumenti antichi*, xii. and xiv.).

About a kilometre distant from the palace of Phaestus near the village of Kalyvia a Late Minoan cemetery was brought to light in 1901, belonging to the same period as that of Cnossus (Savignoni, *Necropoli di Phaestos*, 1905).

Hagia Triada.—On a low hill crowned by a small church of the above name, about 3 m. nearer the Libyan Sea than Phaestus, a small palace or royal villa was discovered by Halbherr and excavated by the Italian Mission. In its structure and general arrangements it bears a general resemblance to the palace of Phaestus and Cnossus on a smaller scale. The buildings themselves, with the usual halls, bath-rooms and magazines, together with a shrine of the Mother Goddess, occupy two sides of a rectangle, enclosing a court at a higher level approached by flights of stairs. Repositories also came to light containing treasure in the shape of bronze ingots. In contrast to the palace of Phaestus, the contents of the royal villa proved exceptionally rich, and derive a special interest from the fact that the catastrophe which overwhelmed the building belongs to a somewhat earlier part of the Late Minoan age than that which overwhelmed Cnossus and Phaestus. Clay tablets were here found belonging to the earlier type of the linear script (Class A), together with a great number of clay sealings with religious and other devices and incised countermarks. Both the signet types and the other objects of art here discovered display the fresh naturalism that characterizes in a special way the first Late Minoan period. A remarkable wall-painting depicts a cat creeping over ivy-covered rocks and about to spring on a pheasant. The steatite vases with reliefs are of great importance. One of these shows a ritual procession, apparently of reapers singing and dancing to the sound of a sistrum. On another a Minoan warrior prince appears before his retainers. A tall funnel-shaped vase of this class, of which a considerable part has been preserved, is divided into zones showing bull-hunting scenes, wrestlers and pugilists in gladiatorial costume, the whole executed in a most masterly manner. The small palace was reconstructed at a later period, and at a somewhat higher level. To a period contemporary with the concluding age of the Cnossian palace must be referred a remarkable sarcophagus belonging to a neighbouring cemetery. The chest is of limestone coated with stucco, adorned with life-like paintings of offertory scenes in connexion with the sacred Double Axes of Minoan cult. There have also come to light remains of a great domed mortuary chamber of primitive construction containing relics of the Early Minoan period (Halbherr, *Monumenti Antichi*, xiii. (1903), p. 6 sqq., and *Memorie del instituto lombardo*, 1905; Paribeni, *Lavori eseguiti della missione italiana nel Palazzo e nella necropoli di Haghia Triada; Rendiconti*, &c., xi. and xii.; Savignoni, *Il Vaso di Haghia Triada*).

Palaikastro.—Near this village, lying on the easternmost coast of Crete, the British School at Athens has excavated a section of a considerable Minoan town. The buildings here show a stratification analogous to that of the palace of Cnossus. The town was traversed by a well-paved street with a stone sewer, and contained several important private houses and a larger one which seems to have been a small palace. Among the more interesting relics found were ivory figures of Egyptian or strongly Egyptianizing fabric. On an adjacent hill were the remains of what seems to have been in later times a temple of the Dictaean Zeus, and from the occurrence of rich deposits of Minoan vases and sacrificial remains at a lower level, the religious tradition represented by the later temple seems to go back to prehistoric times. On the neighbouring height of Petsofà, by a rock-shelter, remains of another interesting shrine were brought to light dating from the Middle Minoan period, and containing interesting votive offerings of terra-cotta, many of them apparently relating to cures or to the warding off of diseases (R. C. Bosanquet, *British School Annual*, viii. 286 sqq., ix. 274 sqq.; R. M. Dawkins, ibid. ix. 290 sqq., x.; J. L. Myres, ibid. ix. 356 sqq.).

PLATE I.

FIG. 1.—PALACE OF CNOSSUS. GENERAL VIEW OF THE SITE FROM THE EAST.

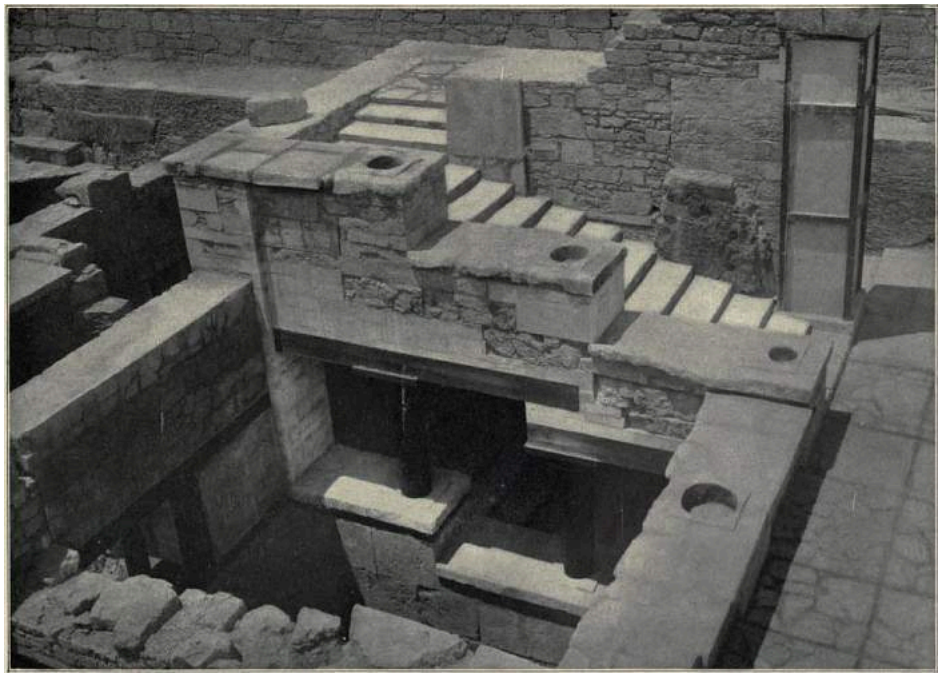


FIG. 2.—VIEW OF PART OF GRAND STAIRCASE AND HALL OF COLONNADES (WOODEN COLUMNS RESTORED) (CNOSSUS).
(*By permission of Dr A. J. Evans.*)

PLATE II.

FIG. 3.—LARGE OIL-JARS IN EAST MAGAZINES (CNOSSUS).

FIG. 4.—GYPSUM THRONE (FRESCO PAINTING VISIBLE ON WALL) (CNOSSUS).

FIG. 5.—BASE OF WEST WALL NEAR ROYAL ENTRANCE (CNOSSUS).

(*By permission of Dr A. J. Evans.*)

Gournia.—Near this hamlet on the coast of the Gulf of Mirabello in east Crete, the American archaeologist Miss Harriet Boyd has excavated a great part of another Minoan town. It covers the sides of a long hill, its main avenue being a winding roadway leading to a small palace. It contained a shrine of the Cretan snake goddess, and was rich in minor relics, chiefly in the shape of bronze implements and pottery for household use. The bulk of the remains belong here, as at Hagia Triada, to the beginning of the Late Minoan period, but there are signs of reoccupation in the decadent Minoan age. The remains supply detailed

information as to the everyday life of a Cretan country town about the middle of the second millennium B.C. (H. Boyd, *Excavations at Gournia*).

Zakro.—Near the lower hamlet of that name on the S.E. coast important remains of a settlement contemporary with that of Gournia were explored by D. G. Hogarth, consisting of houses and pits containing painted pottery of exceptional beauty and a great variety of seal impressions. The deep bay in which Zakro lies is a well-known port of call for the fishing fleets on their way to the sponge grounds of the Libyan coast, and doubtless stood in the same stead to the Minoan shipping (D. G. Hogarth, *Annual of the British School*, vii. 121 sqq., and *Journ. of Hellenic Studies*, xxii. 76 sqq. and 333 sqq.).

Dictaean Cave.—Near the village of Psychro on the Lassithi range, answering to the western Dicte, opens a large cave, identified with the legendary birthplace of the Cretan Zeus. This cavern also shared with that of Ida the claim to have been that in which Minos, Moses-like, received the law from Zeus. The exploration begun by the Italian Mission under Halbherr and continued by Evans, who found here the inscribed libation table (see above), was completed by Hogarth in 1900. Besides the great entrance hall of the cavern, which served as the upper shrine, were descending vaults forming a lower sanctuary going down deep into the bowels of the earth. Great quantities of votive figures and objects of cult, such as the fetish double axes and stone tables of offering, were found both above and below. In the lower sanctuary the natural pillars of stalagmite had been used as objects of worship, and bronze votive objects thrust into their crevices (Halbherr, *Museo di antichità classica*, ii. pp. 906-910; Evans, *Further Discoveries*, &c., p. 350 sqq., *Myc. Tree and Pillar Cult*, p. 14 sqq.; Hogarth, "The Dictaean Cave," *Annual of British School at Athens*, vi. 94 sqq.).

Pseira and Mochlos.—On these two islets on the northern coast of E. Crete, R. Seager, an American explorer, has found striking remains of flourishing Minoan settlements. The contents of a series of tombs at Mochlos throw an entirely new light on the civilization of the Early Minoan age.

The above summary gives, indeed, a very imperfect idea of the extent to which the remains of the great Minoan civilization are spread throughout the island. The "hundred cities" ascribed to Crete by Homer are in a fair way of becoming an ascertained reality. The great days of Crete lie thus beyond the historic period. The period of decline referred to above (Late Minoan III.), which begins about the beginning of the 14th century before our era, must, from the abundance of its remains, have been of considerable duration. As to the character of the invading elements that hastened its close, and the date of their incursions, contemporary Egyptian monuments afford the best clue. The Keftiu who represented Minoan culture in Egypt in the concluding period of the Cnossian palace (Late Minoan II.) cease to appear on Egyptian monuments towards the end of the XVIIIth Dynasty (c. 1350 B.C.), and their place is taken by the "Peoples of the Sea." The Achaeans, under the name *Akaiusha*, already appear among the piratical invaders of Egypt in the time of Rameses III. (c. 1200 B.C.) of the XXth Dynasty (see H. R. Hall, "Keftiu and the Peoples of the Sea," *Annual of British School at Athens*, viii. 157 sqq.).

Third Late Minoan period.

About the same time the evidences of imports of Late Minoan or "Mycenaean" fabrics in Egypt definitely cease. In the *Odyssey* we already find the Achaeans together with Dorians settled in central Crete. In the extreme east and west of the island the aboriginal "Eteocretan" element, however, as represented respectively by the Praesians or Cydonians, still held its own, and inscriptions written in Greek characters show that the old language survived to the centuries immediately preceding the Christian era.

Greek settlementsin Crete.

The mainland invasions which produced these great ethnic changes in Crete are marked archaeologically by signs of widespread destruction and by a considerable break in the continuity of the insular civilization. New burial customs, notably the rite of cremation in place of the older corpse-burial, are introduced, and in many cases the earlier tombs were pillaged and re-used by new comers. The use of iron for arms and implements now finally triumphed over bronze. Northern forms of swords and safety-pins are now found in general use. A new geometrical style of decoration like that of contemporary Greece largely supplants the Minoan models. The civic foundations which belong to this period, and which include the greater part of the massive ruins of Goulas and Anavlachos in the province of Mirabello and of Hyrtakina in the west, affect more or less precipitous sites and show a greater tendency to fortification. The old system of writing now dies out, and it is not till some three centuries later that the new alphabetic forms are introduced from a Semitic source. The whole course of the older Cretan civilization is awhile interrupted, and is separated from the new by the true dark ages of Greece.

The dark ages.

It is nevertheless certain that some of the old traditions were preserved by the remnants of the old population now reduced to a subject condition, and that these finally leavened the whole lump, so that once more—this time under a Hellenic guise—Crete was enabled to anticipate mainland Greece in nascent civilization. Already in 1883 A. Milchhöfer (*Anfänge der Kunst*) had called attention to certain remarkable examples of archaic Greek bronze-work, and the subsequent discovery of the votive bronzes in the cave of Zeus on Mount Ida, and notably the shields with their fine embossed designs, shows that by the 8th century B.C. Cretan technique in metal not only held its own beside imported Cypro-Phoenician work, but was distinctly ahead of that of the rest of Greece (Halbherr, *Bronzi del antro di Zeus Ideo*). The recent excavations by the British School on the site of the Dictaean temple at Palaikastro bear out this conclusion, and an archaic marble head of Apollo found at Eleutherna shows that classical tradition was not at fault in recording the existence of a very early school of Greek sculpture in the island, illustrated by the names of Dipoenos and Scyllis.

The Dorian dynasts in Crete seem in some sort to have claimed descent from Minos, and the Dorian legislators sought their sanction in the laws which Minos was said to have received from the hands of the Cretan Zeus. The great monument of Gortyna discovered by Halbherr and Fabricius (*Monumenti antichi*, iii.) is the most important monument of early law hitherto brought to light in any part of the Greek world.

Among other Greek remains in the island may be mentioned, besides the great inscription, the archaic temple of the Pythian Apollo at Gortyna, a plain square building with a *pronaos* added in later times, excavated by Halbherr, 1885 and 1887 (*Mon. Ant.* iii. 2 seqq.), the Hellenic bridge and the vast rock-cut reservoirs of Eleutherna, the city walls of Itanos, Aptera and Polyrrhenia, and at Phalasarna, the rock-cut throne of a divinity, the port, and the remains of a temple. The most interesting record, however, that has been preserved of later Hellenic civilization in the island is the coinage of the Cretan cities (J. N. Svoronos, *Numismatique de la Crete ancienne*; W. Wroth, *B. M. Coin Catalogue, Crete, &c.*; P. Gardner, *The Types of Greek Coins*), which during the good period display a peculiarly picturesque artistic style distinct from that of the rest of the Greek world, and sometimes indicative of a revival of Minoan types. But in every case these artistic efforts were followed at short intervals by gross relapses into barbarism which reflect the anarchy of the political conditions.

Greek remains.

Under the *Pax Romana*, the Cretan cities again enjoyed a large measure of prosperity, illustrated by numerous edifices still existing at the time of the Venetian occupation. A good account of these is preserved in a MS. description of the island drawn up under the Venetians about 1538, and existing in the library of St Mark (published by Falkener, *Museum of Classical Antiquities*, ii. pp. 263-303). Very little of all this, however, has escaped the Turkish conquest and the ravages caused by the incessant insurrections of the last two centuries. The ruin-field of Gortyna still evokes something of the importance that it

Roman remains.

possessed in Imperial days, and at Lebena on the south coast are remains of a temple of Aesculapius and its dependencies which stood in connexion with this city. At Cnossus, save some blocks of the amphitheatre, the Roman monuments visible in Venetian times have almost wholly disappeared. Among the early Christian remains of the island far and away the most important is the church of St Titus at Gortyna, which perhaps dates from the Constantinian age.

LITERATURE.—See the authorities already quoted, for further details. Previous to the extensive excavations referred to above, Crete had been carefully examined and explored by Tournefort, Pococke, Olivier and other travellers, *e.g.* Pashley (*Travels in Crete*, 2 vols., London, 1837) and Captain Spratt (*Travels and Researches in Crete*, 2 vols., London, 1865). A survey sufficiently accurate as regards the maritime parts was also executed, under the orders of the British admiralty, by Captain Graves and Captain (afterwards Admiral) Spratt. Most that can be gathered from ancient authors concerning the mythology and early history of the island is brought together by Meursius (*Creta*, &c., in the 3rd vol. of his works) and Hoeck (*Kreta*, 3 vols., Göttingen, 1823-1829), but the latter work was published before the researches which have thrown so much light on the topography and antiquities of the island. Much new material, especially as to the western provinces of Crete, has been recently collected by members of the Italian Archaeological Mission (*Monumenti Antichi*, vol. vi. 154 seqq., ix. 286, 1899; xi. 286 seqq.).

(A. J. E.)

History.

Ancient.—Lying midway between three continents, Crete was from the earliest period a natural stepping-stone for the passage of early culture from Egypt and the East to mainland Greece. On all this the recent archaeological discoveries (see the section on ARCHAEOLOGY) have thrown great light, but the earliest written history of Crete, like that of most parts of continental Greece, is mixed up with mythology and fable to so great an extent as to render it difficult to arrive at any clear conclusions concerning it. The Cretans themselves claimed for their island to be the birthplace of Zeus, as well as the parent of all the other divinities usually worshipped in Greece as the Olympian deities. But passing from this region of pure mythology to the semi-mythic or heroic age, we find almost all the early legends and traditions of the island grouped around the name of Minos. According to the received tradition, Minos was a king of Cnossus in Crete; he was a son of Zeus, and enjoyed through life the privilege of habitual intercourse with his divine father. It was from this source that he derived the wisdom which enabled him to give to the Cretans the excellent system of laws and governments that earned for him the reputation of being the greatest legislator of antiquity. At the same time he was reported to have been the first monarch who established a naval power, and acquired what was termed by the Greeks the *Thalassocracy*, or dominion of the sea.

This last tradition, which was received as an undoubted fact both by Thucydides and Aristotle, has during the last few years received striking confirmation. The remarkable remains recently brought to light on Cretan soil tend to show that already some 2000 years before the Dorian conquest the island was exercising a dominant influence in the Aegean world. The great palaces now excavated at Cnossus and Phaestus, as well as the royal villa of Hagia Triada, exhibit the successive phases of a brilliant primitive civilization which had already attained mature development by the date of the XIIth Egyptian dynasty. To this civilization as a whole it is convenient to give the name “Minoan,” and the name of Minos itself may be reasonably thought to cover a dynastic even more than a personal significance in much the same way as such historic terms as “Pharaoh” or “Caesar.”

The archaeological evidence outside Crete points to the actual existence of Minoan plantations as far afield on one side as Sicily and on the other as the coast of Canaan. The historic tradition which identifies with the Cretans the principal element of the Philistine confederation, and places the tomb of Minos himself in western Sicily, thus

receives remarkable confirmation. Industrial relations with Egypt are also marked by the occurrence of a series of finds of pottery and other objects of Minoan fabric among the remains of the XVIIIth, XIIth and even earlier dynasties, while the same seafaring enterprise brought Egyptian fabrics to Crete from the times of the first Pharaohs. Even in the Homeric poems, which belong to an age when the great Minoan civilization was already decadent, the Cretans appear as the only Greek people who attempted to compete with the Phoenicians as bold and adventurous navigators. In the Homeric age the population of Crete was of a very mixed character, and we are told in the *Odyssey* (xix. 175) that besides the Eteocretes, who, as their name imports, must have been the original inhabitants, the island contained Achaeans, Pelasgians and Dorians. Subsequently the Dorian element became greatly strengthened by fresh immigrations from the Peloponnesus, and during the historical period all the principal cities of the island were either Dorian colonies, or had adopted the Dorian dialect and institutions. It is certain that at a very early period the Cretan cities were celebrated for their laws and system of government, and the most extensive monument of early Greek law is the great Gortyna inscription, discovered in 1884. The origin of the Cretan laws was of course attributed to Minos, but they had much in common with those of the other Dorian states, as well as with those of Lycurgus at Sparta, which were, indeed, according to one tradition, copied in great measure from those already existing in Crete.[2]

It is certain that whatever merits the Cretan laws may have possessed for the internal regulation of the different cities, they had the one glaring defect, that they made no provision for any federal bond or union among them, or for the government of the island as a whole. It was owing to the want of this that the Cretans scarcely figure in Greek history as a people, though the island, as observed by Aristotle, would seem from its natural position calculated to exercise a preponderating influence over Greek affairs. Thus they took no part either in the Persian or in the Peloponnesian War, or in any of the subsequent civil contests in which so many of the cities and islands of Greece were engaged. At the same time they were so far from enjoying tranquillity on this account that the few notices we find of them in history always represent them as engaged in local wars among one another; and Polybius tells us that the history of Crete was one continued series of civil wars, which were carried on with a bitter animosity exceeding all that was known in the rest of Greece.

In these domestic contests the three cities that generally took the lead, and claimed to exercise a kind of *hegemony* or supremacy over the whole island, were Cnossus, Gortyna and Cydonia. But besides these three, there were many other independent cities, which, though they generally followed the lead of one or other of these more powerful rivals, enjoyed complete autonomy, and were able to shift at will from one alliance to another. Among the most important of these were—Lyttus or Lyctus, in the interior, south-east of Cnossus; Rhaucus, between Cnossus and Gortyna; Phaestus, in the plain of Messara, between Gortyna and the sea; Polyrrhenia, near the north-west angle of the island; Aptera, a few miles inland from the Bay of Suda; Eleutherna and Axus, on the northern slopes of Mount Ida; and Lappa, between the White Mountains and the sea. Phalasarna on the west coast, and Chersonesus on the north, seem to have been dependencies, and served as the ports of Polyrrhenia and Lyttus. Elyrus stood at the foot of the White Mountains just above the south coast. In the eastern portion of the island were Praesus in the interior, and Itanus on the coast, facing the east, while Hierapytna on the south coast was the only place of importance on the side facing Africa, and on this account rose under the Romans to be one of the principal cities of the island.

(A. J. E.)

Medieval to 19th Century.—Though it was continually torn by civil dissensions, the island maintained its independence of the various Macedonian monarchs by whom it was surrounded; but having incurred the enmity of Rome, first by an alliance with the great Mithradates, and afterwards by taking active part with their neighbours, the pirates of Cilicia, the Cretans were at length attacked by the Roman arms, and, after a resistance protracted for more than three years, were finally subdued by Q. Metellus, who earned by this success the surname of Creticus

(67 B.C.). The island was now reduced to a Roman province, and subsequently united for administrative purposes with the district of Cyrenaica or the Pentapolis, on the opposite coast of Africa. This arrangement lasted till the time of Constantine, by whom Crete was incorporated in the prefecture of Illyria. It continued to form part of the Byzantine empire till the 9th century, when it fell into the hands of the Saracens (823). It then became a formidable nest of pirates and a great slave mart; it defied all the efforts of the Byzantine sovereigns to recover it till the year 960, when it was reconquered by Nicephorus Phocas. In the partition of the Greek empire after the capture of Constantinople by the Latins in 1204, Crete fell to the lot of Boniface, marquis of Montferrat, but was sold by him to the Venetians, and thus passed under the dominion of that great republic, to which it continued subject for more than four centuries.

Under the Venetian government Candia, a fortress originally built by the Saracens, and called by them "Khandax," became the seat of government, and not only rose to be the capital and chief city of the island, but actually gave name to it, so that it was called in the official language of Venice "the island of Candia," a designation which from thence passed into modern maps. The ancient name of Krete or Kriti was, however, always retained in use among the Greeks, and is gradually resuming its place in the usage of literary Europe. The government of Crete by the Venetian aristocracy was, like that of their other dependencies, very arbitrary and oppressive, and numerous insurrections were the consequence. Daru, in his history of Venice, mentions fourteen between the years 1207 and 1365, the most important being that of 1361-1364,—a revolt not of the natives against the rule of their Venetian masters, but of the Venetian colonists against the republic. But with all its defects their administration did much to promote the material prosperity of the country, and to encourage commerce and industry; and it is probable that the island was more prosperous than at any subsequent time. Their Venetian masters at least secured to the islanders external tranquillity, and it is singular that the Turks were content to leave them in undisturbed possession of this opulent and important island for nearly two centuries after the fall of Constantinople. The Cretans themselves, however, were eager for a change, and, disappointed in the hope of a Genoese occupation, were ready, as is stated in the report of a Venetian commissioner, to exchange the rule of the Venetians for that of the Turks, whom they fondly expected to find more lenient, or at any rate less energetic, masters. It was not till 1645 that the Turks made any serious attempt to effect the conquest of the island; but in that year they landed with an army of 50,000 men, and speedily reduced the important city of Canea. Retimo fell the following year, and in 1648 they laid siege to the capital city of Candia. This was the longest siege on record, having been protracted for more than twenty years; but in 1667 it was pressed with renewed vigour by the Turks under the grand vizier Ahmed Kuprili, and the city was at length compelled to surrender (September 1669). Its fall was followed by the submission of the whole island. Venice was allowed to retain possession of Grabusa, Suda and Spinalonga on the north, but in 1718 these three strongholds reverted to the Turks, and the island was finally lost to Venice.

From this time Crete continued subject to Ottoman rule without interruption till the outbreak of the Greek revolution. After the conquest a large part of the inhabitants embraced Mahommedanism, and thus secured to themselves the chief share in the administration of the island. But far from this having a favourable effect upon the condition of the population, the result was just the contrary, and according to R. Pashley (*Travels in Crete*, 1837) Crete was the worst governed province of the Turkish empire. In 1770 an abortive attempt at revolt, the hero of which was "Master" John, a Sphakiot chief, was repressed with great cruelty. The regular authorities sent from Constantinople were wholly unable to control the excesses of the janissaries, who exercised without restraint every kind of violence and oppression. In 1813 the ruthless severity of the governor-general, Haji Osman, who obtained the co-operation of the Christians, broke the power of the janissaries; but after Osman had fallen a victim to the suspicions of the sultan, Crete again came under their control. When in 1821 the revolution broke out in continental Greece, the Cretans, headed by the Sphakiots, after a massacre at Canea at once raised the standard of insurrection. They carried on hostilities with such success that they soon made themselves masters of the whole of

the open country, and drove the Turks and Mussulman population to take refuge in the fortified cities. The sultan then invoked the assistance of Mehemet Ali, pasha of Egypt, who despatched 7000 Albanians to the island. Hostilities continued with no decisive result till 1824, when the arrival of further reinforcements enabled the Turkish commander to reduce the island to submission. In 1827 the battle of Navarino took place, and in 1830 (3rd of February) Greece was declared independent. The allied powers (France, England and Russia) decided, however, that Crete should not be included amongst the islands annexed to the newly-formed kingdom of Greece; but recognizing that some change was necessary, they obtained from the sultan Mahmud II. its cession to Egypt, which was confirmed by a firman of the 20th of December 1832. This change of masters brought some relief to the unfortunate Cretans, who at least exchanged the licence of local misrule for the oppression of an organized despotism; and the government of Mustafa Pasha, an Albanian like Mehemet Ali, the ruler of the island for a considerable period (1832-1852), was more enlightened and intelligent than that of most Turkish governors. He encouraged agriculture, improved the roads, introduced an Albanian police, and put down brigandage. The period of his administration has been called the "golden age" of Crete.

In 1840 Crete was again taken from Mehemet Ali, and replaced under the dominion of the Turks, but fortunately Mustafa still retained his governorship until he left for Constantinople to become grand vizier in 1852. Four years later an insurrection broke out, owing to the violation of the provisions of an imperial decree (February 1856), whereby liberty of conscience and equal rights and privileges with Mussulmans had been conferred upon Christians. The latter refused to lay down their arms until a firman was issued (July 1858), confirming the promised concessions. These promises being again repudiated, in 1864 the inhabitants held an assembly and a petition was drawn up for presentation at Constantinople by the governor. The sultan's reply was couched in the vaguest terms, and the Cretans were ordered to render unquestioning obedience to the authorities. After a period of great distress and cruel oppression, in 1866, on the demand for reforms being again refused, a general insurrection took place, which was only put down by great exertions on the part of the Porte. It was followed by the concession of additional privileges to the Christians of the island and of a kind of constitutional government and other reforms embodied in what is known as the "Organic Statute" of 1868.

(J. H. F.)

Modern Constitutional.—Cretan constitutional history may be said to date from 1868, when, after the suppression of an insurrection which had extended over three years, the Turkish government consented to grant a certain measure of autonomy to the island. The privileges now accorded were embodied in what is known as the Organic Statute, an instrument which eventually obtained a somewhat wider importance, being proposed by Article XXIII. of the Berlin Treaty as a basis of reforms to be introduced in other parts of the Ottoman empire. Various privileges already acquired by the Christian population were confirmed; a general council, or representative body, was brought into existence, composed of deputies from every district in the island; mixed tribunals were introduced, together with a highly elaborate administrative system, under which all the more important functionaries, Christian and Mussulman, were provided with an assessor of the opposite creed. The new constitution, however, proved costly and unworkable, and failed to satisfy either section of the population. The Christians were ready for another outbreak, when, in 1878, the Greek government, finding Hellenic aspirations ignored by the treaty of San Stefano, gave the signal for agitation in the island. During the insurrection which followed, the usual barbarities were committed on both sides; the Christians betook themselves to the mountains, and the Mussulman peasants crowded into the fortified towns. Eventually the Cretan chiefs invoked the mediation of England, which Turkey, exhausted by her struggle with Russia, was ready to accept, and the convention known as the Pact of Halepa was drawn up in 1878 under the auspices of Mr Sandwith, the British consul, and Adossides Pasha, both of whom enjoyed the confidence of the Cretan population. The privileges conferred by the Organic Statute were confirmed; the cumbersome and extravagant judicial and administrative systems were maintained; the judges were declared independent of the

Pact of Halepa.

executive, and an Assembly composed of forty-nine Christian and thirty-one Mussulman deputies took the place of the former general council. A parliamentary régime was thus inaugurated, and party warfare for a time took the place of the old religious antagonism, the Moslems attaching themselves to one or other of the political factions which now made their appearance among the Christians. The material interests of the island were neglected in the scramble for place and power; the finances fell into disorder, and the party which came off worst in the struggle systematically intrigued against the governor-general of the day and conspired with his enemies at Constantinople. A crisis came about in 1889, when the "Conservative" leaders, finding themselves in a minority in the chamber, took up arms and withdrew to the mountains. Though the outbreak was unconnected with the religious feud, the latent fanaticism of both creeds was soon aroused, and the island once more became a scene of pillage and devastation. Unlike the two preceding movements, the insurrection of 1889 resulted unfavourably for the Christians. The Porte, having induced the Greek government to persuade the insurgents not to oppose the occupation of several strategic posts, despatched a military governor to the island, proclaimed martial law, and issued a firman abrogating many important provisions of the Halepa Pact. The mode of election to the assembly was altered, the number of its members reduced, and the customs revenue, which had hitherto been shared with the island, was appropriated by the Turkish treasury. The firman was undoubtedly illegal, as it violated a convention possessing a quasi-international sanction, but the Christians were unable to resist, and the powers abstained from intervention. The elections held under the new system proved a failure, the Christians refusing to go to the polls, and for the next five years Crete was governed absolutely by a succession of Mahommedan Valis. The situation went from bad to worse, the deficit in the budget increased, the gendarmery, which received no pay, became insubordinate, and crime multiplied. In 1894 the Porte, at the instance of the powers, nominated a Christian, Karatheodory Pasha, to the governorship, and the Christians, mollified by the concession, agreed to take part in the assembly which soon afterwards was convoked; no steps, however, were taken to remedy the financial situation, which became the immediate cause of the disorders that followed. The refusal of the Porte to refund considerable sums which had been illegally diverted from the Cretan treasury or even to sanction a loan to meet immediate requirements caused no little exasperation in the island, which was increased by the recall of Karatheodory (March 1895). Before that event an Epitropé, or "Committee of Reform," had appeared in the mountains—the harbinger of the prolonged struggle which ended in the emancipation of Crete. The Epitropé was at first nothing more than a handful of discontented politicians who had failed to find places in the administration, but some slight reverses which it succeeded in inflicting on the Turkish troops brought thousands of armed Christians to its side, and in April 1896 it found itself strong enough to invest the important garrison town of Vamos. The Moslem peasantry now flocked to the fortified towns and civil war began. Serious disturbances broke out at Canea on the 24th of May, and were only quelled by the arrival of foreign warships. The foreign consuls intervened in the hope of bringing about a peaceful settlement, but the Sultan resolved on the employment of force, and an expedition despatched to Vamos effected the relief of that town with a loss of 200 men. The advance of a Turkish detachment through the western districts, where other garrisons were besieged, was marked by pillage and devastation, and 5000 Christian peasants took refuge on the desolate promontory of Spada, where they suffered extreme privations. These events, which produced much excitement in Greece, quickened the energies of the powers. An international blockade of the island was proposed by Austria but rejected by England. The ambassadors at Constantinople urged peaceful counsels on the Porte, and the Sultan, alarmed at this juncture by an Armenian outbreak, began to display a conciliatory disposition. The Pact of Halepa was restored, the troops were withdrawn from the interior, financial aid was promised to the island, a Christian governor-general was appointed, the assembly was summoned, and an imperial commissioner was despatched to negotiate an arrangement. The Christian leaders prepared a moderate scheme of reforms, based on the Halepa Pact, which, with a few exceptions, were approved by the powers and eventually sanctioned by the sultan.

Insurrection of 1896-97.

On the 4th of September 1896 the assembly formally accepted the new constitution and declared its gratitude to the powers for their intervention. The Moslem leaders acquiesced in the arrangement, which the powers undertook to guarantee, and, notwithstanding some symptoms of discontent at Candia, there was every reason to hope that the island was now entering upon a period of tranquillity. It soon became evident, however, that the Porte was endeavouring to obstruct the execution of the new reforms. Several months passed without any step being taken towards this realization; difficulties were raised with regard to the composition of the international commissions charged with the reorganization of the gendarmery and judicial system; intrigues were set on foot against the Christian governor-general; and the presence of a special imperial commissioner, who had no place under the constitution, proved so injurious to the restoration of tranquillity that the powers demanded his immediate recall. The indignation of the Christians increased, a state of insecurity prevailed, and the Moslem peasants refused to return to their homes. A new factor now became apparent in Cretan politics. Since the outbreak in May 1896 the Greek government had loyally co-operated with the powers in their efforts for the pacification of the island, but towards the close of the year a secret society known as the Ethniké Hetaeria began to arrogate to itself the direction of Greek foreign policy. The aim of the society was a war with Turkey with a view to the acquisition of Macedonia, and it found a ready instrument for its designs in the growing discontent of the Cretan Christians. Emissaries of the society now appeared in Crete, large consignments of arms were landed, and at the beginning of 1897 the island was practically in a state of insurrection. On the 21st of January the Greek fleet was mobilized. Affairs were brought to a climax by a series of conflicts which took place at Canea on the 4th of February; the Turkish troops fired on the Christians, a conflagration broke out in the town, and many thousands of Christians took refuge on the foreign warships in the bay. The Greek government now despatched an ironclad and a cruiser to Canea, which were followed a few days later by a torpedo flotilla commanded by Prince George. The prince soon retired to Melos, but on the night of the 14th of February a Greek expeditionary force under Colonel Vassos landed at Kolymbari, near Canea, and its commander issued a proclamation announcing the occupation of the island in the name of King George. On the same day Georgi Pasha, the Christian governor-general, took refuge on board a Russian ironclad, and, on the next, naval detachments from the warships of the powers occupied Canea. This step paralysed the movements of Colonel Vassos, who after a few slight engagements with the Turks remained practically inactive in the interior. The insurgents, however, continued to threaten the town, and their position was bombarded by the international fleet (21st February). The intervention of Greece caused immense excitement among the Christian population, and terrible massacres of Moslem peasants took place in the eastern and western districts. The forces of the powers shortly afterwards occupied Candia and the other maritime towns, while the international fleet blockaded the Cretan coast. These measures were followed by the presentation of collective notes to the Greek and Turkish governments (2nd March), announcing the decision of the powers that (1) Crete could in no case in present circumstances be annexed to Greece; (2) in view of the delays caused by Turkey in the application of the reforms Crete should now be endowed with an effective autonomous administration, intended to secure to it a separate government, under the suzerainty of the sultan. Greece was at the same time summoned to remove its army and fleet from the island, while the Turkish troops were to be concentrated in the fortresses and eventually withdrawn. The cabinet of Athens, however, declined to recall the expeditionary force, which remained in the interior till the 9th of May, when, after the Greek reverses in Thessaly and Epirus, an order was given for its return. Meantime Cretan autonomy had been proclaimed (20th March). After the departure of the Greek troops the Cretan leaders, who had hitherto demanded annexation to Greece, readily acquiesced in the decision of the powers, and the insurgent Assembly, under its president Dr Sphakianakis, a man of good sense and moderation, co-operated with the international commanders in the maintenance of order. The pacification of the island, however, was delayed by the presence of the Turkish troops and the inability of the powers to agree in the choice of a new governor-general. The prospect of a final settlement was improved by the withdrawal of Germany and Austria, which had favoured Turkish pretensions,

Greek Intervention.

Decision of the powers.

from the European concert (April 1898); the remaining powers divided the island into four departments, which they severally undertook to administer. An attack made by the Moslems of Candia on the British garrison of that town, with the connivance of the Turkish authorities, brought home to the powers the necessity of removing the Ottoman troops, and the last Turkish soldiers quitted the island on the 14th of November 1898.

On the 26th of that month the nomination of Prince George of Greece as high commissioner of the powers in Crete for a period of three years (renewed in 1901) was formally announced, and on the 21st of December the prince landed at Suda and made his public entry into Canea amid enthusiastic demonstrations. For some time after his arrival complete tranquillity prevailed in the island, but the Moslem population, reduced to great distress by the prolonged insurrection, emigrated in large numbers. On the 27th of April 1899 a new autonomous constitution was voted by a constituent assembly, and in the following June the local administration was handed over to Cretan officials by the international authorities. The extensive powers conferred by the constitution upon Prince George were increased by subsequent enactments. In 1901 M. Venezelo, who had played a noteworthy part in the last insurrection, was dismissed from the post of councillor by the prince, and soon afterwards became leader of a strong opposition party, which denounced the arbitrary methods of the government. During the next four years party spirit ran high; in the spring of 1904 a deputation of chiefs and politicians addressed a protest to the prince, and early in the following year a band of armed malcontents under M. Venezelo raised the standard of revolt at Theriso in the White Mountains. The insurgents, who received moral support from Dr Sphakianakis, proclaimed the union of the island with Greece (March 1905), and their example was speedily followed by the assembly at Canea. The powers, however, reiterated their decision to maintain the *status quo*, and increased their military and naval forces; the Greek flag was hauled down at Canea and Candia, and some desultory engagements with the insurgents took place, the international troops co-operating with the native gendarmerie. In the autumn M. Venezelo and his followers, having obtained an amnesty, laid down their arms. A commission appointed by the powers to report on the administrative and financial situation drew up a series of recommendations in January 1906, and a constituent assembly for the revision of the constitution met at Canea in the following June. On the 25th of July the powers announced a series of reforms, including the reorganization of the gendarmerie and militia under Greek officers, as a preliminary to the eventual withdrawal of the international troops, and the extension to Crete of the system of financial control established in Greece. On the 14th of September, under an agreement dated the 14th of August, they invited King George of Greece, in the event of the high commissionership becoming vacant, to propose a candidate for that post, to be nominated by the powers for a period of five years, and on the 25th of September Prince George left the island. He had done much for the welfare of Crete, but his participation in party struggles and his attitude towards the representatives of the powers had rendered his position untenable. His successor, M. Alexander Zaimis, a former prime minister of Greece, arrived in Crete on the 1st of October.

Prince George's administration.

(J. D. B.)

On the 22nd of February 1907 M. Zaimis, as high commissioner, took the oath to the new constitution elaborated after much debate by the Cretan national assembly. His position was one of singular difficulty. Apart from the rivalry of the factions within the Assembly, there was the question of the Mussulman minority, dwindling it is true,[3] but still a force to be reckoned with. The high commissioner, true to his reputation as a prudent statesman and astute politician, showed great skill in dealing with the situation. From the first he had taken up an attitude of great reserve, appearing little in public and careful not to identify himself with any faction. In such matters as appointments to the judicial bench, indeed, his studied impartiality offended both parties; but on the whole his administration was a marked success, and the cessation of the chronic state of disturbance in the island justified the powers in preparing for the withdrawal of their troops. In spite of the admission of their co-religionists to high office in the government, the Mussulmans, it is true, still complained of continuous ill-treatment having for its object their expatriation; but these complaints were declared by Sir Edward Grey, in answer to a question in

parliament, to be exaggerated. The protecting powers had fixed the conditions preliminary to evacuation—(1) the organization of a native gendarmerie, (2) the maintenance of the tranquillity of the island, (3) the complete security of the Mussulman population. On the 20th of March 1908 M. Zaimis called the attention of the powers to the fact that these conditions had been fulfilled, and on the 11th of May the powers announced to the high commissioner their intention of beginning the evacuation at once and completing it within a year. The first withdrawal of the troops (July 27), hailed with enthusiasm by the Cretan Christians, led to rioting by the Mussulmans, who believed themselves abandoned to their fate.

Meanwhile M. Zaimis had made a further advance towards the annexation of the island to Greece by a visit to Athens, where he arranged for a loan with the Greek National Bank and engaged Greek officers for the new gendarmerie. The issue was precipitated by the news of the revolution in Turkey. On the 12th of October the Cretan Assembly once more voted the union with Greece, and in the absence of M. Zaimis—who had gone for a holiday to Santa Maura—elected a committee of six to govern the island in the name of the king of Greece.

Against this the Mussulman deputies protested, in a memorandum addressed to the British secretary of state for foreign affairs. His reply, while stating that his government would safeguard the interests of the Mussulmans, left open the question of the attitude of the powers, complicated now by sympathy with reformed Turkey. The efforts of diplomacy were directed to allaying the resentment of the "Young Turks" on the one hand and the ardour of the Greek unionists on the other; and meanwhile the Cretan administration was carried on peaceably in the name of King George. At last (July 13, 1909) the powers announced to the Porte, in answer to a formal remonstrance, their decision to withdraw their remaining troops from Crete by July 26 and to station four war-ships off the island to protect the Moslems and to safeguard "the supreme rights" of the Ottoman Empire. This arrangement, which was duly carried out, was avowedly "provisional" and satisfied neither party, leading in Greece especially to the military and constitutional crises of 1909 and 1910.

(W. A. P.)

AUTHORITIES.—Pashley, *Travels in Crete* (2 vols., Cambridge and London, 1837); Spratt, *Travels and Researches in Crete* (2 vols., London, 1867); Raulin, *Description physique de l'île de Crète* (3 vols, and Atlas, Paris, 1869); W. J. Stillman, *The Cretan Insurrection of 1866-68* (New York, 1874); Edwardes, *Letters from Crete* (London, 1887); Stavrakis, Στατιστικὴ τοῦ πληθυσμοῦ τῆς Κρήτης (Athens, 1890); J. H. Freese, *A Short Popular History of Crete* (London, 1897); Bickford-Smith, *Cretan Sketches* (London, 1897); Laroche, *La Crète ancienne et moderne* (Paris, 1898); Victor Berard, *Les Affaires de Crète* (Paris, 1898); *Monumenti Veneti dell' isola de Creta* (published by the Venetian Institute), vol. i. (1906), vol. ii. (1908). See also Mrs Walker, *Eastern Life and Scenery* (London, 1886), and *Old Tracks and New Landmarks* (London, 1897); H. F. Tozer, *The Islands of the Aegean* (Oxford, 1890); J. D. Bourchier, "The Stronghold of the Sphakiotes," *Fortnightly Review* (August 1890); E. J. Dillon, "Crete and the Cretans," *Fortnightly Review* (May 1897).

1 See L. Cayeux, "Les Lignes directrices des plissements de l'île de Crète," *C.R. IX. Cong. géol. internat. Vienna*, pp. 383-392 (1904).

2 Among the features common to the two were the *syssitia*, or public tables, at which all the citizens dined in common. Indeed, the Cretan system, like that of Sparta, appears to have aimed at training up the young, and controlling them, as well as the citizens of more mature age, in all their habits and relations of life. The supreme governing authority was vested in magistrates called Cosmi, answering in some measure to the Spartan Ephori, but there was nothing corresponding to the two kings at Sparta. These Cretan institutions were much extolled by some writers of antiquity, but receive only qualified praise from the judicious criticisms of Aristotle (*Polit.* ii. 10).

3 The Mussulman population, 88,000 in 1895, had sunk to 40,000 in 1907, and the emigration was still continuing. The loss to the country in wealth exported and land going out of cultivation has been very serious.

CRETINISM, the term given to a chronic disease, either sporadic or endemic, arising in early childhood, and due to absence or deficiency of the normal secretion of the thyroid gland. It is characterized by imperfect development both of mind and body. The thyroid gland is either congenitally absent, imperfectly developed, or there is definite goitre. The origin of the word is doubtful. Its southern French form *Chrestiaa* suggested to Michel a derivation from *cresta* (*crête*), the goose foot of red cloth worn by the Cagots of the Pyrenees. The Cagots, however, were not cretins. The word is usually explained as derived from *chrétien* (Christian) in the sense of "innocent." But *Christianus* (which appears in the Lombard *cristanei*; compare the Savoyard *innocents* and *gens du bon dieu*) is probably a translation of the older *cretin*, and the latter is probably connected with *creta* (*craie*)—a sallow or yellow-earthy complexion being a common mark of cretinism.

The endemic form of cretinism prevails in certain districts, as in the valleys of central Switzerland, Tirol and the Pyrenees. In the United Kingdom cretins have been found in England at Oldham, Sholver Moor, Crompton, Duffield, Cromford (near Matlock), and other points in Derbyshire; endemic goitre has been seen near Nottingham, Chesterfield, Pontefract, Ripon, and the mountainous parts of Staffordshire and Yorkshire, the east of Cumberland, certain parts of Worcester, Warwick, Cheshire, Monmouth, and Leicester, near Horsham in Hampshire, near Haslemere in Surrey, and near Beaconsfield in Buckingham. There are cretins at Chiselborough in Somerset. In Scotland cretins and cases of goitre have been seen in Perthshire, on the east coast of Fife, in Roxburgh, the upper portions of Peebles and Selkirk, near Lanark and Dumfries, in the east of Ayrshire, in the west of Berwick, the east of Wigtown, and in Kirkcudbright. The disease is not confined to Europe, but occurs in North and South America, Australia, Africa and Asia. Wherever endemic goitre is present, endemic cretinism is present also, and it has been constantly observed that when a new family moves into a goitrous district, goitre appears in the first generation, cretinism in the second. The causation of goitre has now been shown to be due to drinking certain waters, though the particular impurity in the water which gives rise to this condition has not been determined (see GOITRE). The causation of the sporadic form of cretinism is, however, obscure.

Cretinism usually remains unrecognized until the child reaches some eighteen months or two years, when its lack of mental development and uncouth bodily form begin to attract attention. Occasionally the child appears to be normal in infancy, but the cretinoid condition develops later, any time up to puberty. The essential point in the morbid anatomy of these cases is the absence or abnormal condition of the thyroid gland (see METABOLIC DISEASES). It may be congenitally absent, atrophied, or the seat of a goitre, though this last condition is very rare in cases of sporadic cretinism. The skeleton shows arrested growth, most marked in the case of the long bones. The skull in the endemic form of cretinism is usually brachycephalic, but in the sporadic cases it is more commonly dolichocephalic. The pathology of cretinism and its allied condition myxoedema (*q.v.*) has now been conclusively worked out, and its essential cause has been shown to be loss of function of the thyroid gland.

The condition has existed and been described in far back ages, but mingled with so many other entirely different deformities and degenerations that it is now often almost impossible to classify them satisfactorily. The following is a vivid picture by Beaupré (*Dissertation sur les crétins*, translated in Blackie on *Cretinism*, Edin., 1855):—

> "I see a head of unusual form and size, a squat and bloated figure, a stupid look, bleared hollow and heavy eyes, thick projecting eyelids, and a flat nose. His face is of a leaden hue, his skin dirty, flabby, covered with tetters, and his thick tongue hangs down over his moist livid lips. His mouth, always open and full of saliva, shows teeth going to decay. His chest is narrow, his back curved, his breath asthmatic, his limbs short, misshapen, without power. The knees are thick and inclined inward, the feet flat. The large head drops listlessly on the breast; the abdomen is like a bag."

When fully grown the height rarely exceeds 4 ft., and is often less than 3 ft. The skin feels doughy from thickening of the subcutaneous tissues, and it hangs in folds over the abdomen and the bends of the joints. Very

frequently there is an umbilical hernia. The hair has a far greater resemblance to horse-hair than to that of a human being, and is usually absent on the body of an adult cretin. The temperature is subnormal, and the exposed parts tend to become blue in cold weather. The blood is usually deficient in haemoglobin, which is often only 40-50% of the normal. The mental capacity varies within narrow limits; an intelligent adult cretin may reach the intellectual development of a child 3-4 years of age, though more often the standard attained is even below this. The child cretin learns neither to walk nor talk at the usual time. Often it is unable even to sit without support. Some years later a certain power of movement is acquired, but the gait is waddling and clumsy. Speech is long delayed, or in bad cases may be almost entirely lacking. The voice is usually harsh and unpleasant. Of the senses smell and taste are but slightly developed, more or less deafness is generally present, and only the sight is fairly normal. In the adult the genital organs remain undeveloped. If the cretin is untreated he rarely has a long life, thirty years being an exceptional age. Death results from some intercurrent disease.

Cretinism has to be distinguished from the state of a Mongolian idiot, in whom there is no thickening of the subcutaneous tissues, and much greater alertness of mind; from achondroplasia, in which condition there is usually no mental impairment; and from infantilism, which covers a group of symptoms whose only common point is that the primary and secondary sexual characteristics fail to appear at the proper time.

Before 1891 there was no treatment for this disease. The patients lived in hopeless imbecility until their death. But in that year Dr George Murray published his discovery of the effect of hypodermic injections of thyroid gland extract in cases of myxoedema. In the following year Drs Hector Mackenzie, E. L. Fox of Plymouth, and Howitz of Copenhagen, each working independently, showed the equally potent effect of the gland administered by the mouth. The remedy was soon after applied to cretinism and its effects were found to be even more wonderful. It has to be used, however, with the greatest care and discrimination, since personal idiosyncrasy seems to be a very variable factor. Even small doses, if beyond the patient's power, may produce fever, excitement, headache, insomnia and vomiting. The administration must be persisted in throughout life, otherwise myxoedematous symptoms appear. The first most apparent results are those of growth, and this may supervene even in patients up to 25-30 years of age. Once started, 4 to 6 in. may be gained in stature in the first year's treatment, though this is usually in inverse ratio to the age of the patient, and also diminishes in later stages of treatment. In young adolescents it may be so rapid that the patient has to be kept lying down to prevent permanent bending of the long bones of the leg, softened by their rapid growth. A very typical case under Dr Hector Mackenzie, showing what can be expected from early treatment, is that of a cretin aged 11 years in 1893, when thyroid treatment was started. He grew very rapidly and became a normal child, passed through school, and in 1908 was at one of the universities.

BIBLIOGRAPHY.—Sardinian Commission, "Relazione della commissione di Sardegna per studiare il cretinismo" (Torino, 1848); C. Hilton Fagge, "On Sporadic Cretinism occurring in England," *Med. Chir. Trans.* (London, 1870); Vincenzo Allara, "Sulla causa del cretinesimo," studio (Milano, 1892); Victor Horsley, "Remarks on the Function of the Thyroid Gland," *Brit. Med. Journ.* (1892); "The Treatment of Myxoedema and Cretinism, being a Review of the Treatment of those Diseases by Thyroid Gland," *Journ. Ment. Sc.* (London, 1893); W. Osler, "On Sporadic Cretinism in America," *Am. Journ. of Med. Sc.* (1893); C. A. Ewald, *Die Erkrankungen der Schilddrüse, Myxödeme und Cretinismus* (Wien, 1896); G. R. Murray, *Diseases of the Thyroid Gland*, part i. (1900); R. Virchow, "Über Cretinismus," *Würzburger Verhand.*; Hector Mackenzie, "Organotherapy," *Textbook of Pharmacology and Therapeutics* (1901); Weygandt, *Der heutige Stand der Lehre vom Kretinismus* (Halle, 1903); Hector Mackenzie, "Cretinism," Allbutt & Rolleston's *System of Medicine*, part iv. (1908).

CRETONNE, originally a strong, white fabric with a hempen warp and linen weft. The word is said to be derived from Creton, a village in Normandy where the manufacture of linen was carried on. It is now applied to a strong, printed cotton cloth, stouter than chintz but used for very much the same purposes. It is usually unglazed and may be printed on both sides and even with different patterns. Frequently the cretonne has a woven fancy pattern of some kind which is modified by the printed design. It is sometimes made with a weft of cotton waste.

CREUSE, a department of central France, comprising the greater portion of the old province of Marche, together with portions of Berry, Bourbonnais, Auvergne, Limousin and Poitou. Area, 2164 sq. m. Pop. (1906) 274,094. It lies on the north-western border of the central plateau and is bounded N. by the departments of Indre and Cher, E. by Allier and Puy-de-Dôme, S. by Corrèze and W. by Haute-Vienne. The surface is hilly, with a general inclination north-westward in the direction of the valley of the Creuse, sloping from the mountains of Auvergne and Limousin, branches of which project into the south of the department. The chief of these starts from the Plateau de Gentioux, and under the name of the Mountains of Marche extends along the left bank of the Creuse. The highest point is in the forest of Châteauvert (3050 ft.) in the extreme south-east of the department. Rivers, streams and lakes are numerous, but none are navigable; the principal is the Creuse, which rises on the north side of the mass of Mount Odouze on the border of the department of Corrèze, and passes through the department, dividing it into two nearly equal portions, receiving the Petite Creuse from the right, and afterwards flowing on to join the Vienne. The valleys of the head-streams of the Cher and of its tributary the Tardes, which near Évaux passes under a fine viaduct 300 ft. in height, occupy the eastern side; those of the heads of the Vienne and its tributary the Thaurion, and of the Gartempe joining the Creuse, are in the west of the department. The climate is in general cold, moist and variable; the rigorous winter covers the higher cantons with snow; rain is abundant in spring, and storms are frequent in summer, but the autumn is fine. Except in the valleys the soil is poor and infertile, and agriculture is also handicapped by the dearness of labour, due to the annual emigration of from 15,000 to 20,000 of the inhabitants to other parts of France, where they serve as stonemasons, &c. The produce of cereals, chiefly rye, wheat, oats and buckwheat, is not sufficient for home consumption. The chestnut abounds in the north and west; hemp and potatoes are also grown. Cattle-rearing and sheep-breeding are the chief industries of the department, which supplies Poitou and Vendée with draught oxen. Coal is mined to some extent, chiefly in the basin of Ahun. There are thermal springs at Évaux in the east of the department, where remains of Roman baths are preserved. The chief industrial establishments are the manufactories of carpets and hangings and the dyeworks of Aubusson and Felletin. Saw-mills and the manufacture of wooden shoes and hats have some importance. Exports include carpets, coal, live-stock and hats; imports comprise raw materials for the manufactures and food-supplies. The department is served by the Orléans railway company, whose line from Montluçon to Périgueux traverses it from east to west. It is divided into the four arrondissements of Guéret, the capital Aubusson, Bourganeuf, and Boussac, and further into 25 cantons and 266 communes. With Haute-Vienne, Creuse forms the diocese of Limoges, where also is its court of appeal. It forms part of the académie (educational division) of Clermont and of the region of the XII. army corps. The principal towns are Guéret and Aubusson. La Souterraine, Chambon-sur-Voueize and Bénévent-l'Abbaye possess fine churches of the 12th century. At Moutier-d'Ahun there is a church, which has survived from a Benedictine abbey. The nave of the 15th century with a fine portal, and the choir with its carved stalls of the 17th century, are of considerable interest. The small industrial town of Bourganeuf has remains of a priory, including a tower (15th century) in which Zizim, brother of the sultan Bajazet II., is said to have been imprisoned.

CREUTZ, GUSTAF FILIP, COUNT (1729-1785), Swedish poet, was born in Finland in 1729. After concluding his studies in Åbo he received a post in the court of chancery at Stockholm in 1751. Here he met Count Gyllenborg, with whom his name is indissolubly connected. They were closely allied with Fru Nordenflycht, and their works were published in common; to their own generation they seemed equal in fame, but posterity has given the palm of genius to Creutz. His greatest work is contained in the 1762 volume, the idyll of *Atis och Camilla*; the exquisite little pastoral entitled "Daphne" was published at the same time, and Gyllenborg was the first to proclaim the supremacy of his friend. In 1763 Creutz practically closed his poetical career; he went to Spain as ambassador, and after three years to Paris in the same capacity. In 1783 Gustavus III. recalled him and heaped honours upon him, but he died soon after, on the 30th of October 1785. *Atis och Camilla* was long the most admired poem in the Swedish language; it is written in a spirit of pastoral which is now to some degree faded, but in comparison with most of the other productions of the time it is freshness itself. Creutz introduced a melody and grace into the Swedish tongue which it lacked before, and he has been styled "the last artificer of the language."

See *Creutz och Gyllenborgs Vitterhetsarbeten* (Stockholm, 1795).

CREUZER, GEORG FRIEDRICH (1771-1858), German philologist and archaeologist, was born on the 10th of March 1771, at Marburg, the son of a bookbinder. Having studied at Marburg and Jena, he for some time lived at Leipzig as a private tutor; but in 1802 he was appointed professor at Marburg, and two years later professor of philology and ancient history at Heidelberg. The latter position he held for nearly forty-five years, with the exception of a short time spent at the university of Leiden, where his health was affected by the Dutch climate. He was one of the principal founders of the Philological Seminary established at Heidelberg in 1807. The Academy of Inscriptions of Paris appointed him one of its members, and from the grand-duke of Baden he received the dignity of privy councillor. He died on the 16th of February 1858. Creuzer's first and most famous work was his *Symbolik und Mythologie der alten Völker, besonders der Griechen* (1810-1812), in which he maintained that the mythology of Homer and Hesiod came from an Eastern source through the Pelasgians, and was the remains of the symbolism of an ancient revelation. This work was vigorously attacked by Hermann in his *Briefen über Homer und Hesiod*, and in his letter, addressed to Creuzer, *Über das Wesen und die Behandlung der Mythologie*; by J. H. Voss in his *Antisymbolik*; and by Lobek in his *Aglaophamos*. Of Creuzer's other works the principal are an edition of Plotinus; a partial edition of Cicero, in preparing which he was assisted by Moser; *Die historische Kunst der Griechen* (1803); *Epochen der griech. Literaturgeschichte* (1802); *Abriss der römischen Antiquitäten* (1824); *Zur*

Geschichte altrömischer Cultur am Oberrhein und Neckar (1833); *Zur Gemmenkunde* (1834); *Das Mithreum von Neuenheim* (1838); *Zur Galerie der alten Dramatiker* (1839); *Zur Geschichte der classischen Philologie* (1854).

See the autobiographical *Aus dem Leben eines alten Professors* (Leipzig and Darmstadt, 1848), to which was added in the year of his death *Paralipomena der Lebenskizze eines alten Professors* (Frankfort, 1858); also Starck, *Friederich Kreuzer, sein Bildungsgang und seine bleibende Bedeutung* (Heidelberg, 1875).

CREVASSE, a French word used in two senses. (1) In French Switzerland, and thence universally in high mountain regions, it designates a fissure in a glacier caused by gigantic cracks in the ice-mass, sometimes of great depth, into which climbers frequently fall through a light bridge of snow which conceals the crevasse. (2) Adopted from the French of Louisiana, it signifies locally a wide crack or breach in the bank of a canal or river, and particularly of the “levee” of the Mississippi.

CREVIER, JEAN BAPTISTE LOUIS (1693-1765), French author, was born at Paris, where his father was a printer. He studied under Rollin and

held the professorship of rhetoric in the college of Beauvais for twenty years. He completed Rollin's *Histoire romaine* by the addition of six volumes (1750-1756); he also published two editions of Livy, with notes; *L'Histoire des empereurs des Romains, jusqu'à Constantin* (1749); *Histoire de l'Université de Paris*, and a *Rhétorique françoise*, which enjoyed much popularity.

CREVILLENTE, a town of eastern Spain, in the province of Alicante, and on the Murcia-Alicante railway. Pop. (1900) 10,726. Crevillente is a picturesque old town built among the eastern foothills of the Sierra de Crevillente. Its flat-roofed Moorish houses are enclosed by gardens of cactus, dwarf palm, orange and other subtropical plants, interspersed with masses of rock. The surrounding country, though naturally sterile, is irrigated from two adjacent springs, which differ in temperature by no less than 25° F. The district is famous for its melons, and also produces wine, olives, wheat and esparto grass. Local industries include the manufacture of coarse cloth, esparto fabrics, oil and flour.

CREW, NATHANIEL CREW, 3RD BARON (1633-1721), bishop of Durham, was a son of John Crew (1598-1679), who was created Baron Crew of Stene in 1661, and a grandson of Sir Thomas Crew (1565-1634),

speaker of the House of Commons. Born on the 31st of January 1633, Nathaniel was educated at Lincoln College, Oxford, and was appointed rector of the college in 1668. He became dean and precentor of Chichester in 1669, clerk of the closet to Charles II. shortly afterwards, bishop of Oxford in 1671, and bishop of Durham in 1674. He owed his rapid preferment to James, then duke of York, whose favour he had gained by conniving at the duke's leanings to the Roman Church. After the accession of James II. Crew received the deanery of the Chapel Royal. He served in 1686 on the revived ecclesiastical commission which suspended Compton, bishop of London, and then shared the administration of the see of London with Sprat, bishop of Rochester. In 1687 he was a member of another ecclesiastical commission, which suspended the vice-chancellor of the university of Cambridge for refusing the degree of M.A. to a monk who would not take the customary oath. On the decline of James's power Crew dissociated himself from the court, and made a bid for the favour of the new government by voting for the motion that James had abdicated. He was excepted from the general pardon of 1690, but afterwards was allowed to retain his see. He left large estates to be devoted to charitable ends, and his benefaction to Lincoln College and to Oxford University is commemorated in the annual Crewian oration. In 1697 Crew succeeded his brother Thomas as 3rd Baron Crew, He died on the 18th of September 1721, when the barony became extinct.

CREW (sometimes explained as a sea term of Scandinavian origin, cf. O. Icel. *krú*, a swarm or crowd, but now regarded as a shortened form of *accrue*, *accrewe*, used in the 16th century in the sense of a reinforcement,

O. Fr. *acreue*, from *accroître*, to grow, increase), a band or body of men associated for a definite purpose, a gang who jointly carry out a particular piece of work, and especially those who man a ship, exclusive of the captain, and sometimes also of the officers.

CREWE, ROBERT OFFLEY ASHBURTON CREWE-MILNES, 1ST EARL OF (1858-), English statesman and writer, was born on the 12th of January 1858, being the son of Lord Houghton (*q.v.*), and was educated at Harrow and Trinity, Cambridge. In 1880 he married Sibyl Marcia Graham, who died in 1887, leaving him with two daughters. He inherited his father's literary tastes, and published *Stray Verses* in 1890, besides other miscellaneous literary work. A Liberal in politics, he became private secretary to Lord Granville when secretary of state for foreign affairs (1883-1884), and in 1886 was made a lord-in-waiting. In the Liberal administration of 1892-1895 he was lord-lieutenant for Ireland, having Mr John Morley as chief secretary. In 1895 he was created 1st earl of Crewe, his maternal grandfather, the 2nd Baron Crewe, having left him his heir. In 1899 he married Lady Margaret Primrose, daughter of the 5th earl of Rosebery. In 1905 he became lord president of the council in the Liberal government; and in 1908, in Mr Asquith's cabinet, he became secretary of state for the colonies and Liberal leader in the House of Lords.

CREWE, a municipal borough in the Crewe parliamentary division of Cheshire, England, 158 m. N.W. of London, on the main line of the London & North-Western railway. Pop. (1901) 42,074. The town was built on an estate called Oak Farm in the parish of Monk's Coppenhall, and takes its name from the original stations having been placed in the township of Crewe, in which the seat of Lord Crewe is situated. It is a railway junction where lines converge from London, Manchester, North Wales and Holyhead, North Stafford and Hereford. It is inhabited principally by persons in the employment of the London & North-Western railway company, and was practically created by that corporation, at a point where in 1841 only a farmhouse stood in open country. Crewe is not only one of the busiest railway stations in the world, but is the locomotive metropolis of the London & North-Western company, which has centred here enormous workshops for the manufacture of the material and plant used in railways. In 1901 the 4000th locomotive was turned out of the works. A series of subterranean ways extending many miles have been constructed to enable merchandise traffic to pass through without interfering with passenger trains on the surface railways. The company possesses one of the finest electric stations in the world, and electrical apparatus for the working of train signals is in operation. The station is fitted with an extensive suite of offices for the interchange of postal traffic, the chief mails to and from Ireland and Scotland being stopped here and arranged for various distributing centres. Its enormous railway facilities and its geographical situation as the junction of the great trunk lines running north and south, tapping also the Staffordshire potteries on the one side and the great mineral districts of Wales on the other, constitute Crewe station one of the most important links of railway and postal communication in the kingdom. The railway company built its principal schools, provided it with a mechanics' institute, containing library, science and art classes, reading rooms, assembly rooms, &c. Victoria Park, also the gift of the company, was opened in 1888. The

municipal corporation built the technical school and school of art. The borough incorporated in 1877, is under a mayor, 7 aldermen and 21 councillors. Area, 2185 acres.

CREWKERNE, a market town in the southern parliamentary division of Somersetshire, England, 132 m. W.S.W. of London by the London & South-Western railway. Pop. of urban district (1901) 4226. It is pleasantly situated in a wooded hollow, in the upper valley of the river Parret. The church of St Bartholomew, one of the finest in the county, is in the Perpendicular style characteristic of the district. The ornamentation throughout is beautiful, and the west front especially notable. The grammar school dates from 1499, but occupies modern buildings. Sail-cloth, horsehair, cloth and webbing are manufactured.

CRIB (a word common to some Teutonic languages, cf. Dutch *krib* and Ger. *Krippe*; it has a common origin with the O. Eng. “cratch,” a manger or crib, cf. Fr. *crêche*), a manger or framework receptacle for holding fodder for cattle and horses, and so, from early times in English, particularly the manger in which Jesus was laid. It is thus used of a “cradle,” from which in form it should be distinguished as being a small bed with high closed-in sides. The word has many transferred meanings, as a rough, small hut or

dwelling, from which comes the slang use of “crib” as a berth or situation, or, as a burglar’s term for a house to be broken into; also, technically, in engineering for a timber framework for masonry constructed with a caisson in laying foundations below water, or in mining for a timber lining to a shaft. “Crib-biting” is a vicious habit in horses, probably due in the first instance to indigestion; the horse seizes the manger or other object in its teeth, and draws in the breath, known as “wind-sucking”; the habit may be checked by the use of a throat-strap. The slang meaning of the verb “crib,” to steal, especially used of petty thefts, is probably derived from an obsolete use of the substantive for a small wicker basket; this meaning occurs in the expression “time-cribbing,” used of an illicit increase of the hours of labour in a factory or workshop, especially by the running of machinery each day slightly beyond the time of ceasing work. “Crib” and “cribbing” in this sense are also applied to any unacknowledged appropriation or plagiarism from an author, and particularly to the secret copying by a schoolboy of another’s work or from a book, and also to the secret use of a translation and to such translation itself. “Crib,” in the game of cribbage, of which it is a shortened form, is the term for the cards thrown away by each player and scored by the dealer.

CRIBBAGE, a game of cards. A very similar game called “Noddy” was formerly played, the game being fifteen or twenty-one up, marked with counters, occasionally by means of a noddy board. Cribbage seems to be an improved form of Noddy. According to John Aubrey (*Brief Lives*) it was invented by Sir John Suckling (1609-1642).

A complete pack of fifty-two cards is required, and a cribbage board for scoring, drilled with sixty holes for each player and one hole (called “the game hole”) at each end, the players usually scoring from opposite ends. Each player has two scoring pegs. The game is marked by inserting the pegs in the holes, one after the other, as the player makes a fresh score, commencing with the outer row at the game-hole end and going up the board. When the thirtieth hole is reached the player comes down the board, using the inner row of holes, until he places his foremost peg in the game-hole. If the losing player fails to obtain half the holes, his adversary wins a “lurch,” or double game.

The game may be played by two players, five or six cards being dealt to each, and each putting out two for what is called “crib”; or by three players (with a triangular scoring board), five cards being dealt to each, each putting out one for crib, and a card from the top of the pack being dealt to complete the crib; or by four players (two being partners against the other two, sitting and playing as at whist, and one partner scoring for both), five cards being dealt to each, and each putting out one card for crib.

Two-handed five-card cribbage was formerly considered the most scientific game, but this verdict has now been reversed in favour of the six-card game. In six-card cribbage both hands and crib contain four cards, and 121 holes are scored.

The players cut for deal, the lowest dealing. If more than one game is played, the winner of the last game deals. The cards rank from king (highest) to the ace (lowest). At the two-handed five-card game, the non-dealer scores three holes (called “three for last”) at any time during the game, but usually while the dealer is dealing the first hand. This is not part of the six-card game, which we take as our example.

The dealer deals six cards to each, singly. The undealt cards are placed face downwards on the table. The players then look at their hands and "lay out," each putting two cards face downwards on the table, on the side of the board nearest to the dealer, for the "crib." A player must not take back into his hand a card he has laid out if the cards have been covered, nor must the crib be touched during the play of his hand.

After laying out, the non-dealer (when more than two play, the player to the dealer's left) cuts the pack, and the dealer turns up the top card of the lower packet, called the "start," or "turn-up." If this is a knave, the dealer marks two "for his heels." This score is forfeited if not marked before the dealer plays a card.

The non-dealer plays first by laying face upwards on the table on his side of the board any card from his hand; the dealer then does the same, and so on alternately. When more than two play, the player to the leader's left plays the second card, and so on. As soon as the first card is laid down the player calls out the number of pips on it; if a picture card, ten. When the second card is laid down, the player calls out the sum of the pips on the two cards played, and so on until all the cards are played, or until neither player can play without passing the number thirty-one. If one player has a card or cards that will come in and the other has not, he is at liberty to play them; at the six-card game he must play as long as they can come in, and he can score runs or make pairs, &c., with them. If one player's cards are exhausted, the adversary plays out his own, and can score with them. When more than two play, the player next in rotation is bound to play, and so on until no one can come in. At the two-handed five-card game, when neither can come in the play stops; at the other games the cards are played turned down, and the remainder of the cards are played in rotation, and so on until all are played out.

The object of the play is to make *pairs*, *fifteens*, *sequences*, and the "go," and to prevent the adversary from scoring.

Pairs.—If a card is put down of the same denomination as the one last played, the player pairing scores two holes. If a third card of the same denomination is next played, a "pair royal" (abbreviated to "prial") is made, and the maker scores six holes. If a fourth card of the same denomination is next played, twelve holes are scored for the "double pair royal." Kings pair only with kings, queens with queens, and so with knaves and tens, notwithstanding that they all count ten in play.

Fifteens.—If either player during the play reaches fifteen exactly, by reckoning the values of all the played cards, he marks two.

Sequences.—If during the play of the hand three or more cards are consecutively played which make an ascending or descending sequence, the maker of the sequence marks one hole for each card forming the sequence or run. King, queen, knave and ten reckon in sequence in this order, notwithstanding that they are all tenth cards in play; the other cards according to the number of their pips. The ace is not in sequence with king, queen. If one player obtains a run of three, his adversary can put down a card in sequence and mark four, and so on. And, if there is a break in the sequence, and the break is filled up during the play, without the intervention of a card not in sequence, the player of the card that fills the break scores a run. Thus the cards are played in this order: A-4, B-3, A-2, B-ace, A gets a run of three, B a run of four. Had B's last card been a five, he would similarly have scored a run of four, as there is no break. Had B's last card been a four, he would have scored a run of three. The cards need not be played in order. Thus the cards being played in this order, A-4, B-2, A-5, B-3, A-6, A-4, B-2, A-5, B-3, A-5, B-6, B takes a run of four for the fourth card played, but

there is no run for any one else, as the second five intervenes. Again, if the cards at six-card cribbage are thus played, A-4, B-2, A-3, B-ace, A-5, B-2, A-4, B-ace, A takes a run of three, B a run of four, A a run of five. B then playing the deuce has no run, as the deuce previously played intervenes.

The "go," end hole or last card is scored by the player who approaches most nearly to thirty-one during the play, and entitles to a score of one. If thirty-one is reached exactly, it is a go of two instead of one. After a go no card already played can be counted for pairs or sequences.

Compound Scores.—More than one of the above scores can be made at the same time. Thus a player pairing with the last card that will come in scores both pair and go. Similarly a pair and a fifteen, or a sequence and a fifteen, can be reckoned together.

When the play is over, the hands are shown and counted aloud. The non-dealer has first show and scores and marks first; the dealer afterwards counts, scores and marks what he has in hand, and then takes what is in crib. In counting both hands and crib the "start" is included, so that five cards are involved.

The combinations in hand or crib which entitle to a score are fifteen, pairs or pairs royal, sequences, flushes and "his nob."

Fifteens.—All the combinations of cards that, taken together, make fifteen exactly, count two. For example, a ten (King, Queen, Knave or Ten) card and a five reckon two, called as "fifteen two." Another five in the hand or turned up would again combine with the ten card, and entitle to another fifteen ("fifteen four"); if the other cards were a two and a three, two other fifteens would be counted ("fifteen six," "fifteen eight")—one for the combination of the three and two with the ten card,

and one for the combination of the two fives with the three and two. Similarly two ten cards and two fives reckon eight; a nine and three threes count six; and so on for other cards.

Pairs.—Pairs are reckoned as in play.

Sequences.—Three or more cards in sequence count one for each card. If one sequence card can be substituted for another of the same denomination, the sequence reckons again. For example, 3,4,5 and a 3 turned up reckon two sequences of three; with another 3 there would be three sequences of three, and so on.

Flushes.—If all the cards in hand are of the same suit, one is reckoned for each card. If the start is also of the same suit, one is reckoned for that also. In crib, no flush is reckoned unless the start is of the same suit as the cards in crib.

His Nob.—If a player holds the knave of the suit turned up for the start he counts one "for his nob."

A dialogue will illustrate the technical conversation of the game, in a game at six-card cribbage. The cards for crib having been discarded, A holds knave of hearts, a four and a pair of twos: B holds a pair of nines, a six and a four. Two of hearts is turned up by B. The hand might be played thus. A lays down a two and says "Two": B plays a nine and says "Eleven": A follows with a four, saying "Fifteen two"; pegging two holes at once: B plays his four and says "Nineteen; two for a pair," and pegs: A putting on his knave, "Twenty-nine"; B says "Go." A lays down his two, his last card, and says "Thirty-one; good for two." B plays his nine and six, saying "Fifteen two, and one for my last—three." The points are marked as they are made. A then counts his hand aloud. "Six for a pair-royal" or "Three twos—good for six," and "One for his nob—seven," and throws down his hand for B's inspection. B,

"Fifteen two, fifteen four, fifteen six, fifteen eight, and a pair are ten." B then looks at his crib and counts it. It contains, say, king, eight, three, ace and the "start" is also reckoned. B counts "Fifteen two and a run of three—five."

After the points in hand and crib are reckoned, the cards are shuffled and dealt again, and so on alternately until the game is won.

The highest possible score in hand is 29—three fives and a knave, with a five, of the same suit as the knave, turned up.

CRICCIETH, a watering-place and contributory parliamentary borough of Carnarvonshire, Wales, on Cardigan Bay, served by the Cambrian railway. Pop. of urban district (1901) 1406. It is interesting for its high antiquity and the ruined castle, a fortress on an eminence where a neck of land ends, projecting into the sea. Portions of two towers are on the very verge of the rock. A double fosse and vallum, with the outer and inner court lines, can be traced. Apparently British, the castle was repaired later, probably in the time of Edward I. Across the bay is seen Harlech castle, backed by the Merionethshire hills. An old county-family mansion near Criccieth is Gwynfryn (happy hill), the seat of the Nanneys, situated near the stream Dwyfawr and within some 7 m. of Pwllheli. Not far is a tumulus, *Tomen fawr*. At a distance of 5 m. is Tremadoc (which owes its name. Town of Madocks—as does Portmadoc—to Mr W. Madocks, of Morfa Lodge, who made the embankment here). Criccieth has become a favourite watering-place, as well as a centre of excursions. The neighbourhood is

agreeable, and the Cardigan Bay shore is shelving and suitable for safe bathing. Cantref y Gwaelod (the hundred of the bottom) is the Welsh literary name of this bay, on the shores of which geological depression has certainly taken place. Mythical history relates how Seithennin's drunkenness inundated the land now covered by the bay, and how King Arthur's ship was wrecked upon Meisdiroedd Enlli near Bardsey. The *Mabinogion* tell how Harlech was a port. Similarly, in Carnarvon Bay, about 2 m. seaward, at low water, are visible the ruins of Caerarianrhod (fortified town of the silver wheel), a submerged town—due to another geological depression.

CRICHTON, JAMES (1560-? 1582), commonly called the "Admirable Crichton," was the son of Robert Crichton, lord advocate of Scotland in the reign of Mary and James VI., and of Elizabeth, daughter of Sir James Stewart of Beath, through whom he claimed royal descent. He was born probably at Eliock in Dumfriesshire in 1560, and when ten years old was sent to St Salvator's College, St Andrews, where he took his B.A. in 1574 and his M.A. in 1575. In 1577 Crichton was undoubtedly in Paris, but his career on the continent is difficult to follow. That he displayed considerable classical knowledge, was a good linguist, a ready and versatile writer of verse, and above all that he possessed an astounding memory, seems certain, not only from the evidence of men of his own time, but from the fact that even Joseph Scaliger (*Prima Scaligerana*, p. 58, 1669) speaks of his attainments with the highest praise. But those works of his which have come down to us show few traces of unusual ability; and the laudation of him as a universal genius by Sir Thomas Urquhart and Aldus Manutius requires to be

discounted. Urquhart (in his *Discovery of a most exquisite jewel*) states that while in Paris Crichton successfully held a dispute in the college of Navarre, on any subject and in twelve languages, and that the next day he won a tilting match at the Louvre. There is, however, no contemporary evidence for this, the only certain facts being that for two years Crichton served in the French army, and that in 1579 he arrived in Genoa. The latter event is proved by a Latin address (of no particular merit) to the Doge and Senate entitled *Oratio J. Critonii Scoti pro Moderatorum Genuensis Reipubl. electione coram Senatu habita....* (Genoa, 1579). The next year Crichton was in Venice, and won the friendship of Aldus Manutius by his Latin ode *In appulsu ad urbem Venetam de Proprio statu J. Critonii Scoti Carmen ad Aldum Manuccium....* (Venice, 1580). The best contemporary evidence for Crichton's stay in Venice is a handbill printed by the Guerra press in 1580 (and now in the British Museum), giving a short biography and an extravagant eulogy of his powers; he speaks ten languages, has a command of philosophy, theology, mathematics; he improvises Latin verses in all metres and on all subjects, has all Aristotle and his commentators at his fingers' ends; is of most beautiful appearance, a soldier from top to toe, &c. This work is undoubtedly by Manutius, as it was reprinted with his name in 1581 as *Relatione della qualità di ... Crettone*, and again in 1582 (reprinted Venice, 1831).

In Venice Crichton met and vanquished all disputants except Giacomo Mazzoni, was followed from place to place by crowds of admirers, and won the affection of the humanists Lorenzo Massa and Giovanni Donati. In March 1581 he went to Padua, where he held two great disputations. In the first he extemporized in succession a Latin poem, a daring onslaught on Aristotelian ignorance, and an oration in praise of ignorance. In the second, which took place in the Church of St John and St Paul, and lasted three days, he undertook to refute innumerable errors in Aristotelians, mathematicians and schoolmen, to conduct his dispute either logically or by

the secret doctrine of numbers, &c. According to Aldus, who attended the debate and published an account of it in his dedication to Crichton prefixed to Cicero's "Paradoxa" (1581), the young Scotsman was completely successful. In June Crichton was once more in Venice, and while there wrote two Latin odes to his friends Lorenzo Massa and Giovanni Donati, but after this date the details of his life are obscure. Urquhart states that he went to Mantua, became the tutor of the young prince of Mantua, Vincenzo di Gonzaga, and was killed by the latter in a street quarrel in 1582. Aldus in his edition of Cicero's *De universitate* (1583), dedicated to Crichton, laments the 3rd of July as the fatal day; and this account is apparently confirmed by the Mantuan state papers recently unearthed by Mr Douglas Crichton (*Proc. Soc. of Antiquaries of Scotland*, 1909). Mr Sidney Lee (*Dict. Nat. Biog.*) argued against this date, on the ground that in 1584 and 1585 Crichton was alive and in Milan, as certain works of his published in that year testified, and regarded it as probable that he died in Mantua c. 1585/6. But these later works seem to have been by another man of the same name. The epithet "admirable" (*admirabilis*) for Crichton first occurs in John Johnston's *Heroes Scoti* (1603). It is probably impossible to recover the whole truth either as to Crichton's death or as to the extent of his attainments, which were so quickly elevated into legendary magnitude.

BIBLIOGRAPHY.—Sir Thomas Urquhart's *Discovery of a most excellent jewel* (1652; reprinted in the Maitland Club's edition of Urquhart's Works in 1834) is written with the express purpose of glorifying Scotland. The panegyrics of Aldus Manutius require to be received with some caution, since he was given to exaggerating the merits of his friend, and uses almost the same language about a young Pole named Stanilaus Niegosevski; see John Black's *Life of Torquato Tasso*, ii. 413-451 (1810), for a criticism. The *Life of Crichton*, by P. Fraser Tytler (2nd ed., 1823), contains many extracts from earlier writers; see also "Notices of Sir Robert Crichton of Cluny and of his

son James," by John Stuart, in *Proceedings Soc. of Antiquaries of Scotland*, vol. ii. pp. 103-118 (1855); and the article by Andrew Lang, "The death of the Admirable Crichton," in the *Morning Post* (London), Feb. 25, 1910. W. Harrison-Ainsworth in his novel *Crichton* (new ed., 1892) reprints and translates some documents relating to Crichton, as well as some of his poems.

CRICKET (*Gryllidae*), a family of saltatory Orthopterous Insects, closely related to the Locustidae. The wings when folded form long slender filaments, which often reach beyond the extremity of the body, and give the appearance of a bifid tail, while in the male they are provided with a stridulating apparatus by which the well-known chirping sound, to which the insect owes its name, is produced. The abdomen of the female ends in a long slender ovipositor, which, however, is not exserted in the mole cricket. The house cricket (*Gryllus domesticus*) is of a greyish-yellow colour marked with brown. It frequents houses, especially in rural districts, where its lively, if somewhat monotonous, chirp may be heard nightly in the neighbourhood of the fireplace. It is particularly fond of warmth, and is thus frequently found in bakeries, where its burrows are often sunk to within a few inches of the oven. In the hot summer it goes out of doors, and frequents the walls of gardens, but returns again to its place by the hearth on the first approach of cold, where, should the heat of the fire be withdrawn, it becomes dormant. It is nocturnal, coming forth at the evening twilight in search of food, which consists of bread crumbs and other refuse of the kitchen. The field cricket (*Gryllus campestris*) is a larger insect than the former, and of a darker colour. It burrows in the ground to a depth of from 6

to 12 in., and in the evening the male may be observed sitting at the mouth of its hole noisily stridulating until a female approaches, “when,” says Bates, “the louder notes are succeeded by a more subdued tone, whilst the successful musician caresses with his antennae the mate he has won.” The musical apparatus in this species consists of upwards of 130 transverse ridges on the under side of one of the nervures of the wing cover, which are rapidly scraped over a smooth, projecting nervure on the opposite wing. The female deposits her eggs—about 200 in number—on the ground, and when hatched the larvae, which resemble the perfect insect except in the absence of wings, form burrows for themselves in which they pass the winter. The mole cricket (*Gryllotalpa vulgaris*) owes its name to the striking analogy in its habits and structure to those of the common mole. Its body is thick and cylindrical in shape, and it burrows by means of its front legs, which are short and greatly flattened out and thickened, with the outer edge partly notched so as somewhat to resemble a hand. It prefers loose and sandy ground in which to dig, its burrow consisting of a vertical shaft from which long horizontal galleries are given off; and in making those excavations it does immense injury to gardens and vineyards by destroying the tender roots of plants, which form its principal food. It also feeds upon other insects, and even upon the weak of its own species in the absence of other food. It is exceedingly fierce and voracious, and is usually caught by inserting a stem of grass into its hole, which being seized, is retained till the insect is brought to the surface. The female deposits her eggs in a neatly constructed subterranean chamber, about the size of a hen’s egg, and sufficiently near the surface to allow of the eggs being hatched by the heat of the sun.

CRICKET. The game of cricket may be called the national summer pastime of the English race. The etymology of the word itself is the subject of much dispute. The *Century Dictionary* connects with O. Fr. *criquet*, "a stick used as a mark in the game of bowls," and denies the connexion with A.S. *crice* or *cryce*, a staff. A claim has also been made for *cricket*, meaning a stool, from the stool at which the ball was bowled, while in the wardrobe account of King Edward I. for the year 1300 (p. 126) is found an allusion to a game called *creag*. Skeat, in his *Etymological Dictionary*, states that the word is probably derived from A.S. *crice* (repudiated by the first authority quoted), the meaning of which is a staff, and suggests that the "et" is a diminutive suffix; the word is of the same origin as "crutch." Finally the *New English Dictionary* traces the O. Fr. *criquet*, defined by Littré as "*jeu d'addresse*," to M. Flem. *Krick, Krüke, baston à s'appuyer, quinette, potence*.

History.—In a MS. of the middle of the 13th century, in the King's library, 14 Bv, entitled *Chronique d'Angleterre, depuis Ethelberd jusqu'à Hen. III.*, there is found a grotesque delineation of two male figures playing a game with a bat and ball. This is undoubtedly the first known drawing of what was destined to develop into the scientific cricket of modern times. The left-hand figure is that of the batsman, who holds his weapon upright in the right hand with the handle downwards. The right-hand figure shows the catcher, whose duty is at once apparent by the extension of his hands. In another portion of the same MS., however, there is a male figure pointing a bat towards a female figure in the attitude of catching, but the ball is absent. In a Bodleian Library MS., No. 264, dated the 18th of April 1344, and entitled *Romance of the Good King Alexander*, fielders for the first time appear in addition to the batsman and bowler. All the players are monks (not female figures, as Strutt misinterprets their dress in his *Sports and Pastimes*), and on the extreme left of the picture, the bowler, with his cowl up, poises the ball in the right hand with the arm nearly horizontal. The

batsman comes next with his cowl down, a little way only to the right, standing sideways to the bowler with a long roughly-hewn and slightly-curved bat, held upright, handle downwards in the left hand. On the extreme right come four figures—with cowls alternately down and up, and all having their hands raised in an attitude to catch the ball. It has been argued that the bat was always held in the left hand at this date, since on the opposite page of the same MS. a solitary monk is figured with his cowl down, and also holding a somewhat elongated oval-shaped implement in his left hand; but it is unsafe to assume that the accuracy of the artist can be trusted.

The close roll of 39 Edw. III. (1365), Men. 23, disparages certain games on account of their interfering with the practice of archery, where the game of cricket is probably included among the pastimes denounced as "ludos inhonestos, et minus utiles aut valentes." In this instance cricket was clearly considered fit for the lower orders only, though it is evident from the entry in King Edward's wardrobe account, already mentioned, that in 1300 the game of *creag* was patronized by the nobility. Judging from the drawings, it can only be conjectured that the game consisted of bowling, batting and fielding, though it is known that there was an in-side and an out-side, for sometime during the 15th century the game was called "Hondyn or Hondoute," or "Hand in and Hand out." Under this title it was interdicted by 17 Edw. IV. c. 3 (1477-1478), as one of those illegal games which still continued to be so detrimental to the practice of archery. By this statute, any one allowing the game to be played on his premises was liable to three years' imprisonment and £20 fine, any player to two years' imprisonment and £10 fine, and the implements to be burnt. The inference that hand in and hand out was analogous to cricket is made from a passage in the Hon. Daines Barrington's *Observations on the more Ancient Statutes from Magna Charta to 21 James I. cap. 27*. Writing in 1766, he comments thus on the above statute, viz.: "This is, perhaps, the most severe law ever made against

gaming, and some of these forbidden sports seem to have been manly exercises, particularly the *handyn* and *handoute*, which I should suppose to be a kind of cricket, as the term hands is still retained in that game."

The word "cricket" occurs about the year 1550. In Russell's *History of Guildford* it appears there was a piece of waste land in the parish of Holy Trinity in that city, which was enclosed by one John Parish, an innholder, some five years before Queen Elizabeth came to the throne. In 35 Elizabeth (1593) evidence was taken before a jury and a verdict returned, ordering the garden to be laid waste again and disinclosed. Amongst other witnesses John Derrick, gent., and one of H.M.'s coroners for Surrey, *aetat.* fifty-nine, deposed he had known the ground for fifty years or more, and "when he was a scholler in the free school of Guildford, he and several of his fellowes did runne and play there at *crickett* and other plaies." In the original edition of Stow's *Survey of London* (1598) the word does not occur, though he says, "The ball is used by noblemen and gentlemen in tennis courts, and by people of the meaner sort in the open fields and streets."

Some noteworthy references to the game may be cited. In Giovanni Florio's dictionary *A Worlde of Wordes most Copious and Exact*, published in Italy in 1595 and in London three years later, *squillare* is defined as "to make a noise as a cricket, to play cricket-a-wicket and be merry." Sir William Dugdale states that in his youth Oliver Cromwell, who was born in 1599, threw "himself into a dissolute and disorderly course," became "famous for football, cricket, cudgelling and wrestling," and acquired "the name of royster." In Randle Cotgrave's *Dictionary of French and English*, dated 1611, *Crosse* is translated "crosier or bishop's staffe wherewith boys play at cricket," and *Crosser* "to play at cricket."

Among the earliest traces of cricket at public schools is an allusion to be found in the *Life of Bishop Ken* by William Lisle Bowles (1830). Concerning the subject of this biography, who was admitted to Winchester

on the 13th of January 1650/1, it is said “on the fifth or sixth day, our junior ... is found for the first time attempting to wield a cricket bat.” In 1688 a “ram and bat” is charged in an Etonian’s school bill, but it is possible this may only refer to a cudgel used for ram-baiting. In *The Life of Thomas Wilson, Minister of Maidstone*, published anonymously in 1672, Wilson having been born in 1601 and dying in or about 1653, occurs the following passage (p. 40): “Maidstone was formerly a very profane town, in as much as I have seen morrice-dancing, cudgel-playing, stool-ball, crickets, and many other sports openly and publicly indulged in on the Lord’s Day.” Cricket is found enumerated as one of the games of Gargantua in *The Works of Rabelais*, translated in 1653 by Sir Thomas Urchard (Urquhart), vol. i. ch. xxii. p. 97. In a poem entitled *The Mysteries of Love and Eloquence or the Arts of Wooing and Complimenting* (1658), by Edward Phillips, John Milton’s nephew, the mistress of a country bumpkin when she goes to a fair with him says “Would my eyes had been beaten out of my head with a cricket ball.” The St Alban’s Cricket Club was founded in 1661, one of its earliest presidents being James Cecil, 4th earl of Salisbury (1666-1694).

In 1662 John Davies of Kidwelly issued his translation of Adam Olearius’ work entitled *The Voyages and Travels of the Ambassadors from the Duke of Holstein to the Grand Duke of Muscovy, and the King of Persia. Begun in the year 1633 and finished in 1639*. On page 297 is a description of the exercises indulged in by the Persian grandees in 1637, and the statement is made that “They play there also at a certain game, which the Persians call *Kuitskaukan*, which is a kind of *Mall*, or *Cricket*.” In the Clerkenwell parish book of 1668 the proprietor of the Rum Inn, Smithfield, is found rated for a cricket field.

The chaplain of H.M.S., “Assistance,” Rev. Henry Teonge, states in his diary that during a visit to Antioch on the 6th of May 1676, several of the ship’s company, accompanied by the consul, rode out of the city early and

amongst other pastimes indulged in “krickett.” During the first half of the 18th century the popularity of the game increased and is frequently mentioned by writers of the time, such as Swift, who alludes sneeringly to “footmen at cricket,” D’Urfey, Pope, Soame Jenyns, Strype in his edition of Stow’s *Survey of London*, and Arbuthnot in *John Bull*, iv. 4, “when he happened to meet with a football or a match at cricket.”

In 1748 it was decided that cricket was not an illegal game under the statute 9 Anne, cap. 19, the court of king’s bench holding “that it was a very manly game, not bad in itself, but only in the ill use made of it by betting more than ten pounds on it; but that was bad and against the law.” Frederick Louis, prince of Wales, died in 1751 from internal injuries caused by a blow from a cricket ball whilst playing at Cliefden House. Games at this period were being played for large stakes, ground proprietors and tavern-keepers farming and advertising matches, the results of which were not always above suspicion. The old Artillery Ground at Finsbury was one of the earliest sites of this type of fixture. Here it was that the London Club—formed about 1700—played its matches. The president was the prince of Wales, and many noblemen were among its supporters. It flourished for more than half a century. One of the very earliest full-scores kept in the modern fashion is that of the match between Kent and All England, played on the Artillery Ground on the 18th of June 1744.

Cricket, however, underwent its most material development in the southern counties, more especially in the hop-growing districts. It was at the large hop-fairs, notably that of Weyhill, to which people from all the neighbouring shires congregated, that county matches were principally arranged.

The famous Hambledon Club lasted approximately from 1750 to 1791. Its matches were played on Broad Half-Penny and Windmill Downs, and in its zenith the club frequently contended with success against All England.

The chief players were more or less retainers of the noblemen and other wealthy patrons of cricket. The original society was broken up in 1791 owing to Richard Nyren, their "general," abandoning the game, of which in consequence "the head and right arm were gone." The dispersion of the players over the neighbouring counties caused a diffusion of the best spirit of the game, which gradually extended northward and westward until, at the close of the 18th century, cricket became established as the national game, and the custom became general to play the first game of each year on Good Friday.

The M.C.C. (or Marylebone Cricket Club), which ranks as the leading club devoted to the game in any part of the globe, sprang from the old Artillery Ground Club, which played at Finsbury until about 1780, when the members migrating to White Conduit Fields became the White Conduit Cricket Club. In 1787 they were remodelled under their present title, and moved to Lord's ground, then on the site of what is now Dorset Square; thence in 1811 to Lord's second ground nearer what is now the Regent's Canal; and in 1814, when the canal was cut, to what is now Lord's ground in St John's Wood. Thomas Lord, whose family were obliged to leave their native Scotland on account of their participation in the rebellion of 1745, was born in Thirsk, Yorkshire, in 1757, and is first heard of as an attendant at the White Conduit Club, London, in 1780. Soon afterwards he selected and superintended a cricket ground for the earl of Winchilsea and other gentlemen, which was called after his name. He died in 1832 on a farm at West Meon, Hampshire, of which he took the management two years before. Lord took away the original turf of his cricket-ground at each migration and relaid it. In 1825 the pavilion was burnt down, invaluable early records of the game being destroyed; and in the same year the ground would have been broken up into building plots had not William Ward purchased Lord's interest. Dark bought him out in 1836, selling the remainder of his lease to the club in 1864. Meanwhile, in 1860, the freehold

had been purchased at public auction by a Mr Marsden—*né* Moses—for £7000, and he sold it to the club six years later for nearly £18,500, a similar sum being paid in 1887 for additional ground. In 1897 the Great Central railway company conveyed a further portion to the club, making the ground complete as it now is; the total area is about 20 acres, including the site of various villas adjoining the ground which are part of the property. The number of members now considerably exceeds five thousand.

Laws.—The oldest laws of cricket extant are those drawn up by the London Club in 1744. These were amended at the "Star and Garter" in Pall Mall, London, in 1755, and again in 1774, and were also revised by the M.C.C. in 1788. From this time the latter club has been regarded as the supreme authority, even though some local modifications have in recent years been effected in Australia. Alterations and additions have been frequently made, and according to the present procedure they have to be approved by a majority of two-thirds of the members present at the annual general meeting of the whole club; the administration being in the hands of a president, annually nominated by his outgoing predecessor, a treasurer and a committee composed of sixteen members, four annually retiring, in conjunction with a secretary and a large subordinate staff.

Implements.—Concerning the implements of the game, in the 1744 rules it was declared that the weight of the ball must be "between five and six ounces," and it was not until 1774 that it was decided that it "shall weigh not less than five ounces and a half nor more than five ounces and three-quarters," as it is to the present day. Not until 1838 however came the addition, "it shall measure not less than nine inches nor more than nine inches and a quarter in circumference." The materials out of which the old balls were made are not on record. At present a cube of cork forms the foundation, round which layers of fine twine and thin shavings of cork are accumulated till the proper size and shape are attained, when a covering of

red leather is sewn on with six parallel seams. Various “compositions” have been tried as a substitute for cork and leather, but without taking their place.

For the bat, English willow has been proverbially found the best wood. The oldest extant bats resemble a broad and curved hockey stick, and it has been claimed to be an evolution of the club employed in the Irish game of “hurley.” The straight blade was adopted as soon as the bowler began to pitch the ball up, an alteration which took place about 1750, but pictures show slightly curved bats almost to the time of the battle of Waterloo. The oldest were all made in one piece and were so used until the middle of the 19th century, when handles of ash were spliced into the blade, and the whole cane-handle was introduced about 1860. No limit was set to the length of the bat until 1840, though the width was restricted to 4¼ in. “in the widest part” by the laws of 1788, and a gauge was made for the use of the Hambledon Club. The length of the bat is now restricted to 38 in., 36 being more generally used, as a rule the handle being 14 in. long and the blade 22 in. As to weight, though there is no restriction, 2 ℔ 3 oz. is considered light, 2 ℔ 6 oz. fairly heavy; but W. Ward (1787-1849) used a bat weighing 4 ℔.

At present the wicket consists of three stumps (round straight pieces of wood) of equal thickness, standing 27 in. upright out of the ground. On the top are two “bails,” short pieces of wood which fit into grooves made in the top of the stumps so as not to project more than half an inch above them. But the evolution of the wicket has been very gradual, and the history of it is very obscure, since different types of wickets seem to have existed simultaneously. If early pictures are to be trusted, no wicket was required in primitive times: the striker was either caught out, or run out, the fieldsman having to put the ball into a hole scooped in the ground, before the batsman could put his bat into it. A single stump, it is supposed, was sometimes substituted for the hole to save collision between the bat and the fieldsman’s

fingers. In due course, but at an unknown date, a wicket—a "skeleton gate"—was raised over the hole; it consisted of two stumps each 12 in. high, set 24 in. apart, with a third laid on the top of them. John Nyren, however, writing in 1833, and discussing some memoranda given him by Mr W. Ward, says apropos of these dimensions, "There must be a mistake in this account of the width of the wicket." Undoubtedly such wickets were all against the bowler, who must have bowled over or through the wicket twenty times for every occasion when he succeeded in hitting either the uprights or the cross stump. In pictures of cricket played about 1743 we find only two stumps and a cross stump, or bail, the wicket varying apparently both in height and width. In a picture, the property of H.M. the King, entitled "A Village Match in 1768," three stumps and a bail are distinctly shown. Two stumps are shown as used in 1779, afterwards three always with one exception. Two prints, advertisements, representing matches played between women on consecutive days in 1811, show, one of them a wicket of three stumps, the other a wicket of two. The addition of the third stump, as is universally agreed, was due to an incident which occurred in a match of the Hambledon Club in 1775. "It was observed at a critical point in the game, that the ball passed three times between Mr Small's two stumps without knocking off the bail; and then, first a third stump was added, and seeing that the new style of balls which rise over the bat also rise over the wicket, then but 1 ft. high, the wicket was altered to the dimensions of 22 in. by 8, and to its present dimensions of 27 in. by 8 in 1817." So writes the Rev. J. Pycroft (1813-1895), quoting fairly closely from Nyren, who wrote many years after the event; but Pycroft is wrong in writing 22 by 8, which should really be 22 by 6. It is hard to believe that the 12 by 24 wicket lasted as long as 1775, for in the laws issued after the meeting held at the "Star and Garter," Pall Mall, where many "noblemen and gentlemen" attended "finally to settle" the laws of the game, we read that the stumps are to be 22 in. and the bail 6. "N.B.—It is lately settled to use three stumps instead of

two to each wicket, the bail the same length as before." Regarding all the circumstances one is tempted to believe that Small defended a wicket of two stumps, 22 in. high and 6 in. apart, strange as is the circumstance that the ball should thrice in a short innings—for Small only made 14 runs—pass through them without dislodging the bail, even though the diameter of the ball is a trifle less than 3 in. Allusion is also found to a wicket 12 in. by 6, but it is hard to believe in its existence, unless it was used as a form of handicap. It should be recorded that in advertisements of matches about this time (1787) the fact that three stumps will be used "to shorten the game" is especially mentioned, and that the *Hampshire Chronicle* of the 15th of July 1797 records that "The earl of Winchilsea has made an improvement in the game of cricket, by having four stumps instead of three, and the wickets 2 in. higher. The game is thus rendered shorter by easier bowling out." In 1788, however, when the M.C.C. revised the laws, reference is made to stumps (no number given, but probably three) 22 in. high and a bail of 6 in. Big scoring in 1796 caused the addition next year of 2 in. to the height and of 1 to the breadth, making the wicket 24 in. by 7. That three stumps were employed is shown by a print of the medallion of the Oxfordshire County C.C. 1797, forming the frontispiece to Taylor's *Annals of Lord's* (1903). In 1817 the dimensions now in use were finally settled, three stumps 27 in. high, and a wicket 8 in. wide. Larger wickets have occasionally been used by way of handicap or experiment. The distance between the wickets seems always, or at least as far back as 1700, to have been 22 yds.—one chain.

The Game.—Cricket is defined in the *New English Dictionary* as "an open-air game played with bats, ball and wickets by two sides of eleven players each; the batsman defends his wicket against the ball which is bowled by a player of the opposing side, the other players of this side being stationed about the field in order to catch or stop the ball." The laws define that the score shall be reckoned by runs. The side which scores the greatest number of runs wins the match. Each side has two innings taken alternately,

except that the side which leads by 150 runs in a three days' match or by 100 runs in a two days' match or by 75 runs in a one day match shall have the option of requiring the other side to "follow their innings." In England cricket is invariably played on turf wickets, but in the Colonies matting wickets are often employed, and sometimes matches have taken place on sand, earth and other substances. The oldest form of the game is probably single wicket, which consists of one batsman defending one wicket, but this has become obsolete, though it was very popular in the time when matches were played for money with only one or two, or perhaps four or five, players on a side. Matches between an unequal number of players are still sometimes arranged, but mainly in the case of local sides against touring teams, or "colts" playing against eleven experienced cricketers. In any case two umpires are always appointed, and for English first-class county cricket these are now annually chosen beforehand by the county captains. Two scorers are officially recognized. All the arrangements as to scoreboards, and accommodation for players, members of the club and general spectators, vary considerably according to local requirements. Between six and seven acres forms the most suitable area for a match, but the size of a cricket ground has never been defined by law.

The wickets are pitched opposite and parallel to one another at a distance of 22 yds.; the "bowling crease" being marked with whitewash on the turf on a line with the stumps 8 ft. 8 in. in length, with short "return creases" at right angles to it at each end; but the "popping crease," marked parallel to the wicket and 4 ft. in front of it, is deemed of unlimited length. The captains of the opposing sides toss for choice of innings, and the winner of the toss, though occasionally, owing to the condition of the ground or the weather prospects, electing to put his adversaries in first, as a general rule elects for his own side to bat first. The captain of the batting side sends his eleven (or whatever the number of his team may be) in to bat in any order he thinks best, and much judgment is used in deciding what this order shall

be. Two batsmen with strong defensive powers and good nerve are usually selected to open the innings, the most brilliant run-getters immediately following them, and the weakest batsmen going in last. As there must always, except in the obsolete single-wicket cricket, be two batsmen in together, it follows that when ten of the side (in a side of eleven) have been put out, one of the final pair must be "not out"; that is to say, his innings is terminated without his getting out because there is none of his side left to become his partner. The batsman who is thus "not out" is said to "carry his bat," a phrase that recalls a period when two bats sufficed for the whole side, each retiring batsman leaving the implement on the ground for the use of his successor, till at the close of the innings the "not out" man carried it back to the tent or pavilion. As the phrase is not also applied to the last batsman to get out, who would of course have carried the second bat off the ground, it was possibly at one time restricted to a player who going in first survived through the whole innings. It should be observed that the term "wicket" is used by cricketers in a number of different senses. Besides being the name given to the set of three stumps with their two bails when pitched for a match, it is in an extended sense applied to that portion of the ground, also called the "pitch," on which the stumps are pitched, as when it is described as being "a fast wicket," a "sticky wicket" and so forth. It also in several idiomatic expressions signifies the getting out of a batsman and even the batsman himself, as in the phrases: "Grace lost his wicket without scoring," "Grace went in first wicket down," "when Grace got out England lost their best wicket," "England beat Australia by two wickets."

The umpires are required to decide questions arising in the course of play and to call the "overs," the "over" being a series of successive deliveries of the ball (usually six) by the bowler from one end of the pitch, the rest of the "out" side, or fielders, being stationed in various positions in the field according to well-defined principles. When an "over" has been bowled from one end a different bowler then bowls an "over" from the opposite end, the

alternation being continued without interruption throughout the innings, and the bowlers being selected and changed from time to time by the captain of their side at his discretion. At the end of every over the fielders "change over" or otherwise rearrange their places to meet the batting from the other end. An over from which no runs are made off the bat is called a "maiden." A "run" is made when the two batsmen change places, each running from his own to the opposite wicket without being "run out." The aim of the batting side is to make as many runs as possible, while the object of the fielding side is to get their opponents out, and to prevent their making runs while in.

There are nine ways in which the batsman, or "striker," can be put out. Of these the following five are the most important. (1) The striker is "bowled" out if the bowler hits the wicket with the ball, when bowling, and dislodges the bail; (2) he is "caught" out if the ball after touching his bat or hand be held by any member of the fielding side before it touches the ground; (3) he is "stumped" out if the wicket-keeper dislodges the bail with the ball, or with his hand holding the ball, at a moment when the striker in playing at the ball has no part of his person or bat in contact with the ground behind the popping crease, *i.e.* when the batsman is "out of his ground"; (4) he is out "l.b.w." (leg before wicket) if he stops with any part of his person other than his hand, or arm below the elbow, a ball which in the umpire's judgment pitched straight between the wickets, and would have bowled the striker's wicket; (5) if when the batsmen are attempting to make a run a wicket is put down (*i.e.* the bail dislodged) by the ball, or by the hand of any fieldsman holding the ball, at a moment when neither batsman has any part of his person or bat on the ground behind the popping crease, the nearer of the two batsmen to the wicket so put down is "run out." The remaining four ways in which a batsman may be dismissed are (6) hit wicket, (7) handling the ball, (8) hitting the ball more than once "with intent to score," and (9) obstructing the field.

The positions of the fieldsmen are those which experience proves to be best adapted for the purpose of saving runs and getting the batsmen caught out. During the middle of the 19th century these positions became almost stereotyped according to the pace of the bowler's delivery and whether the batsmen were right or left handed. A certain number of fielders stood on the "on" side, *i.e.* the side of the wicket on which the batsman stands, and a certain number on the opposite or "off" side, towards which the batsman faces. "Point" almost invariably was placed square with the striker's wicket some ten or a dozen yards distant on the "off" side; "cover point" to the right of "point" (as he is looking towards the batsman) and several yards deeper; "mid on" a few yards to the right of the bowler, and "mid off" in a corresponding position on his left, and so forth. Good captains at all times exercised judgment in modifying to some extent the arrangement of the field according to circumstances, but in this respect much was learnt from the Australians, who on their first visit to England in 1878 varied the positions of the field according to the idiosyncrasies of the batsmen and other exigencies to a degree not previously practised in England. The perfection of wicket-keeping displayed by the Australian, McCarthy Blackham (b. 1855), taught English cricketers that on modern grounds the "long stop" could be altogether dispensed with; and this position, which in former days was considered a necessary and important one, has since been practically abolished. In many matches at the present day, owing to the character of modern bowling, no more than a single fieldsman is placed on the "on" side, while the number and positions of those "in the slips," *i.e.* behind the wicket on the "off" side, are subject to no sort of rule, but vary according to the nature of the bowling, the state of the ground, or any other circumstances that may influence the judgment of the captain of the fielding side. Charts such as were once common, showing the positions of the fielders for fast, slow and medium bowling respectively, would therefore to-

day give no true idea of the actual practice; and much of the skill of modern captaincy is shown in placing the field.

The score is compiled by runs made by the batsman and by the addition of "extras," the latter consisting of "byes," "leg-byes," "wides" and "no-balls." All these are included in the designation "runs," of which the total score is composed, though neither "wides" nor "no-balls" involve any actual run on the part of the batsmen. They are called by the umpire on his own initiative, in the one case if the bowler's delivery passes the batsman beyond the reach of his bat ("wide"), and in the other if he delivers the ball without having either foot touching the ground behind the "bowling crease" and within the "return crease," or if the ball be jerked or thrown instead of being *bona fide* "bowled." "Wides" and "no-balls" count as one "run" each, and all "extras" are added to the score of the side without being credited to any individual batsman. The batsman may, however, hit a "no-ball" and make runs off it, the runs so made being scored to the striker's credit instead of the "no-ball" being entered among the "extras." The batsman may be "run out" in attempting a run off a "no-ball," but cannot be put out off it in any other way. "Byes" are runs made off a ball which touches neither the bat nor the person of the batsman, "leg-byes" off a ball which, without touching the bat or hand, touches any other part of his person. With the exception of these "extras" the score consists entirely of runs made off the bat.

Batting.

Batting is the most scientific feature of the game. Proficiency in it, as in golf and tennis, depends in the first instance to a great extent on the player assuming a correct attitude for making his stroke, the position of leg, shoulder and elbow being a matter of importance; and although a quick and accurate eye may occasionally be sufficient by itself to make a tolerably successful run-getter, good style can never be acquired, and a consistently high level of achievement can seldom be gained, by a batsman who has neglected these

rudiments. Good batting consists in a defence that is proof against all the bowler's craft, combined with the skill to seize every opportunity for making runs that the latter may inadvertently offer. If the batsman's whole task consisted in keeping the ball out of his wicket, the accomplishment of his art would be comparatively simple; it is the necessity for doing this while at the same time he must prevent the ball from rising off his bat into the air in the direction of any one of eleven skilfully-placed fielders, each eager to catch him out, that offers scope for the science of a Grace, a MacLaren or a Trumper. In early days when the wickets were low and the ball was trundled along the ground, the curved bats of the old pictures were probably well adapted for hitting, defence being neglected; but when the height of the wickets was raised, and bowlers began to pitch the ball closer to the batsman so that it would reach the wicket on the first bound, defence of the wicket became more necessary and more difficult. Hence the modern straight-bladed bat was produced, and a more scientific method of batting became possible. Batting and bowling have in fact developed together, a new form of attack requiring a new form of defence. One of the first principles a young batsman has to learn is to play with a "a straight bat" when defending his wicket against straight balls. This means that the whole blade of the bat should be equally opposite to the line on which the ball is travelling towards him, in order that the ball, to whatever height it may bound from the ground, may meet the bat unless it rises altogether over the batsman's hands; the tendency of the untutored cricketer being on the contrary to hold the bat sloping outwards from the handle to the point, as the golf-player holds his "driver," so that the rise of the ball is apt to carry it clear of the blade. Standing then in a correct position and playing with a straight bat, the batsman's chief concern is to calculate accurately the "length" of the ball as soon as he sees it leave the bowler's hand. The "length" of the ball means the distance from the batsman at which it pitches, and "good length" is the first essential of the bowler's art. The distance that

constitutes "good length" is not, however, to be defined by precise measurement; it depends on the condition of the ground, and on the reach of the batsman. A "good-length ball" is one that pitches too far from the batsman for him to reach out to meet it with the bat at the moment it touches the ground or immediately it begins to rise, in the manner known as "playing forward"; and at the same time not far enough from him to enable him to wait till after it has reached the highest point in its bound before playing it with the bat, *i.e.* "playing back." When, owing to the good length of the ball, the batsman is unable to play it in either of these two ways, but is compelled to play at it in the middle of its rise from the ground, he is almost certain, if he does not miss it altogether, to send it up in the air with the danger of being caught out. If through miscalculation the batsman plays forward to a short-pitched ball, he will probably give a catch to the bowler or "mid off," if he plays back to a well-pitched-up ball, he will probably miss it and be bowled out. The bowler is therefore continually trying to pitch balls just too short for safe forward play, while the batsman defends his wicket by playing forward or back as his judgment directs so long as the bowling is straight and of approximately good length, and is ready the instant he receives a bad-length ball, or one safely wide of the wicket, to hit it along the ground clear of the fieldsmen so as to make as many runs as he and his partner can accomplish before the ball is returned to the wicket-keeper or the bowler. But even those balls off which runs are scored are not to be hit recklessly or without scientific method. A different stroke is brought into requisition according to the length of the ball and its distance wide of the wicket to the "off" or "on" as the case may be; and the greatest batsmen are those who with an almost impregnable defence combine the greatest variety of strokes, which as occasion demands they can make with confidence and certainty. There are, however, comparatively few cricketers who do not excel in some particular strokes more than in others. One will make most of his runs by "cuts" past "point," or by wrist strokes behind the

wicket, while others, like the famous Middlesex Etonian C. I. Thornton, and the Australian C. J. Bonnor, depend mainly on powerful "drives" into the deep field behind the bowler's wicket. Some again, though proficient in all-round play, develop exceptional skill in some one stroke which other first-class players seldom attempt. A good illustration is the "glance stroke" off the legs which K. S. Ranjitsinhji made with such ease and grace. All great cricketers in fact, while observing certain general principles, display some individuality of style, and a bowler who is familiar with a batsman's play is often aware of some idiosyncrasy of which he can take advantage in his attack.

Bowling.

Bowling is, indeed, scarcely less scientific than batting. It is not, however, so systematically taught to young amateurs, and it may be partly in consequence of this neglect that amateur bowling is exceedingly weak in England as compared with that of professionals. The evolution of the art of bowling, for it has been an evolution, is an interesting chapter in the history of cricket which can only be briefly outlined here. The fundamental law as to the proper mode of the bowler's delivering the ball is that the ball must be bowled, not thrown or jerked. When bowling underhand along the ground was superseded by "length bowling," it was found that the ball might be caused, by jerking, to travel at a pace which on the rough grounds was considered dangerous; hence the law against jerking, which was administered practically by chalking the inside of the bowler's elbow; if a chalk mark was found on his side, the ball was not allowed as fair. The necessity of keeping the elbow away from the side led gradually to the extension of the arm horizontally and to round-arm bowling, the invention of which is usually attributed to John Wills (or Willes; b. 1777) of Kent and Sussex. Nyren, however, says "Tom Walker (about 1790) began the system of throwing instead of bowling now so much the fashion"; and, "The first I recollect seeing revive this fashion was Wills, a Sussex man," the date of the

revival being 1807. Walker was no-balled. Beldham (1766-1862) says, “The law against jerking was owing to the frightful pace Tom Walker put on, and I believe that he afterwards tried something more like the modern throwing-bowling. Willes was not the inventor of that kind, or round-arm bowling. He only revived what was forgotten or new to the young folk.” Curiously enough, Beldham also writes of the same Tom Walker that he was “the first lobbing slow bowler” he ever saw, and that he “did feel so ashamed of such baby bowling, but after all he did more than even David Harris himself.” Round-arm bowling was long and vigorously opposed, especially in 1826 when three matches were arranged between England and Sussex, the Sussex bowlers being round-arm bowlers. When England had lost the first two matches, nine of the professionals refused to take part in the third, “unless the Sussex bowlers bowl fair, that is, abstain from throwing.” Five of them did play and Sussex lost, but the new style of bowling had indicated its existence. In 1844 the M.C.C.’s revised law reads, “The ball must be bowled, not thrown or jerked, and the hand must not be above the shoulder in delivery.” Round-arm bowling was thenceforth legal. In 1862 Willsher (1828-1885), the Kent bowler, was no-balled by the umpire (Lillywhite) for raising his hand too high, amid a scene of excitement that almost equalled a tumult. Overhand bowling was legalized on the 10th of June 1864 after strenuous opposition. In early days much importance was attached to great pace, but the success of the slow lobbing bowling (pitched up underhand) led to its cultivation; in both styles some of the best performers delivered the ball with a curious high action, thrusting the ball, as it were, from close under the arm-pit. When the advantages of bias (or twist, or break) were first known is not closely recorded, but we read of one Lamborn who (about 1800) could make the ball break from leg so that “the Kent and Surrey men could not tell what to make of that cursed twist of his.” Whatever the pace of bowling, accuracy is the essential point, or, more correctly, the power of accurately varying pace, pitch and direction, so that the batsman is never at

peace. If the bowler is a mere machine, the batsman soon becomes his master; but the question as to which of the two is supreme depends very largely on the condition of the turf, whether it be hard and true, soft and wet, hard and rough or soft and drying: the first pair of conditions favour the batsmen, the second pair the bowler.

The immense amount of labour and expense devoted to the preparation and care of cricket grounds has produced during the past quarter of a century a perfection of smoothness in the turf which has materially altered the character of the game. On the rough and fiery pitches of earlier days, on which a "long stop" was indispensable, the behaviour of the ball could not be reckoned upon by the batsman with any degree of confidence. The first ball of an "over" might be a "shooter," never rising as much as an inch off the ground, the next might bound over his head, and the third pursue some equally eccentric course. But on the best grounds of to-day, subject to the well-understood changes due to weather, the bound of the ball is so regular as to be calculable with reasonable certainty by the batsman. The result has been that in fine weather, when wickets are true and fast, bowlers have become increasingly powerless to defeat the batsmen. In other words the defence has been strengthened out of proportion to the attack. Bowlers have consequently to a great extent abandoned all attempt to bowl the wicket down, aiming instead at effecting their purpose by bowling close to but clear of the wicket, with the design of getting the batsman to give catches. Many batsmen of the stubbornly defensive type, known in cricket slang as "stonewallers," retaliated by leaving such balls alone together, or stopping them deliberately with the legs instead of the bat.

These tactics caused the game to become very slow; over after over was bowled without an attempt being made to score a run and without apparent prospect of getting a wicket. This not only injured the popularity of the game from the spectator's point of view, but, in conjunction with the

enormous scores that became common in dry seasons, made it so difficult to finish a match within the three days to which first-class matches in England are invariably limited, that nearly 70% of the total number of fixtures in some seasons were drawn. Cricketers of an older generation have complained that the cause of this is partly to be found in the amount of time wasted by contemporary cricketers. These critics see no reason why half of a summer's day should be allowed to elapse before cricket begins, and they comment with some scorn on the interval for tea, and the fastidiousness with which play is frequently interrupted on account of imperfect light or for other unimperative reasons. Various suggestions have been made, including proposals for enlarging the wicket, for enabling the attack to hold its own against the increasing strength of the defence. But the M.C.C., the only recognized source of cricket legislation, has displayed a cautious but wise conservatism, due to the fact that its authority rests on no sanction more formal than that of prestige tacitly admitted by the cricketing world; and consequently no drastic changes have been made in the laws of the game, the only important amendments of recent years being that which now permits a side to close its innings voluntarily under certain conditions, and that which, in substitution for the former hard and fast rule for the "follow on," has given an option in the matter to the side possessing the requisite lead on the first innings.

Early Players.—If the era of the present form of cricket can very properly be dated from the visit of the first Australian team to England in 1878, some enumeration must be made of a few of the cricketers who took part in first-class matches in the earlier portion of the 19th century. Among amateurs should be noted the two fast bowlers, Sir F. H. Bathurst (1807-1881; Eton, Hampshire), and Harvey Fellowes (b. 1826; Eton); the batsman N. Felix (1804-1876; Surrey and Kent), who was a master of "cutting" and one of the earliest to adopt batting gloves; the cricketing champion of his time Alfred Mynn (1807-1861; Kent); and the keen player F. P. Miller (1828-

1875; Surrey). The three Marshams, Rev. C. D. Marsham (b. 1835), R. H. B. Marsham (b. 1833) and G. Marsham (b. 1849), all of Eton and Oxford, were as famous as the Studds in the 'eighties; and R. Hankey (1832-1886; Harrow and Oxford) was a great scorer. In the next generation one of the greatest bats of his own or any time was R. A. H. Mitchell (1843-1905; Eton, Oxford, Hants). A very attractive run-getter was C. F. Buller (b. 1846; Harrow, Middlesex); an all too brief career was that of C. J. Ottaway (1850-1878; Eton, Oxford, Kent and Middlesex); whilst A. Lubbock (b. 1845; Eton, Kent) was a sound bat, and D. Buchanan (1830-1900; Rugby and Cambridge) a destructive bowler, as was also A. Appleby (1843-1902; Lancashire).

Of the professionals, Fuller Pilch (1803-1870) and E. G. Wenman (1803-1897) were great bats; T. Box (1808-1876) the most skilled wicket-keeper of his time; W. Lillywhite (1792- 1854), one of the first round-arm bowlers, renowned for the accuracy of his pitch, and W. Clark (1798-1856) possessed wonderful variety of pace and pitch. It was the last-named who organized the All England Eleven, and he was not chosen to represent the players until he had reached the age of forty-seven. George Parr (1826-1891), the greatest leg-hitter in England, had no professional rival until the advent of Richard Daft (1835- 1900). J. Dean (1816-1891) was the finest long-stop, Julius Caesar (1830-1878) a hard clean hitter, as was G. Anderson (1826-1902), and T. Lockyer (1826-1869) seems to have been the first prominent wicket-keeper who took balls wide on the leg-side. Of bowlers, E. Willsher (1828-1885) would seem to have been the most difficult, W. Martingell (1818-1897) being a very good medium-paced bowler, and J. Wisden (1826-1884) a very fast bowler but short in his length. Four famous bowlers of a later date are George Freeman (1844-1895), J. Jackson (1833-1901), G. Tarrant (1838-1870) and G. Wootton (b. 1834). With them must be mentioned the great batsmen, T. Hayward (1835-1876) and R. Carpenter

(1830-1901), as well as two other keen cricketers, H. H. Stephenson (1833-1896) and T. Hearne (1826-1900).

Since the first half of the 19th century the sort of cricket to engage public attention has very greatly changed, and the change has become emphasized since the exchange of visits between Australian and English teams has become an established feature of first-class cricket. First-class cricket has become more formal, more serious and more spectacular. The contest for the county championship has introduced an annual competition, closely followed by the public, between standing rivals familiar with each other's play and record; an increased importance has become attached to "averages" and "records," and it is felt by some that the purely sporting side of the game has been damaged by the change. Professionalism has increased, and it is an open secret that not a few players who appear before the public as amateurs derive an income under some pretext or other from the game. Cricket on the village green has in many parts of the country almost ceased to exist, while immense crowds congregate to watch county matches in the great towns; but this must no doubt be in part attributed to the movement of population from the country districts; and some compensation is to be found in league cricket (see below), and in the numerous clubs for the employees of business firms and large shops, and for the members of social institutes of all kinds, which play matches in the suburbs of London and other cities. At an earlier period two great professional organizations, "The All England," formed in 1846, and "The United All England," toured the country, mainly for profit, playing local sides in which "given men," generally good professional players, figured. They did much good work in popularizing the game, and an annual match between the two at Lord's on Whit-Monday was once a great feature of the season; but the increase of county cricket led eventually to their disbandment.

At this period, and much later, the first-class matches of "M.C.C. and ground" (*i.e.* ground-staff, or professionals attached to the club) occupied a far greater amount of importance than is at present the case. In recent years over 150 minor matches of the utmost value in propagating the best interests of cricket are annually played by the leading club. League cricket has of late become exceedingly popular, especially in the North of England, a number of clubs—about twelve to sixteen—combining to form a "League" and playing home-and-home matches, each one with each of the others in turn; points are scored according as each club wins, loses, or draws matches, the championship of the "League" being thus decided.

English County Cricket.—The first English inter-county match which is recorded was played on Richmond Green in 1730 between Surrey and Middlesex; but for very many years, though counties played counties, there was no systematic organization, matches often being played at odds or with "given" players, who had no county connexion with the side they represented. This was the natural outcome of the custom of playing for stakes. It was not till 1872 that any real effort was made to organize county cricket. In that year the M.C.C. took the initiative by offering a cup for competition between the counties, six of which were to be selected by the M.C.C., the matches to be played at Lord's, but the scheme fell through owing to the coolness of the counties themselves. It was only in 1890 that the counties were formally and officially classified, Notts (the county club dating from 1859), Lancashire (1864), Surrey (1845), Kent (1842), Middlesex (1864), Gloucestershire (1869), Yorkshire (1862), and Sussex (1839), being regarded as "first-class," as indeed had been the case from the time of their existence; and by degrees other counties were promoted to this class; Somerset in 1893; Derbyshire, Essex, Leicestershire, Warwickshire in 1894; Hampshire in 1895; Worcestershire in 1899; Northamptonshire in 1905.

In 1887 the County Cricket Council had been formed, working with and not against the Marylebone Club, for the management of county cricket, but the council dissolved itself in 1890, and it was then arranged that the county secretaries and delegates should meet and discuss such matters, and request the M.C.C. to consider the result of their deliberations, and practically to act as patron and arbitrator. In 1905 an Advisory Cricket Committee was formed "with the co-operation of the counties, with a view to improve the procedure in dealing with important matters arising out of the development of cricket, the effect of which will be" (the quotation is from the annual report of M.C.C. in 1905) "to bring the counties into closer touch with the M.C.C." Various methods have been tried as to the assignment of points or marks, the following being the list of champion counties up to 1909:—

1864	Surrey	
1865	Notts	
1866	Middlesex	
1867	Yorkshire	
1868	Yorkshire	
1869	Notts	
1870	Yorkshire	
1871	Notts	
1872	Surrey	} equal
	Gloucestershire	
1882	Lancashire	} equal
	Notts	
1883	Yorkshire	
1884	Notts	
1885	Notts	
1886	Notts	
1887	Surrey	
1888	Surrey	} equal
	Notts	

1873	Surrey	
1874	Gloucestershire	
1875	Notts	
1876	Gloucestershire	
1877	Gloucestershire	
1878	Notts	
1879	Lancashire	} equal
	Notts	
1880	Notts	
1881	Lancashire	
1895	Surrey	
1896	Yorkshire	
1897	Lancashire	
1898	Yorkshire	
1899	Surrey	
1900	Yorkshire	
1901	Yorkshire	
1902	Yorkshire	
1903	Middlesex	

1889	Lancashire	} equal	1904	Lancashire
	Surrey		1905	Yorkshire
1890	Surrey		1906	Kent
1891	Surrey		1907	Notts
1892	Surrey		1908	Yorkshire
1893	Yorkshire		1909	Kent
1894	Surrey			

English county cricket is now the most firmly established cricketing institution in the world, but in its earlier stages it owed much in different counties to enthusiastic individuals and famous cricketing families whose energies were devoted to its encouragement and support. To Gloucestershire belongs the honour of the greatest name in the history of the game. Dr W. G. Grace (*q.v.*) was not only the most brilliant all-round cricketer in the world, but he remained supreme after reaching an age when most cricketers have long abandoned the game. He and his two famous brothers, E. M. Grace (b. 1841) and G. F. Grace (1850-1880), rendered invaluable service to their county for many years; and not to their county alone, for the great part they played for a generation in first-class cricket did much to increase the growing popularity of the county fixtures. A separate article is devoted to Dr W. G. Grace, whose name as the champion of the game will always be associated with its history. And of Dr E. M. Grace it may be mentioned that, besides being the most daring field at "point" ever seen, he altogether took 11,092 wickets and scored 75,625 runs. In more recent years some excellent cricketers have been associated with Gloucestershire, such as F. Townsend, and the professional Board; but foremost stands G. L. Jessop, a somewhat "unorthodox" batsman famous for his powers of hitting.

The Graces and Gloucestershire.

What W. G. Grace did for Gloucestershire, Lord Harris (b. 1851) did for Kent, and his services are not to be estimated by his performances in the field alone, great as they were. His influence was always exerted to impart a spirit of sportsmanship and honourable distinction to the national game. Kent had been a home of cricket since the first half of the 18th century, but it was Lord Harris more than any other individual who made it a first-class county, celebrated for the number of distinguished amateurs who have taken part in its matches. The Hon. Ivo Bligh, afterwards Lord Darnley (b. 1859), and F. Marchant (b. 1864), both Etonians like Lord Harris himself; the two Harrovians, W. H. Patterson (b. 1859) and M. C. Kemp (b. 1862), and the Wykehamist J. R. Mason (b. 1874) are names that show the place taken by public school men in the annals of Kent cricket, while the family of Hearnes supplied the county with some famous professionals. Amateur batsmen like W. Rashleigh, C. J. Burnup, E. W. Dillon and A. P. Day have been prominent in the Kent eleven; and in Fielder and Blythe they have had two first-class professional bowlers. The "Kent nursery" at Tonbridge has proved a valuable institution for training young professional players, and contributed not a little to the rising reputation of Kent, which justified itself when the county won the championship in 1906, largely owing to the admirable batting of the amateur K. L. Hutchings.

Kent.

Middlesex and Lancashire, not less than Kent, have been indebted to the great public schools, and especially to Harrow, which provided both counties with famous captains who directed their fortunes for an uninterrupted period of over twenty years. I. D. Walker, the most celebrated of seven cricketing brothers, all Harrovians, who founded the Middlesex County Club, handed on the captaincy, after a personal record of astonishing brilliancy, to a younger Harrow and

Middlesex and Lancashire.

Oxford cricketer, A. J. Webbe, who was one of the finest leg-hitters and one of the safest out-fielders of his day, and a captain of consummate judgment and knowledge of the game. A. N. Hornby, a contemporary at Harrow of I. D. Walker, was for many years the soul of Lancashire cricket, and was succeeded in the captaincy of the county by the still more famous Harrovian, A. C. MacLaren, one of the greatest batsmen in the history of cricket, whose record for England in test matches against Australia was almost unrivalled. In 1895, when he headed the batting averages, MacLaren made the highest individual score in a first-class match, viz. 424 against Somersetshire. Middlesex has also the distinction of having produced the two greatest amateur wicket-keepers in the history of English cricket, namely, the Hon. Alfred Lyttelton (b. 1857) and Gregor MacGregor, both of whom, after playing for Cambridge University, gave their services to the Metropolitan county; while Lancashire can boast of the greatest professional wicket-keeper in Richard Pilling (1855-1891), whose reputation has not been eclipsed by that of the most proficient of more recent years. Another famous Cambridge University cricketer, a contemporary of Lyttelton, who was invaluable to Lancashire for some years when he was one of the very finest all-round cricketers in the country, was A. G. Steel (b. 1858), equally brilliant as a batsman and as a slow bowler; and other names memorable in Lancashire cricket were R. G. Barlow (b. 1859), whose stubborn batting was a striking contrast to the rapid run-getting of Hornby and the perfect style of Steel; John Briggs (1862-1902), whose slow left-hand bowling placed him at the head of the bowling averages in 1890; John Crossland (1853-1903) and A. Mold (b. 1865), both of whom were destructive fast bowlers; J. T. Tyldesley and R. H. Spooner, both among the most brilliant batsmen of a later generation; and W. Brearley, the amateur fast bowler.

Middlesex, like Kent, has been better served by amateurs than professionals. Indeed, with the notable exceptions of J. T. Hearne, who headed the bowling averages in 1891, 1896 and 1898, and of the imported Australian A. E. Trott, few professionals of high merit are conspicuously associated with the history of the county cricket. Trott, in 1899 and again in 1900, performed the previously unprecedented feat of taking over two hundred wickets and scoring over one thousand runs in the same season. And in his "benefit match" in May 1907 at Lord's he achieved the "hat trick" twice in one innings, taking first four and then three wickets with successive balls. But if there has been a dearth of professionals in Middlesex cricket, the county has produced an abundance of celebrated amateurs. In addition to the Walkers and A. J. Webbe, the metropolitan county was the home of the celebrated hitter, C. I. Thornton, and of the Studd family, who learnt their cricket at Eton and Cambridge University. C. T. Studd, one of the most polished batsmen who ever played cricket, was at the same time an excellent medium-paced bowler, and his brother G. B. Studd is remembered especially for his fielding, though like his elder brother, J. E. K. Studd, he was an all-round cricketer of the greatest value to a county team. Sir T. C. O'Brien, who made his reputation by a fine innings for Oxford University against the Australian team of 1882, sustained it in the following years by many brilliant performances for Middlesex. A. E. Stoddart for several years was the best run-getter in the Middlesex eleven; and W. J. Ford and his younger brother, F. G. J. Ford, were conspicuous among many prominent Middlesex batsmen. In more recent times the Oxonian P. F. Warner (b. 1873), both as captain and as batsman, did splendid work; and B. J. T. Bosanquet, besides assisting powerfully with the bat, became famous for inaugurating a new style of curly bowling ("googlies") of a very effective type.

A glance at the table given above shows the high place occupied by Surrey in the past. Surrey county cricket can be traced as far back as 1730. Pycroft observes that "the name of Surrey as one united county club is quite lost in the annals of cricket from 1817 to 1845." But before that date two of the most celebrated cricketers, William Lillywhite and Fuller Pilch, had occasionally played for the county, and so also had James Broadbridge (1796-1843) and W. Lambert (1779-1851). Kennington Oval became the Surrey county ground in 1845, the property being leased from the duchy of Cornwall; and in the years immediately following the county team included H. H. Stephenson (1833-1896), Caffyn (b. 1828), N. Felix, and Lockyer (1826-1869); among a later generation appeared such well-remembered names as Jupp, Southerton, Pooley and R. Humphrey. After being champion county in 1873, Surrey did not again attain the same position for fourteen years, but for the next ten years maintained an almost uninterrupted supremacy. The greatest credit was due to the energetic direction of J. Shuter (b. 1855), who kept together a remarkable combination of cricketers, such as W. W. Read (1855-1906), Maurice Read (b. 1859), George Lohmann (1865-1901), and Robert Abel (b. 1859), all of whom were among the greatest players of their period. Lohmann in 1885-1890 would alone have made any side famous; and in the same years when he was heading the bowling averages and proving himself the most deadly bowler in the country, W. W. Read was performing prodigies of batting. No sooner did the latter begin to decline in power than Abel took his place at the head of the batting averages, scoring with astonishing consistency in 1897-1900. In 1899 he made 357 not out in an innings against Somersetshire, and in 1901 his aggregate of 3309 was the largest then compiled. The Oxonian K. J. Key was another famous batsman whose services as captain were also exceedingly valuable to

Surrey.

the county. An almost inexhaustible supply of professionals of the very highest class has been at Surrey's service. W. Lockwood (b. 1868) became almost as deadly a bowler as Lohmann, and Tom Richardson (b. 1870) was the terror of all Surrey's opponents for several seasons after 1893. Richardson took in all no less than 1340 wickets at the cost of 20,000 runs. Tom Hayward (b. 1867), nephew of the renowned Cambridge professional of the same name, succeeded Abel as the leading Surrey batsman, his play in the test matches of 1899, when he averaged 65, being superb. During the following years his reputation was fully maintained, and in 1906 he had a particularly successful season. Key was followed in the captaincy by D. L. A. Jephson, but the county did not in the opening years of the 20th century maintain the high place it occupied during the last quarter of the 19th. It possessed some excellent professionals, however, in Hayes, Hobbs and Lees, and the season of 1906, under the captaincy of Lord Dalmeny, showed a revival, a new fast bowler being found in N. A. Knox, and a fine batsman and bowler in J. N. Crawford.

Sussex.

Several of the celebrated cricketers of early times already mentioned as having played for the Surrey club were more closely associated with the adjoining county of Sussex, whose records go back as far as 1734, in which year a match was played against Kent, the chief promoters of which were the duke of Richmond and Sir William Gage. One of the earliest famous cricketers, Richard Newland (d. 1791), was a Sussex man; and James Broadbridge, W. Lambert, Tom Box, and the great Lillywhite family were all members of the Sussex county team. Lambert, in a match against Epsom, played at Lord's in 1817, made a "century" (one hundred runs) in each innings, a feat not repeated in first-class cricket for fifty years; and the occasion was the first when the aggregate of a thousand runs was scored in a match. Broadbridge played for Sussex in

five reigns, while Box (1808-1876) kept wicket for the county for twenty-four years without missing a match. Notwithstanding this distinguished history, Sussex never attained the highest place in the county rivalry, and for a number of years towards the end of the 19th century the left-handed batting of F. M. Lucas (1860-1887) alone saved the county from complete insignificance. A revival came when W. L. Murdoch (b. 1855), of Australian celebrity, qualified for Sussex; and at a still later date the fortunes of the county were raised by the inclusion in its eleven of Kumar Shri Ranjitsinhji, afterwards H.H. the Jam of Nawanagar (b. 1872), the Indian prince, who had played for Cambridge University. Ranjitsinhji's dexterity, grace and style were unrivalled. He scored 2780 runs in 1896, averaging 57, while in county matches in 1899 his aggregate was 2555, with an average of 75. Even this performance was beaten in 1900 when he scored a total of 2563 runs, giving an average for the season of 83. In all matches his aggregates were 3159 in 1899, and 3065 in 1900. Not less remarkable was the cricket of C. B. Fry (b. 1872), who came from Oxford University to become a mainstay of Sussex cricket, and who in 1901 performed the unparalleled feat of scoring in successive innings 106, 209, 149, 105, 140 and 105, his aggregate for the season being 3147 with an average of 78. In 1905 his average for Sussex was 86, but in the following year an accident kept him out of the cricket field throughout the season; and in 1909 he transferred his services to Hampshire.

If Kent and Middlesex may be described as the counties of amateurs, Yorkshire and Nottinghamshire should be called the counties of famous professionals. Between 1864 and 1889 Nottinghamshire was champion county twelve times and the county eleven was as a rule composed almost entirely of professional players, among whom have been many of the greatest names in the history of the game. Richard Daft (1835-1900),

Notts.

after playing as an amateur, became a professional in preference to abandoning the game, scorning to resort to any of the pretexts by which cricketers have been known to accept payment for their services while continuing to cling to the status of the amateur. William Oscroft (1843-1905) was one of Nottinghamshire's early batting heroes, and in Alfred Shaw (b. 1842) and F. Morley (1850-1884) the county possessed an invaluable pair of bowlers. William Gunn (b. 1858), besides being a magnificent fielder "in the country," was an exceptionally able batsman; but his performances did not equal those of his greater contemporary, Arthur Shrewsbury, who in six years between 1885 and 1892 headed the English batting averages. Shrewsbury's perfect style combined with inexhaustible patience placed him in the front rank of the "classical" batsmen of English cricket. Of the batsmen nicknamed "stonewallers," who at one time endangered the popularity of first-class cricket, was W. Scotton (1856-1893); and among the other numerous professionals whose cricket contributed to the renown of Nottinghamshire were Barnes (1852-1899), at times a most formidable bat; Flowers (b. 1856), always useful both with the bat and the ball; W. Attewell (b. 1861), a remarkably steady bowler who bowled an abnormal number of maiden overs; Mordecai Sherwin (b. 1851), an excellent successor to T. Plumb (b. 1833) and F. Wild (1847-1893) as wicket-keeper for the county; and among more recent players, J. Iremonger (b. 1877) and John Gunn, both of whom proved themselves cricketers worthy of the Notts traditions. J. A. Dixon (b. 1861), one of the few amateurs of the Nottinghamshire records, was for some time captain of the county team; and he was succeeded by A. O. Jones (b. 1873), a dashing batsman, who in 1899 was partner with Shrewsbury when the pair scored 391 for the first wicket in a match against Gloucestershire.

The history of Yorkshire cricket is modern in comparison with that of Surrey, Sussex or Kent. The county club only dates from 1861, and for some years the team was composed entirely of professionals. But though Yorkshire attained the championship three times during the first ten years of the county club's existence, thirteen years elapsed after 1870 before it again occupied the place of honour. In the ten years 1896-1906 Yorkshire was no less than six times at the head of the list, this position of supremacy being in no small measure due to the captaincy of Lord Hawke (b. 1860), who played continuously for the county from his university days for more than twenty years, and whose influence on Yorkshire cricket was unique. But before his time Yorkshire had already produced some notable cricketers, such as George Ulyett (1857-1898), who headed the batting averages in 1878, and who was also a fine fast bowler; Louis Hall (b. 1852), a patient bat; and another excellent scorer, Ephraim Lockwood (b. 1845). William Bates (1855-1900), too, was effective both as batsman and bowler; and Tom Emmett (1841-1904), long proverbial for bowling "a wide and a wicket," was deservedly popular. To the earlier period belonged two fast bowlers, George Freeman (1844-1895) and Allan Hill (b. 1845), and the eminent wicket-keeper Pincher (1841-1903), who was succeeded by J. Hunter (1857-1891), and later by his brother Daniel Hunter (b. 1862). The full effect of Lord Hawke's energetic captaincy was seen in 1900, when Yorkshire played through a programme of twenty-eight fixtures without sustaining a defeat; and the county's record was but little inferior in both the following years and again in 1905, in each of which years it retained the championship. It was during this period that as notable a group of cricketers wore the Yorkshire colours as ever appeared in county matches. Edmund Peate (1856-1900), one of the finest bowlers in his day, did not survive to take part in the later triumphs of his

Yorkshire.

county; but the period beginning in 1890 saw J. T. Brown, J. Tunnicliffe, R. Peel, W. Rhodes, George Hirst and the Hon. F. S. Jackson in the field. The two first named became famous for their first wicket partnerships. In 1896 in a match against Middlesex at Lord's these two batsmen scored 139 before being separated in the first innings, and in the second knocked off the 147 required to win the match. In the following year they made 378 for the first wicket against Surrey, and during their careers they scored over a hundred for the first wicket on no less than fifteen occasions, the greatest feat of all being in 1898, when they beat the world's record by staying together till 554 runs had been compiled. Peel was for many years an untiring bowler, and Yorkshire was fortunate in discovering a successor of even superior skill in Wilfrid Rhodes, who in 1900 took over 200 wickets at a cost of 12 runs each in county matches alone, and was also an excellent bat. Hirst and Jackson were the two finest all-round cricketers in England about 1905. The Hon. F. S. Jackson (b. 1870), like his fellow-Harrovian A. C. MacLaren, had a wonderful record in test matches against Australia; he captained the England eleven in 1905, and his wonderful nerve enabled him to extricate his side when in a difficulty, and to render his best service at an emergency. Hirst (b. 1871) in 1904 and in 1905 scored over 2000 runs and took more than 100 wickets; and in 1906 he surpassed all previous records by scoring over 2000 runs and taking over 200 wickets during the season. A concourse of 78,000 people watched his "benefit" match (Yorkshire against Lancashire) in August 1904. Besides cricketers like these, such fine players were included in the team as Wainwright (b. 1865), Haigh (b. 1871), Denton (b. 1874), and E. Smith (b. 1869); with such material the Yorkshire eleven had no "tail," and was able to win the championship six times in a decade.

Somersetshire hardly fulfilled the promise held out by the success achieved in the closing decade of the 19th century; this had been largely owing to the captaincy and brilliant batting of H. T. Hewett (b. 1864), who in partnership with L. C. H. Palairet (b. 1870), famous for his polished style, scored 346 for the first wicket in a match against Yorkshire in 1892. Hewett was succeeded in the command of the county eleven by the Cambridge fast bowler, S. M. J. Woods (b. 1868); and among other members of the eleven the most valuable was L. C. Braund (b. 1876), a professional who excelled as an all-round cricketer.

Somersetshire.

The counties above referred to are those which have figured most prominently in the history of county cricket. Individual players of the highest excellence are, however, to be found from time to time in all parts of the country. Warwickshire, for example, can boast of having had in A. A. Lilley (b. 1867) the best wicket-keeper of his day, who represented England against Australia in the test matches; while Worcestershire produced one of the best all-round professionals in the country for a number of years in Arnold (b. 1877), and a batsman of extreme brilliancy in R. E. Foster, a member of a cricketing family to whom belongs the credit of raising Worcestershire into a cricketing county of the first class. Derbyshire, similarly, can claim some well-known cricket names, the bowler W. Mycroft (1841-1894), W. Chatterton (b. 1863), and W. Storer (b. 1868), a first-class wicket-keeper. Essex possesses at Leyton one of the best county grounds in the country, and the club was helped over financial difficulties by the munificent support of an old Uppingham and Cambridge cricketer, C. E. Green. It has produced a fair number of excellent players, notably the batsmen P. Perrin, C. MacGahey, and the fast bowler C. J. Kortright; and A. P. Lucas, afterwards a member of the county club, was a famous cricketer who

Minor counties.

played for England in 1880 in the first Australian test match. Hampshire had a fine batsman in Captain E. G. Wynyard, and its annals are conspicuous for the phenomenal scores made during the single season of 1899 by Major R. M. Poore; these two put together 411 against Somersetshire in that year before being separated. Among the later Hants professionals, Llewellyn was most prominent.

The distribution of cricketing ability in England might be the subject of some interesting speculation. In the first forty years of the annual competition for the championship six counties alone gained the coveted distinction, and three of these, Surrey, Notts and Yorkshire, won it thirty-four times between them. Why, it may be asked, is it that one county excels in the game while another has no place whatever in the history of cricket? How comes it that great names recur continually in the annals of Surrey and Yorkshire, for example, while those of Berkshire and Lincolnshire are entirely barren? No doubt proximity to great centres of population favours the cultivation of the game, but in this respect Kent and Sussex are no better situated than Hertfordshire, nor does it account for Nottinghamshire having so illustrious a record while Staffordshire has none at all, nor for Somersetshire having outclassed Devon. It is strange, moreover, that while the universities are the chief training-grounds for amateur cricketers, neither Oxfordshire nor Cambridgeshire has made any mark among the counties. The influence of individuals and families, such as the Graces in Gloucestershire, the Walkers in Middlesex, and in recent times the Fosters in Worcestershire, has of course been of inestimable benefit to cricket in those counties; but Buckinghamshire and Norfolk and Cheshire send their sons to the public schools and universities no less than Lancashire or Kent. It is difficult, therefore, to understand why county cricket should so persistently confine itself to a small number of counties; but such is the fact.

Cricket has never flourished vigorously in Scotland, Ireland or Wales, a fact that may partly be accounted for by the comparative difficulty of obtaining good grounds in those parts of the kingdom, and by the inferiority, for the purpose of cricket, of their climate. In the south of Scotland, and especially in the neighbourhood of Edinburgh, there are clubs which keep the game alive; and Scotland, though it has produced no great cricketers, either amateur or professional, has sent a few players to the English university elevens who have found places in English county teams. In Ireland cricket is fairly popular, especially in those parts of the island where local sides can obtain assistance from soldiers quartered in the neighbourhood. One or two counties play annual matches, that between Kildare and Cork in particular exciting keen rivalry. Trinity College, Dublin, has turned out some excellent players; and the Phoenix and Leinster clubs in Dublin, and the North of Ireland club in Belfast, play a full programme of matches every season. D. N. Trotter, who played for county Meath for many years towards the close of the 19th century, was a batsman who would have found a place in any English county eleven; so also would William Hone, one of several brothers all of whom were keen and skilful cricketers. About the same period Lieutenant Dunn scored so many centuries in Irish cricket that he was played, though without any great success, for his native county of Surrey. More recently L. H. Gwynn (1873-1902) batted in a style and with a success that proved him capable of great things. Sir T. C. O'Brien, though an Irishman, belongs as a cricketer to Middlesex; but T. C. Ross, who was chosen to play for Gentlemen v. Players at Lord's in 1902, was a bowler who played regularly for county Kildare.

Gentlemen v. Players.—The most important match of the year as far as purely English cricket is concerned is the match between the gentlemen and players (amateurs and professionals) played at Lord's.

For many years a match played between sides similarly composed at the Oval excited equal interest, but latterly county cricket has rather starved this particular game, though it still continues as a popular fixture. Other matches with the same title have been played in London on Prince's Ground (now built over), and at Brighton, Hastings and Scarborough and elsewhere, but those games in no way rank with the London matches.

The Lord's fixture was first established in 1806, in which year two matches were played; it became annual in 1819, but in those days the amateurs, being no match for their opponents, generally received odds, while in 1832 they defended wickets 22 in. by 6, and in 1837 the professionals stood in front of wickets of four stumps, measuring in all 36 in. by 12 in. This match was known as "The Barndoor Match" or "Ward's Folly," and the professionals won by an innings and 10 runs. Odds were not given after 1838, the gentlemen having then won eight matches and lost thirteen. From 1839 to 1866 the gentlemen only won 7 matches as compared with 21 losses. In 1867 the tide turned, for the brothers Grace, especially Dr W. G. Grace, became a power in the cricket-field, and from 1867 to 1884 the gentlemen, winning fifteen matches, only lost one. From 1885 the balance swung round, and by 1903 the professionals had won eleven matches and lost but four. The gentlemen won on nine successive occasions between 1874 and 1884, a draw intervening; while beginning with 1854 the professionals won eleven matches "off the reel." The professionals won in 1860 by an innings and no less than 181 runs; in 1900 they only won by two wickets, but to do so had to make, and did make, 501 runs in the last innings of the match. In 1903 the gentlemen, heavily in arrears after each side had played an innings, actually scored 500 in their second innings with only two men out. In 1904 the gentlemen won by two wickets after being 156 runs behind on the first innings, thanks to fine

play by K. S. Ranjitsinhji and A. O. Jones. J. H. King had scored a century in each innings, a feat previously only performed by R. E. Foster in 1900. C. B. Fry's 232 not out in 1903 was the largest innings scored in the match. Dr W. G. Grace, who is credited with eight centuries, is the only cricketer who exceeded the hundred more than twice at Lord's in the fixture, 164 by J. T. Brown being the highest innings by a professional. There were seven instances before 1864 of two bowlers being unchanged in the match, and the Hon. F. S. Jackson and S. M. J. Woods repeated this in 1894. The Oval match was first played in 1857. The amateurs effected their first win in 1866, and though several games were drawn the professionals did not win again till 1880. As at Lord's, it was the era of Grace, but from this point the amateurs could only win two matches, and by the narrowest of margins, till 1903, this making their sum of victories up to then thirteen, as opposed to twenty-three. In 1879 the gentlemen won in one innings by 126 runs, the heaviest beating that one side had inflicted on the other. The highest individual score was Robert Abel's 247, and the next Dr W. G. Grace's 215. Hayward scored 203 in 1904; A. G. Steel and A. H. Evans bowled unchanged in 1879.

School and Club Cricket.—Cricket is the standing summer game at every English private and public school, where it is taught as carefully and systematically as either classics or mathematics. There are also numbers of amateur clubs which possess no grounds of their own and are connected with no particular locality, but which are in fact mere associations of cricketers who play matches against the universities, schools or local teams, or against each other. Of these the best known, perhaps, is I Zingari (The Wanderers), popularly known as I.Z., whose well-known colours, red, yellow and black stripes, are prized rather as a social than as a cricketing distinction. This club was founded in 1845 by Lorraine Baldwin and Sir Spencer Ponsonby-Fane. The first rule of

the club humorously declares that “the entrance fee shall be nothing, and the annual subscription shall not exceed the entrance fee.” It is a rule of the club that no member shall play on the opposing side. I.Z. has long been connected with the social festivities forming a feature of the “Canterbury Week,” a cricket festival held at Canterbury during the first week in August, of the Scarborough week, and of the Dublin horse-show. Dr W. G. Grace, who almost invariably appeared in the cricket field wearing the red and yellow stripes of the M.C.C., and some other notable amateurs, never belonged to I.Z. or any similar club; but Dr Grace was instrumental in the formation of the London county club, whose ground was at the Crystal Palace at Sydenham. Other amateur clubs, similar to I Zingari, are the Free Foresters, Incogniti, Etceteras, and in Ireland Na Shuler; while the Eton Ramblers, Harrow Wanderers, Old Wykehamists, and others are clubs whose membership is restricted to “old boys.”

The Oxford and Cambridge universities match was first played in 1827, but was not an annual fixture till 1838. Five matches, those of 1829, 1843, 1846, 1848 and 1850, were played at Oxford, the rest at Lord’s. The “’Varsity match,” and that between the two great public schools, Eton and Harrow, are great “society” events at Lord’s every summer. Up to 1909 Eton won thirty times, and Harrow on thirty-five occasions. D. C. Boles by scoring 183 in 1904 set up a new record for this match, beating the 152 obtained in 1841 by Emilius Bayley (afterwards the Rev. Sir John Robert Laurie); and in 1907 the Harrow captain, M. C. Bird, established a further record by scoring over a hundred runs in each innings. Of the contests between Oxford and Cambridge, the latter (up to 1909) had lost thirty-one and won thirty-five. Oxford’s 503 in 1900 and Cambridge’s 392 in the same match furnished the highest aggregates. The largest individual innings was 172 not out by J. F. Marsh in 1904; but as a feat of batting it was

intrinsically inferior to the 171 by R. E. Foster in 1900. Of the thirty centuries scored up to 1909, Oxford was credited with sixteen. Eustace Crawley (b. 1868) made a hundred both in the Eton v. Harrow and Oxford v. Cambridge matches. In the match of 1870 F. C. Cobden (b. 1849) took the last three Oxford wickets with consecutive balls, winning the match for Cambridge by 2 runs.

Australian Cricket.—Naturally popular in a British colony, cricket made but little progress in Australia before the arrival of an English professional eleven in 1861-1862, which carried all before it. Subsequent visits, and the coaching of imported professionals, so promoted the game that in 1878 a representative eleven of Australians visited England. The visits were repeated biennially till 1890, and then triennially. The visits of the Australian teams to England aroused unparalleled interest and acted as an immense incentive to the game. A great sensation was caused when the first team, captained by D. W. Gregory, on the 27th of May 1878, defeated a powerful M.C.C. eleven in a single day, disposing of them for 33 and 19, the fast bowler F. R. Spofforth (b. 1853) taking 6 wickets for 4 runs, and H. F. Boyle (b. 1847) 5 for 3. Their prowess was well maintained when in September 1880 Australia for the first time met the whole strength of England, such matches between representatives of Australia and England being known as “test matches,” a term that was applied later to matches between England and South Africans also. Although in 1880 the old country won by 5 wickets, the honours were fairly divided, especially as Spofforth could not play. Dr W. G. Grace with a score of 152 headed the total of 420, but even finer was the Australian captain W. L. Murdoch’s imperturbable display, when he carried his bat for 153. From 1882 onwards the Colonials, with two exceptions, at Blackpool and Skegness, only played eleven-a-side matches. Such bowlers as Spofforth, Boyle, G. E. Palmer (b. 1861), T. W. Garrett (b. 1858), and

G. Giffen (1859) became household names. Nor was the batting less admirable, for Murdoch was supported by H. H. Massie (b. 1854), P. S. McDonnell (1860-1896), A. C. Bannerman (b. 1859), T. Horan (b. 1855), C. J. Bonnor (b. 1855), and S. P. Jones (b. 1861), whilst the wicket-keeper was McCarthy Blackham (b. 1855). This visiting side in 1882 was the greatest team of all; 23 matches were won, only 4 lost, and England was defeated at the Oval by 7 runs. In 1884 English cricket had improved, and the visiting record was hardly so good. The match against England at the Oval will not soon be forgotten. The Colonials scored 551 (Murdoch 211, McDonnell 103, Scott 102), and England responded with 346, Scotton and W. W. Read adding 151 for the ninth wicket.

The team of H. J. H. Scott (b. 1858) in 1886 proved less successful, for all three test matches were lost, and eight defeats had to be set against nine victories, but Giffen covered himself with distinction. This was the first tour under the auspices of the Melbourne Club. McDonnell's team in 1888 marked the appearance of the bowlers C. T. B. Turner (b. 1862) and J. J. Ferris (1867-1900). The former took 314 wickets for 11 runs each, and the latter 220 for 14 apiece. To all appearance they redeemed a poor tour, 19 matches being won and 14 lost. The 1890 tour, though Murdoch reappeared as captain, proved disappointing, both the test matches being lost and defeats for the first time exceeding victories, though the two bowlers again performed marvellously well. After an interval of three years, M. Blackham captained the seventh team, which was moderately fortunate. H. Graham (b. 1870) and S. E. Gregory (b. 1870) batted admirably, and the 149 of J. J. Lyons (b. 1863) in the match against M.C.C. was an extraordinary display of punishing cricket. In 1896, though they did not win the rubber of test matches, the colonials were most successful, 19 matches being victories and only 6 lost. S. E. Gregory, J. Darling (b.

1870), F. A. Iredale (b. 1867), G. Giffen, C. Hill (b. 1877), and G. H. S. Trott (1866-1905) were the best bats, and the last-named made an admirable captain. H. Trumble (1867) kept an excellent length, and E. Jones (1869) was deadly with his fast bowling.

The Australian representatives in 1899 demonstrated that they were the best since 1882, 16 successes and only 3 defeats (v. Essex, Surrey and Kent) being emphasized by a victory over England at Lord's by 10 wickets, the only one of the five test matches brought to a conclusion. M. A. Noble (b. 1873) and Victor Trumper (b. 1877), both newcomers, batted superbly. The latter, v. Sussex, made 300, the largest individual score hitherto made by an Australian in England, the previous best having been 286 by Murdoch in the corresponding match in 1882. H. Trumble scored 1183 runs and took 142 wickets for 18 runs apiece, and Darling not only made a judicious captain, but scored the biggest aggregate, 1941, up to then obtained by any batsman touring with a colonial eleven in England. On the home side, Hayward did sound service with the bat, and his stand with F. S. Jackson in the fifth test match yielded 185 runs for the first wicket.

In 1902 another fine Australian eleven, captained by Darling, won 23 and lost only 2 matches. They won the rubber of test matches at Manchester by 3 runs, but lost the final at the Oval by one wicket after an even more remarkable struggle, G. L. Jessop having scored 104 in an hour and a quarter. The other defeat was by Yorkshire by 5 wickets, when they were dismissed for 23 by Hirst and Jackson. The rest of the tour was characterized by brilliant batting. The performance of Trumper in making 2570 runs (with an average of 48) surpassed anything previously seen; R. A. Duff (b. 1878) also proved a brilliant run-getter. W. W. Armstrong (b. 1879) was useful in all departments, and J. V. Saunders (b. 1876) proved a successful left-handed bowler.

In 1905 there was a marked falling-off, as England won two and drew the other three test matches; but only one other defeat, by Essex by 19 runs, had to be set against 16 Australian victories. The persistent bowling off the wicket by Armstrong, and the inability to finish games within three days, were the chief drawbacks. Armstrong eclipsed all previous colonial records in England by heading both tables of averages, scoring 2002 (average 48) and taking 130 wickets at a cost of 17 runs each. He also compiled the largest individual score (303 not out v. Somerset) ever made on an Australian tour. M. A. Noble also exceeded 2000 runs. For a long time the fast bowler, A. Cotter (b. 1882, N.S.W.), failed, but eventually "came off," just as F. Laver (b. 1869), who had taken many wickets in the earlier part of the tour, was becoming less formidable. Duff saved the colonials by a great innings in the fifth test match; Trumper was less certain than formerly, and Clement Hill more reckless; whilst J. J. Kelly (b. 1867) on his fifth tour was better than ever before with the gloves.

The Australians who visited England under the leadership of M. A. Noble in 1909 were generally held to be a weaker team than most of their predecessors, but they greatly improved as the season advanced, proving that the side included several cricketers of the highest merit, and as a captain Noble has seldom been surpassed in consummate generalship. Their record of thirteen wins to four defeats offered little evidence of inferiority, while the large number of twenty-one drawn matches was accounted for by the cold wet weather that largely prevailed throughout the summer. Two out of the five test matches were unfinished, and Australia won the rubber by two matches to one. In all the test matches England was under the command of A. C. MacLaren, but the great Harrovian was no longer the batsman he had been some years earlier; Jackson had abandoned first-class cricket; Hirst and Hayward were becoming veterans; and, speaking generally, the English

batting was decidedly inferior, and it collapsed feebly in three of the test matches. England's failure, for which poor fielding and missed catches were also responsible, was the more disappointing since they began well by winning the first test match at Birmingham by ten wickets. C. B. Fry and Hobbs knocking off the 105 runs required to win in the second innings without the loss of a wicket. In the third test match, at Leeds, England was deprived of the services of Hayward and Blythe through illness, and an accident to Jessop during the match compelled the side to play a man short. It was in bowling that the Australians were thought to be least strong; but Laver's analysis in the Manchester test match, when he took 8 wickets for 31 runs in England's first innings, was the most notable feature of the match; and although his record at the head of the bowling averages for the tour, 70 wickets at an average cost of 14.9 runs, had frequently been beaten in earlier Australian tours in England, it proved him a worthy successor of Spofforth, Boyle and Turner. Armstrong, although he did not equal his record of 1905, again scored over 1000 runs and took over 100 wickets, his exact figures being 1439 runs and 120 wickets. The most remarkable Australian batting was that of two young left-handed players who on this occasion visited England for the first time, W. Bardsley (b. 1884) and Vernon Ransford (b. 1885), the latter of whom headed the averages both for test matches (58.8) and for the whole tour (45.5), his principal achievement being an innings of 143 not out in the test match at Lord's. Bardsley, who was second in the test matches averages (39.6), fell into the third place slightly below Armstrong in the averages for the tour; but he alone scored over 200 in an innings, which he accomplished twice, and over 2000 in aggregate for the tour, and he established a test match "record" by scoring 136 and 130 in the match at the Oval. Of the twenty-two "centuries" scored by Australians during the season Bardsley and Ransford each made six. Trumper and Noble

each scored over a thousand runs, and Macartney was an invaluable member of the side both in batting and bowling. As a wicket-keeper Carter worthily filled the place of Kelly, and the fielding of the Colonials fully maintained the brilliant Australian standard of former years.

The following "records" of Australian cricket in England up to 1909 are of interest:—Highest total by an Australian team: 843 v. Past and Present of Oxford and Cambridge Universities in 1893. Highest total against an Australian team: 576 by England at the Oval in 1899. Lowest total by an Australian team: 18 v. M.C.C. in 1896. Lowest total against an Australian team: 17 by Gloucestershire in 1896. Highest individual Australian score in one innings: 303 not out by W. W. Armstrong v. Somersetshire in 1905. Highest individual Australian aggregate in a tour: 2570 by V. T. Trumper in 1902. Two centuries in a match: V. T. Trumper 109 and 119 v. Essex in 1902; W. Bardsley 136 and 130 v. England in 1909 (test match record).

The following table shows the Australians who headed the batting and bowling averages respectively in tours in England up to 1909.

Batting.

Year.		Inn.	Not out.	Runs.	Most.	Aver.
1878	C. Bannerman, N.S.W.	31	1	723	133	24.10
1880	W. L. Murdoch, N.S.W.	19	1	465	*153	25.80
1882	W. L. Murdoch, N.S.W.	61	5	1711	*286	30.50
1884	W. L. Murdoch, N.S.W.	50	5	1378	211	30.60
1886	G. Giffen, S.A.	63	9	1453	119	26.90

1888	P. M‘Donnell, V.	62	1	1393	105	22.50
1890	W. L. Murdoch, N.S.W.	64	2	1459	*158	23.33
1893	H. Graham, V.	55	3	1492	219	28.36
1896	S. E. Gregory, N.S.W.	48	2	1464	154	31.38
1899	J. Darling, S.A.	56	9	1941	167	41.29
1902	V. T. Trumper, N.S.W.	53	0	2570	128	48.49
1905	W. W. Armstrong, V.	48	7	2002	*303	48.82
1909	V. S. Ransford	43	4	1778	190	45.58

* Not out.

Bowling.

Year.		O.	M.	R.	W.	Aver.
1878	T. W. Garrett, N.S.W.	296.2	144	394	38	10.30
1880	F. R. Spofforth, N.S.W.	240.8	82	396	46	8.60
1882	H. F. Boyle, V.	1200.14	525	1680	144	11.60
1884	F. R. Spofforth, N.S.W.	1544.32	649	2642	216	12.20
1886	G. Giffen, S.A.	1693.26	722	2711	159	17.05
1888	C. T. B. Turner, N.S.W.	2589.3	1222	3492	314	11.38
1890	C. T. B. Turner, N.S.W.	1651.1	724	2725	215	12.45
1893	C. T. B. Turner, N.S.W.	1148	450	2202	160	13.12
1896	T. R. M‘Kibbin, N.S.W.	647.1	198	1441	101	14.27
1899	H. Trumble, V.	1249.1	431	2618	142	18.43
1902	H. Trumble, V.	948	305	1998	140	14.27
1905	W. W. Armstrong, V.	1027	308	2288	130	17.60
1909	F. Laver	495.5	161	1048	70	14.97

The first English team to visit Australia was organized in 1862, and was captained by H. H. Stephenson. George Parr (1826-1891) took out the next in 1864, Dr E. M. Grace being the only amateur. In 1873 the Melbourne Club invited Dr W. G. Grace to take out an eleven, and three years later James Lillywhite conducted a team of professionals. On this tour for the first time colonials contended on equal terms, one match v. Australia being won by 4 wickets and the other lost by 45 runs. Lord Harris in the autumn of 1878 took a team of amateurs assisted by Ulyett and Emmett, winning 2 and losing 3 eleven-a-side encounters, Emmett's 137 wickets averaging 8 runs each. Shaw, Shrewsbury and Lillywhite jointly organized the expedition of 1881, when Australia won the second test match by 5 wickets. The Hon. Ivo Bligh (afterwards Lord Darnley) in 1882 took a fine team, which was crippled owing to an injury sustained by the bowler F. Morley. Four victories could be set against three defeats; Australia winning the only test match, owing to the batting of Blackham. Shaw's second tour in 1884 showed Barnes heading both batting and bowling averages, while six victories counterbalanced two defeats. In the third tour Shrewsbury became captain, but the English for the first time encountered the bowling of C. T. B. Turner, who took 27 wickets for 113 runs in two matches. Australia was twice defeated, the English captain batting in fine form. On this tour was played the Smokers v. Non-Smokers, when the latter scored 803 for 9 wickets (Shrewsbury 236, W. Bruce 131, Gunn 150), against the bowling of Briggs, Boyle, Lohmann, Palmer and Flowers. The winter of 1887 saw two English teams in Australia, one under Lord Hawke and G. F. Vernon, the other under Shrewsbury and Lillywhite. Both teams played well, the batting being headed by W. W. Read with an average of 65, and Shrewsbury with 58. The ill-success of Lord Sheffield's team in two out of three test matches did not disprove the great merits of his eleven. Dr W. G. Grace headed the

averages with 44, and received the best support from Abel and A. E. Stoddart, whilst Attewell, Briggs and Lohmann all possessed fine bowling figures. A. E. Stoddart's first team (in 1894) achieved immense success and was the best of all. In the first test match they went in against 586 runs and ultimately won by 10 runs, Ward making 75 and 117. Stoddart himself averaged 51, scoring 173 in the second test match, and A. C. MacLaren (who made 228 v. Victoria), Brown and Ward all averaged over 40. The last tour conducted by Stoddart proved less satisfactory, four of the five test matches being lost, and some friction being caused by various incidents. K. S. Ranjitsinhji, who averaged 60 and made 175 in a test match and 189 v. South Australia, and A. C. MacLaren, who scored five hundreds and averaged 54, were prominent, Hayward also doing good work; but the bowling broke down. Weakness in bowling was the cause of the ill success of A. C. MacLaren's side in 1901. After a brilliant victory by an innings and 124 runs at Sydney, the other four test matches were all lost. MacLaren himself batted magnificently, and so did Hayward and Tyldesley. Braund stood alone as an all-round man. The M.C.C. in 1903 officially despatched a powerful side led by P. F. Warner, and in every sense except the financial the success was complete. Three test matches were won and two lost, while two new records were set up, one by Rhodes obtaining 15 wickets at Melbourne, the other by R. E. Foster, who in seven hours of brilliant batting compiled 287. Tyldesley and Hayward both did good work as batsmen; Rhodes and Braund both bowled consistently. The catch-phrase about "bringing back the ashes" became almost proverbial; its origin is to be found in the *Sporting Times* in 1882 after Australia had defeated England at the Oval.

New Zealand.—Although cricket has not attained a degree of perfection in New Zealand commensurate with that in Australia, it is

keenly played. Lord Hawke sent out from England a team in 1902-1903 which won all the eighteen matches arranged.

Cricket in India.—Not only the English who live in India, but the natives also—Parsees, Hindus and Mahommedans alike—play cricket. A Parsee eleven visited England in 1884 and 1888.

South Africa.—South African cricketers visiting England are handicapped by playing on turf instead of on the matting wickets used in South Africa. The side which came over during the Boer War in 1901 won 13, lost 9, and drew 2 matches, playing a tie with Worcestershire, and showing marked improvement on the team which had visited England in 1894. E. A. Halliwell (b. 1864) proved a fine wicket-keeper, J. H. Sinclair (b. 1876) a good all-round cricketer, J. J. Kotze (b. 1879) a very fast bowler, and G. A. Rowe (b. 1872) clever with the ball. In 1904 more decided success was achieved, for on a more ambitious programme ten victories could be set against two defeats by Worcestershire and Kent, with a tie with Middlesex. The most important success was a victory by 189 runs over a powerful England eleven at Lord's, when R. O. Schwarz (b. 1875) scored 102 and 26, and took 8 wickets for 106, dismissing Ranjitsinhji twice. Kotze and Sinclair again bore the brunt of the attack. Of the English teams visiting South Africa, that taken by Lord Hawke in 1894 did not meet with such important opposition as the one he led in 1900, yet the side came back undefeated, having won all three test matches. P. F. Warner and F. Mitchell, with Tyldesley, were the chief run-getters, Haigh, Trott and Cuttell bowling finely. In the winter of 1905 the M.C.C. sent out a side under P. F. Warner, but it lost four out of the five test matches, F. L. Fane and J. N. Crawford being the most successful of the Englishmen, and G. C. White (1882) and A. D. Nourse proving themselves great colonial batsmen. In 1907 a representative South African team came to

England, and their improved status in the cricketing world was shown by the arrangement of test matches. In the winter of 1909-1910 an English team under Mr Leveson Gower went to South Africa, and played test matches.

West Indies.—West Indian cricketers toured in England in 1900, winning 5 matches and losing 8. The best batsman was C. A. Olivierre (b. 1876), who subsequently qualified for Derbyshire. The brunt of the bowling devolved on S. Woods and T. Burton (b. 1878). In 1897 teams under Lord Hawke and A. Priestly (b. 1865) both visited West Indies, Trinidad defeating both powerful combinations. R. S. Lucas (b. 1867) had in 1895 taken out a successful side. A much weaker combination in 1902 suffered five defeats but won 13 matches. B. J. T. Bosanquet, E. R. Wilson (b. 1879) and E. M. Dowson (b. 1880) were the chief performers. In 1906 another West Indian side visited England, but were not particularly successful.

America.—In the United States cricket has always had to contend with the popularity of baseball, and in Canada with the rival attractions of lacrosse. Nevertheless it has grown in popularity, Philadelphia being the headquarters of the game in the New World.

The Germantown, Belmont, Merion and Philadelphia Clubs play annually for the Halifax Cup, and the game is controlled by the Associated Cricket clubs of Philadelphia. In the neighbourhood of New York matches are arranged by the Metropolitan District Cricket League and the New York Cricket Association; similar organizations are the Northwestern, the California and the Massachusetts associations, while the Intercollegiate Cricket League consists of college teams representing Harvard, Pennsylvania and Haverford. R. S. Newhall (b. 1852) and D. S. Newhall (b. 1849) may almost claim to be the fathers of cricket in the United States; while D. W. Saunders (b. 1862) did

much for the game in Canada. Other eminent names in American cricket are A. M. Wood; H. Livingston, of the Pittsburg Club, who scored three centuries in one week in 1907; H. V. Hordern, University of Pennsylvania, a very successful bowler; J. B. King, who in 1906 made 344 not out for Belmont v. Merion, and who as a fast bowler proved most effective during two tours in England. At San Francisco in 1894 W. Robertson and A. G. Sheath compiled a total of 340 without the loss of a wicket, the former scoring 206 not out, and the latter 118 not out. A large number of English cricket teams have visited the United States and Canada. The first county to do so was Kent in 1904, in which year the Philadelphians also made a tour in England, in the course of which J. B. King (b. 1873) took 93 wickets at an average cost of 14 runs, and proved himself the best all-round man on the side. P. H. Clark (b. 1873), a clever fast bowler, and J. A. Lester (b. 1872), the captain of the team, also showed themselves to be cricketers of merit, while N. Z. Graves (b. 1880) and F. H. Bohlen (b. 1868) were quite up to English county form. The team did not, however, include G. S. Patterson (b. 1868), one of the best batsmen in America. The Philadelphians again visited Great Britain in 1908, when they won 7 out of 14 matches, one being drawn. On this tour King surpassed his former English record by taking 115 wickets, and Wood, who played one fine innings of 132, was the most successful of the American batsmen.

Other Countries.—The English residents of Portugal support the game, but were no match for a moderate English team that visited them in 1898. In Holland, chiefly at the Hague and Haarlem, cricket is played to a limited extent on matting wickets. Dutch elevens have visited England, and English elevens have crossed to Holland, the most important visit being that of the gentlemen of the M.C.C. in 1902, the Englishmen winning all the matches.

Professionalism.—The remuneration of the first-class English professionals is £6 per match, out of which expenses have to be paid; a man engaged on a ground to bowl receives from £2, 10s. to £3, 10s. a week when not away playing matches. A professional player generally receives extra reward for good batting or bowling, the amount being sometimes a fixed sum of £1 for every fifty runs, more frequently a sum awarded by the committee on the recommendation of the captain. Some counties give their men winter pay, others try to provide them with suitable work when cricket is over. A few get cricket in other countries during the English winter. For international matches professional players and "reserves" receive £20 each, though before 1896 the fee was only £10; players (and reserves) in Gentlemen v. Players at Lord's are paid £10. A good county professional generally receives a "benefit" after about ten years' service; but the amount of the proceeds varies capriciously with the weather, the duration of the match, and the attendance. In the populous northern counties of England benefits are far more lucrative than in the south, but £800 to £1000 may be regarded as a good average result. County clubs generally exercise some control over the sums received. Umpires are paid £6 a match; in minor games they receive about £1 a day.

Records.—Records other than those already cited may be added for reference. A schoolboy named A. E. J. Collins, at Clifton College in 1899, excited some interest by scoring 628 not out in a boy's match, being about seven hours at the wicket. C. J. Eady (b. 1870) scored 566 for Break o' Day v. Wellington in eight hours in 1902, the total being 911. A. E. Stoddart made 485 for Hampstead v. Stoics in 1886. In first-class cricket the highest individual score for a batsman is A. C. MacLaren's 424 for Lancashire v. Somerset at Taunton in 1895. Melbourne University scored 1094 against Essendon in March 1898, this being the highest authenticated total on record. M.C.C. and Ground

made 735 v. Wiltshire in 1888, the highest total at Lord's. In the match between A. E. Stoddart's team and New South Wales at Sydney in 1898, 1739 runs were scored, an aggregate unparalleled in first-class cricket. The highest total for an innings in a first-class match is 918 for N.S.W. v. South Australia in January 1901. Yorkshire scored 887 v. Warwickshire at Birmingham in May 1896. The lowest total in a first-class match is 12 by Northamptonshire v. Gloucestershire in June 1907. The record for first wicket is 472 by S. Colman and P. Coles at Eastbourne in 1892. The longest partnership on record is 623 by Captain Oates and Fitzgerald at the Curragh in 1895. The best stand that has been made for the last wicket in a first-class match is 230 runs, which was run up by R. W. Nicholls and Roche playing for Middlesex v. Kent at Lord's in 1899.

The "averages" of individual players for batting and bowling annually excite a good deal of interest, and there is a danger that some players may think too much of their averages and too little of the sporting side of the game. Any comparison of the highest averages during a series of years would be misleading, owing to improvements in grounds, difference of weather, and the variations in the number of innings.

The following table of aggregates, compiled from the figures to the end of 1905, affords a summary of the records of a select list of historic cricketers; it will serve to supplement some details already given above about them and others.

Batting.

	Innings.	Not Out.	Runs.	Most.	Aver.

K. S. Ranjitsinhji	448	57	22,277	285	56.3
C. B. Fry	481	29	22,865	244	50.4
T. Hayward	667	61	25,225	315	41.3
J. T. Tyldesley	491	38	18,683	250	41.1
Dr W. G. Grace	1463	103	54,073	344	39.1
A. Shrewsbury	784	88	25,819	267	37.6
R. Abel	964	69	32,810	357	36.5
A. C. MacLaren	526	37	17,364	424	35.2
G. H. Hirst	626	92	18,615	341	34.4
Hon. F. S. Jackson	490	35	15,498	160	34.2
W. Gunn	821	66	25,286	273	33.3
W. W. Read	739	53	22,919	328	33.2
A. E. Stoddart	513	16	16,081	221	32.2

Bowling.

	Overs.	Maid.	Runs.	Wkts.	Aver.
A. Shaw	22,830	12,803	21,887	1916	11.8
F. R. Spofforth	5,342	2,168	8,773	682	12.5
C. T. B. Turner	5,388	2,396	8,419	649	12.6
T. Emmett	14,672	6,870	20,811	1523	13.1
G. Lohmann	15,196	6,508	23,958	1734	13.1
F. Morley	12,610	6,239	15,938	1213	13.1
E. Peate	11,669	5,593	14,299	1061	13.5
W. Rhodes	11,014	3,476	23,336	1564	14.1
W. Attewell	22,461	11,408	28,671	1874	15.5
J. Briggs	20,300	8,275	34,411	2161	15.2
R. Peel	18,255	7,856	27,795	1733	16.6

S. Haigh	7,749	2,279	18,516	1102	16.8
J. T. Hearne	19,895	7,395	40,532	2350	17.5
W. H. Lockwood	8,733	2,241	22,981	1273	18.6
T. Richardson (1904)	14,474	3,835	38,126	2081	18.6
Dr W. G. Grace (1904)	28,502	10,892	50,441	2730	18.1
G. H. Hirst	11,586	3,525	27,028	1377	19.8

BIBLIOGRAPHY.—The chief works on cricket are, apart from well-known annuals:—H. Bentley's *Scores from 1786 to 1822* (published in 1823); John Nyren's *Young Cricketer's Tutor* (1833); N. Wanostrocht's *Felix on the Bat* (various editions, 1845-1855); F. Lillywhite's *Cricket Scores and Biographies, 1746 to 1840* (1862); Rev. J. Pycroft's *Cricket Field* (various editions, 1862-1873); C. Box's *Theory and Practice of Cricket* (1868); F. Gale's *Echoes from Old Cricket Fields* (1871, new ed. 1896); *Marylebone Cricket Club Scores and Biographies* (1876), a continuation of Lillywhite's *Scores and Biographies*; C. Box's *English Game of Cricket* (1877); *History of a Hundred Centuries*, by W. G. Grace (1895); *History of the Middlesex County Cricket Club*, by W. J. Ford (1900); *History of the Cambridge University Cricket Club*, by W. J. Ford (1902); *History of Yorkshire County Cricket*, by R. S. Holmes (1904); *History of Kent County Cricket*, ed. by Lord Harris, (1907); *Annals of Lord's*, by A. D. Taylor (1903); *Curiosities of Cricket*, by F. S. Ashley Cooper (1901); "Cricket," by Lord Hawke, in *English Sport*, by A. E. T. Watson (1903); *Cricket*, edited by H. G. Hutchinson (1903); *Cricket Form at a Glance*, by Home Gordon (1903); *Cricket* (Badminton Library), by A. G. Steel and Hon. R. H. Lyttleton (1904); *Old English Cricketers*, by Old Ebor (1900); *Cricket in Many Climes*, by P. F. Warner (1903); *How We Recovered the Ashes*, by P. F. Warner (1904); *England v. Australia*, by J. N. Pentelow (records from 1877 to

1904) (1904); *The Jubilee Book of Cricket*, by K. S. Ranjitsinhji (1897).

CRICKHOWELL, a market town of Brecknockshire, Wales, 14 m. E. of Brecon, beautifully situated on the left bank of the Usk, which divides it from Llangattock. Pop. (1901) 1150. The nearest railway stations are Govilon (5 m.) and Gilwern (4 m.) on the London & North-Western railway, but a mail and passenger motor service running between Abergavenny and Brecon passes through the town. It is also served by the Brecon & Newport Canal, which passes through Llangattock about a mile distant. Agriculture is almost the sole industry of the district. The town derives its name from a British fortress, Crûg Hywel, commonly called Table Mountain, about 2 m. N.N.E. of the town. Crickhowell Castle, of which only a tower remains, probably dated from the Norman conquest of the country. The manor of Crickhowell used to be regarded as a borough by prescription, but there is no record of its ever having possessed any municipal institutions. The church is in transitional Decorated style.

CRICKLADE, a market town in the Cricklade parliamentary division of Wiltshire, England, 9 m. N.W. of Swindon, on the Midland & South-Western Junction railway. Pop. (1901) 1517. It is pleasantly situated in the

plain which borders the south bank of the Thames, not far from the Thames & Severn Canal. The cruciform church of St Sampson is mainly Perpendicular, with a fine ornate tower, and an old rood-stone in its churchyard. The small church of St Mary has an Early English tower, Perpendicular aisles and a Norman chancel-arch. There is some agricultural trade.

Legend makes Cricklade the abode of a school of Greek philosophers before the Roman conquest, and the name is given as "Greeklade" in Drayton's *Polyolbion*. It owed its importance in Saxon times to its position at the passage of the Thames. During the revolt of Æthelwald the Ætheling in 905 he and his army "harried all the Mercian's land until they came to Cricklade and there they went over the Thames" (Anglo-Sax. Chron. *sub anno*), and in 1016 Canute came with his army over the Thames into Mercia at Cricklade (ibid.). There was a mint at Cricklade in the time of Edward the Confessor and William I., and William of Dover fortified a castle here in the reign of Stephen. In the reign of Henry III. a hospital dedicated to St John the Baptist was founded at Cricklade, and placed under the government of a warden or prior. Cricklade was a borough by prescription at least as early as the Domesday Survey, and returned two members to parliament from 1295 until disfranchised by the Redistribution Act of 1885. The borough was never incorporated, but certain liberties, including exemption from toll and passage, were granted to the townsmen by Henry III. and confirmed by successive sovereigns. In 1257 Baldwin de Insula obtained a grant of a Thursday market, and an annual three days' fair at the feast of St Peter ad Vincula. The market was subsequently changed to Saturday, and was much frequented by dealers in corn and cattle, but is now inconsiderable. During the 14th century Cricklade formed part of the dowry of the queens of England. In the reign of Henry VI. the lordship was acquired by the Hungerford family, and in 1427 Sir Walter Hungerford granted the reversion

of the manor to the dean and chapter of Salisbury cathedral to aid towards the repair of their belfry.

CRIEFF, a police burgh of Perthshire, Scotland, capital of Strathearn, 17¾ m. W. of Perth by the Caledonian railway. Pop. (1901) 5208. Occupying the southern slopes of a hill on the left bank of the Earn, here crossed by a bridge, it practically consists of a main street, with narrower streets branching off at right angles. Its climate is the healthiest in mid-Scotland, the air being pure and dry. Its charter is said to date from 1218, and it was the seat of the courts of the earls of Strathearn till 1747, when heritable jurisdictions were abolished. A Runic sculptured stone, believed to be of the 8th century, and the old town cross stand in High Street, but the great cattle fair, for which Crieff was once famous, was removed to Falkirk in 1770. It was probably in connexion with this market that the "kind gallows of Crieff" acquired their notoriety, for they were mostly used for the execution of Highland cattle-stealers. The principal buildings are the town hall, tolbooth, public library, assembly rooms, mechanics' institute, Morison's academy (founded in 1859), and Strathearn House, a hydropathic establishment built on an eminence at the back of the town, and itself sheltered by the Knock of Crieff (911 ft. high). The industries consist of manufactures of cotton, linen, woollens and worsteds, and leather. Drummond Castle, about 3 m. S., is celebrated for its gardens. They cover an area of 10 acres, are laid out in terraces, and illustrate Italian, Dutch and French styles. They were planned by the 2nd earl of Perth (d. 1662), and take rank with the most magnificent in the United Kingdom. The keep of the castle dates from 1490, and much of the original building was

demolished in 1689, a few years after its siege by Cromwell. The present structure was erected subsequent to the extinction of the Jacobite rebellion.

CRIME (Lat. *crimen*, accusation), the general term for offences against the CRIMINAL LAW (*q.v.*). Crime has been defined as "a failure or refusal to live up to the standard of conduct deemed binding by the rest of the community." Sir James Stephen describes it as "some act or omission in respect of which legal punishment may be inflicted on the person who is in default whether by acting or omitting to act." Such action or neglect of action may be injurious or hurtful to society. It is a wrong or tort, to be prevented and corrected by the strong arm of the law.

Crimes vary in character with times and countries. Under different circumstances of place and custom, that which at one time is denounced as a crime, at another passes as a meritorious act. It was once an imperative duty for the family to avenge the death of a kinsman, and the blood feud had a sanction that made killing no murder. Again, among primitive tribes to make away with parents at an advanced age or suffering from an incurable disease was a filial duty. Polyandry was sometimes encouraged, and cannibalism practised with general approval; religious sentiment elevated into heinous crimes, blasphemy, heresy, sacrilege, sorcery and even science when it ran counter to accepted dogmas of the church. Offences multiplied when people gathered into communities and the rights of property and of personal security were understood and established. The law of the strongest might still interfere with individual ownership; the weakest went to the wall; authority, whether exercised by one master or by the combined government

of the many, was resisted, and this resistance constituted crime. As civilization spread and the bulk of the population settled into orderliness, society, for its own comfort, convenience and protection, would not tolerate the infraction of its rules, and rising against all law-breakers decreed reprisals against them as the common enemy. Then began that constant warfare between criminals and the forces of law and order which has been continuously waged through the centuries with varying degrees of bitterness.

The combat with crime was long waged with great cruelty. Extreme penalties were thought to constitute the best deterrent, and the principle of vengeance chiefly inspired the penal law. The harshness of ancient codes makes a more humane age shudder. It was the custom to hang or decapitate, or otherwise take life in some more or less barbarous fashion, on the smallest excuse. The final act was preceded by hideous torture. It was performed with the utmost barbarity. Victims were put to death by breaking on the wheel, burning at the stake, by dismemberment and flaying or boiling alive. These were the aggravations of the original idea of riddance, of checking crime by the absolute removal of the offender. Only slowly and gradually milder methods came into force. Revenge and retaliation were no longer the chief aims, the law had a larger mission than to coerce the criminal and force him by severity to mend his ways. To withdraw him for a lengthened period from the sphere of his baneful activity was something; to subject him to more or less irksome processes, to solitary confinement upon short diet, deprived of all the solaces of life, with severe labour, were sharp lessons limited in effect to those actually subjected to them, but too remote to deter the outside crowd of potential wrongdoers. The higher duty of the administrator is to utilize the period of detention by labouring to reform the criminal subjects and send them out from gaol reformed characters. If no very remarkable success has been achieved in this direction, it is obviously the right aim, and it is being more and more steadfastly pursued. But it is

generally accepted in principle that to eradicate criminal proclivities and cut off recruits from the permanent army of crime the work must be undertaken when the subject is of an age susceptible of reform; hence the extreme value attaching to the more enlightened treatment of crime in embryo, a principle becoming more and more largely accepted in practice among civilized nations.

It may safely be asserted that the germ of crime is universally present in mankind, ever ready to show under conditions favourable to its growth. Children show criminal tendencies in their earliest years. They exhibit evil traits, anger, resentment, mendacity; they are often intensely selfish, are strongly acquisitive, greedy of gain, ready to steal and secrete things at the first opportunity. Happily the fatal consequences that would otherwise be inevitable are checked by the gradual growth of inhibitory processes, such as prudence, reflection, a sense of moral duty, and in many cases the absence of temptation. From this Dr Nicholson deduces that "in proportion as this development is prevented or stifled, either owing to an original brain defect or by lack of proper education or training, so there is the risk of the individual lapsing into criminal-mindedness or into actual crime." In the lowest strata of society this risk is largely increased from the conditions of life. The growth of criminals is greatly stimulated where people are badly fed, morally and physically unhealthy, infected with any forms of disease and vice. In such circumstances, moreover, there is too often the evil influence of heredity and example. The offspring of criminals are constantly impelled to follow in their parents' footsteps by the secret springs of nature and pressure of childish imitativeness. The seed is thrown, so to speak, into a hot-bed where it finds congenial soil in which to take root and flourish.

Wherever crime shows itself it follows certain well-defined lines and has its genesis in three dominant mental processes, the result of marked propensities. These are malice, acquisitiveness and lust. Malicious crimes

may be amplified into offences against the person originating in hatred, resentment, violent temper, and rising from mere assaults into manslaughter and murder. Crimes of greed and acquisitiveness cover the whole range of thefts, frauds and misappropriation; of larcenies of all sorts; obtaining by false pretences; receiving stolen goods; robberies; house-breaking, burglary, forgery and coining. Crimes of lust embrace the whole range of illicit sexual relations, the result of ungovernable passion and criminal depravity. The proportions in which these three categories are manifested have been worked out in England and Wales to give the following figures. The percentage in any 100,000 of the population is:—

Crimes of malice	15%
Crimes of greed	75%
Crimes of lust	10%

The members of these categories do not form distinct classes; their crimes are interdependent and constantly overlap. Crime in many is progressive and passes through all the stages from minor offences to the worst crimes. Murder—the culminating point of malice—is constantly preceded by petty larceny; theft by forcible entry; and robbery is associated with violence and armed resistance to capture. Criminality rising into its highest development shows itself under many forms. It is instinctive, passionate, accidental, deliberate and habitual, the outcome of abnormal appetite, of weak and disordered moral sense. The causation of crime varies, but a predominating motive is idleness, leading to the predatory instincts of gain easily acquired without the labour of continuous effort. To deprive the more industrious or more happily placed of their hard-won earnings or possessions, inspires the bulk of modern serious crime. It no doubt has produced one peculiar feature in modern crime: the extensive scale on which it is carried out. The greatest frauds are now commonly perpetrated; great robberies are planned in one capital and executed in another. The whole is worked by wide associations of cosmopolitan criminals.

Other features of modern crime are especially interesting. It is extraordinarily precocious. Children of quite tender years commit murders, and boys and girls are frequently to be met with as professional thieves. Again, the comparative proportions of crime in the two sexes may be considered. Everywhere women are less criminal than men. Naturally they have fewer facilities for committing crimes of violence, although they have offences peculiar to their sex, such as infanticide, and are more frequently guilty of poisoning than men by 70% against 30%. Statistics presented to the Prison Congress at Stockholm fix the percentage of female criminals at 3% in Japan, the East generally, South America and some parts of North America. In some states of the American Union it is 10%; in China, 20%; in Europe generally it varies between 10% and 21%. In France the proportion of accused women is fifteen to eighty-five men. In Great Britain it is now one in four, but has been less. The total sentenced in 1905-1906 to penal servitude and imprisonment was 139,389 men and 44,294 women, the balance being made up by summary convictions. The curious fact in female crime is that one-seventh of the women committed to prison had already been convicted from eleven to twenty times. It has been well said from the above proportions that women are less criminal according to the figures, because when a woman wants a crime committed she can generally find a man to do it for her.

It has often been debated whether or not prison methods react upon the criminality of the country; whether, in other words, severity of treatment *deters*, while milder methods encourage the wrongdoers to despise the penalties imposed by the law. Evidence for and against the verdict may be drawn from the whole civilized world. In England, as judged by the increase or decrease of the prison population, it might be supposed that the prison system was at one time effective in diminishing crime. Between 1878 and 1891 there was a steady decrease in numbers because of it. More recently there has been an appreciable increase in the number of crimes and

proportionately of those imprisoned. The figures for 1906 showed a distinct increase in criminality for that year as compared with the years immediately preceding. The proportion of indictable offences had increased in 1906 from 59,079 as against 50,494 in 1899, or in the proportion of 171.01 per 100,000 of the population as against 158.97, a very marked increase over earlier years. Nevertheless the figures for 1906, although high, are by no means the highest, as on eight occasions during the fifty odd years for which statistics were available in 1909 the total crimes exceeded 60,000, and in the quinquennial period 1860-1864 the annual average was 280 per 100,000 as compared with 171.01 for 1906 and 175 for the quinquennial period 1902-1906. The quality of the crime varied, and while offences against property have increased, those against the person have constantly fallen. Quite half the whole number of crimes were committed by old offenders (see RECIDIVISM).

Statistics have not been kept with the same care in all other countries, but some authentic figures may be quoted for France, where the number of thefts increased while offences against the person diminished. In Belgium there has been a satisfactory decrease in recent years. In Prussia the prison population has on the whole increased, but there has been a slight diminution in more serious crime. Some very noticeable figures are forthcoming from the United States, and comparison is possible of the relative amount of crime in the two countries, America and England. Here the want of statistics covering a large period is much to be regretted. On the general question serious crime in the ten years between 1880 and 1890 slightly increased, while petty crime was very considerably less during the period. Charges for homicide have been much more numerous. There were in 1880, 4608, or a ratio of 9.1 to 100,000 of the population; but in 1890 these offences rose to 7351, or a ratio of 11.7. Comparing America with England, it has been calculated in round numbers that the proportion of prisoners to the general population was in the United States as 1 to every

759, and in England 1 to every 1764 persons. As regards the more serious crimes the number in English convict prisons was as 1 to 10,000, and in the American state prisons (the corresponding institutions) the ratio was 1 to every 1358. In the lesser prisons, *i.e.* the English local prisons and the American city or county gaols, the numbers more nearly approximate, being in England 1 to 2143 and in America 1 to 1721. It has been argued that much of the crime in America is attributable to the preponderance of foreign immigrants, but the ratio of native born prisoners is that of 1237 to the million, of foreign born prisoners 1777 to the million.

AUTHORITIES.—A. MacDonald, *Criminology* (New York, 1893); A. Drähms, *The Criminal* (New York, 1900); E. Ferri, *La Sociologie criminelle*, trans. Ferrier (Paris, 1905); all these contain extensive bibliographies. See also under CRIMINOLOGY.

(A. G.)

CRIMEA (ancient *Tauris* or Tauric Chersonese, called by the Russians by the Tatar name *Krym* or *Crim*), a peninsula on the north side of the Black Sea, forming part of the Russian government of Taurida, with the mainland of which it is connected by the Isthmus of Perekop (3-4 m. across). It is rudely rhomboid in shape, the angles being directed towards the cardinal points, and measures 200 m. between 44° 23′ and 46° 10′ N., and 110 m. between 32° 30′ and 36° 40′ E. Its area is 9700 sq. m.

Its coasts are washed by the Black Sea, except on the north-east, where is the Sivash or Putrid Sea, a shallow lagoon separated from the Sea of Azov by the Arabat spit of sand. The shores are broken by several bays and harbours—on the west side of the Isthmus of Perekop by the Bay of Karkinit; on the south-west by the open Bay of Kalamita, on the shores of which the allies landed in 1854, with the ports of Eupatoria, Sevastopol and Balaklava; by the Bay of Arabat on the north side of the Isthmus of Yenikale or Kerch; and by the Bay of Kaffa or Feodosiya (Theodosia), with the port of that name, on the south side of the same. The south-east coast is flanked at a distance of 5 to 8 m. from the sea by a parallel range of mountains, the Yaila-dagh, or Alpine Meadow mountains, and these are backed, inland, by secondary parallel ranges; but 75% of the remaining area

consists of high arid prairie lands, a southward continuation of the Pontic steppes, which slope gently north-westwards from the foot of the Yaila-dagh. The main range of these mountains shoots up with extraordinary abruptness from the deep floor of the Black Sea to an altitude of 2000 to 2500 ft., beginning at the south-west extremity of the peninsula, Cape Fiolente (anc. *Parthenium*), supposed to have been crowned by the temple of Artemis in which Iphigeneia officiated as priestess. On the higher parts of this range are numerous flat mountain pastures (Turk, *yailas*), which, except for their scantier vegetation, are analogous to the *almen* of the Swiss Alps, and are crossed by various passes (*bogaz*), of which only six are available as carriage roads. The most conspicuous summits in this range are the Demir-kapu or Kemal-egherek (5040 ft.), Roman-kosh (5060 ft.), Chatyr-dagh (5000 ft.), and Karabi-yaila (3975 ft.). The second parallel range, which reaches altitudes of 1500 to 1900 ft., likewise presents steep crags to the south-east and a gentle slope towards the north-west. In the former slope are thousands of small caverns, probably inhabited in prehistoric times; and several rivers pierce the range in picturesque gorges. A valley, 10 to 12 m. wide, separates this range from the main range, while another valley 2 to 3 m. across separates it from the third parallel range, which reaches altitudes of only 500 to 850 ft. Evidences of a fourth and still lower ridge can be traced towards the south-west.

A number of short streams, none of them anywhere navigable, leap down the flanks of the mountains by cascades in spring, *e.g.* the Chernaya, Belbek, Kacha and Alma, to the Black Sea, and the Salghir, with its affluent, the Kara-su, to the Sivash lagoon.

In point of climate and vegetation there exist marked differences between the open steppes and the south-eastern littoral, with the slopes of the Yaila-dagh behind it. The former, although grasses and Liliaceae grow on them in great variety and luxuriance in the early spring, become completely parched

up by July and August, while the air is then filled with clouds of dust. There also high winds prevail, and snowstorms, hailstorms and frost are of common occurrence. Nevertheless this region produces wheat and barley, rye and oats, and supports numbers of cattle, sheep and horses. Parts of the steppes are, however, impregnated with salt, or studded with saline lakes; there nothing grows except the usual species of *Artemisia* and *Salsola*. As a rule water can only be obtained from wells sunk 200 to 300 ft. deep, and artesian wells are now being bored in considerable numbers. All over the steppes are scattered numerous *kurgans* or burial-mounds of the ancient Scythians. The picture which lies behind the sheltering screen of the Yaila-dagh is of an altogether different character. Here the narrow strip of coast and the slopes of the mountains are smothered with greenery. This Russian Riviera stretches all along the south-east coast from Cape Sarych (extreme S.) to Feodosiya (Theodosia), and is studded with summer sea-bathing resorts—Alupka, Yalta, Gursuv, Alushta, Sudak, Theodosia. Numerous Tatar villages, mosques, monasteries, palaces of the Russian imperial family and Russian nobles, and picturesque ruins of ancient Greek and medieval fortresses and other buildings cling to the acclivities and nestle amongst the underwoods of hazel and other nuts, the groves of bays, cypresses, mulberries, figs, olives and pomegranates, amongst the vineyards, the tobacco plantations, and gardens gay with all sorts of flowers; while the higher slopes of the mountains are thickly clothed with forests of oak, beech, elm, pines, firs and other Coniferae. Here have become acclimatized, and grow in the open air, such plants as magnolias, oleanders, tulip trees, bignonias, myrtles, camellias, mimosas and many tender fruit-trees. Vineyards cover over 19,000 acres, and the wine they yield (3½ million gallons annually) enjoys a high reputation. Fruits of all kinds are produced in abundance. In some winters the tops of the mountains are covered with snow, but snow seldom falls to the south of them, and ice, too, is rarely seen in the same districts. The heat of summer is moderated by breezes off the

sea, and the nights are cool and serene; the winters are mild and healthy. Fever and ague prevail in the lower-lying districts for a few weeks in autumn. Dense fogs occur sometimes in March, April and May, but seldom penetrate inland. The difference of climate between the different parts of the Crimea is illustrated by the following data: annual mean, at Melitopol, on the steppe N. of Perekop, 48° Fahr.; at Simferopol, just within the mountains, 50°; at Yalta, on the south-east coast, 56.5°; the respective January means being 20°, 31° and 39.5°, and the July means 74°, 70° and 75.5°. The rainfall is small all over the peninsula, the annual average on the steppes being 13.8 in., at Simferopol 17.5, and at Yalta 18 in. It varies greatly, however, from year to year; thus at Simferopol it ranges between the extremes of 7.5 and 26.4 in.

Other products of the Crimea, besides those already mentioned, are salt, porphyry and limestone, and ironstone has recently been brought to light at Kerch. Fish abound all round the coast, such as red and grey mullet, herring, mackerel, turbot, soles, plaice, whiting, bream, haddock, pilchard, a species of pike, whitebait, eels, salmon and sturgeon. Manufacturing industries are represented by shipbuilding, flour-mills, ironworks, jam and pickle factories, soap-works and tanneries. The Tatars excel in a great variety of domestic industries, especially in the working of leather, wool and metal. A railway, coming from Kharkov, crosses the peninsula from north to south, terminating at Sevastopol and sending off branch lines to Theodosia and Kerch.

The bulk of the population consist of Tatars, who, however, are racially modified by intermarriage with Greeks and other ethnic elements. The remainder of the population is made up of Russians, Germans, Karaite Jews, Greeks and a few Albanians. The total in 1897 was 853,900, of whom only 150,000 lived in the towns. Simferopol is the chief town; others of

note, in addition to those already named, are Eupatoria and Bakhchisarai, the old Tatar capital.

History.—The earliest inhabitants of whom we have any authentic traces were the Celtic Cimmerians, who were expelled by the Scythians during the 7th century B.C. A remnant, who took refuge in the mountains, became known subsequently as the Tauri. In that same century Greek colonists began to settle on the coasts, *e.g.* Dorians from Heraclea at Chersonesus, and Ionians from Miletus at Theodosia and Panticapaeum (also called Bosporus). Two centuries later (438 B.C.) the archon or ruler of the last-named assumed the title of king of Bosporus, a state which maintained close relations with Athens, supplying that city with wheat and other commodities. The last of these kings, Paerisades V., being hard pressed by the Scythians, put himself under the protection of Mithradates VI., king of Pontus, in 114 B.C. After the death of this latter sovereign his son Pharnaces, as a reward for assistance rendered to the Romans in their war against his father, was (63 B.C.) invested by Pompey with the kingdom of Bosporus. In 15 B.C. it was once more restored to the king of Pontus, but henceforward ranked as a tributary state of Rome. During the succeeding centuries the Crimea was overrun or occupied successively by the Goths (A.D. 250), the Huns (376), the Khazars (8th century), the Byzantine Greeks (1016), the Kipchaks (1050), and the Mongols (1237). In the 13th century the Genoese destroyed or seized the settlements which their rivals the Venetians had made on the Crimean coasts, and established themselves at Eupatoria, Cembalo (Balaklava), Soldaia (Sudak), and Kaffa (Theodosia), flourishing trading towns, which existed down to the conquest of the peninsula by the Ottoman Turks in 1475. Meanwhile the Tatars had got a firm footing in the northern and central parts of the peninsula as early as the 13th century, and after the destruction of the Golden Horde by Tamerlane they founded an independent khanate under a descendant of Jenghiz Khan, who is known as

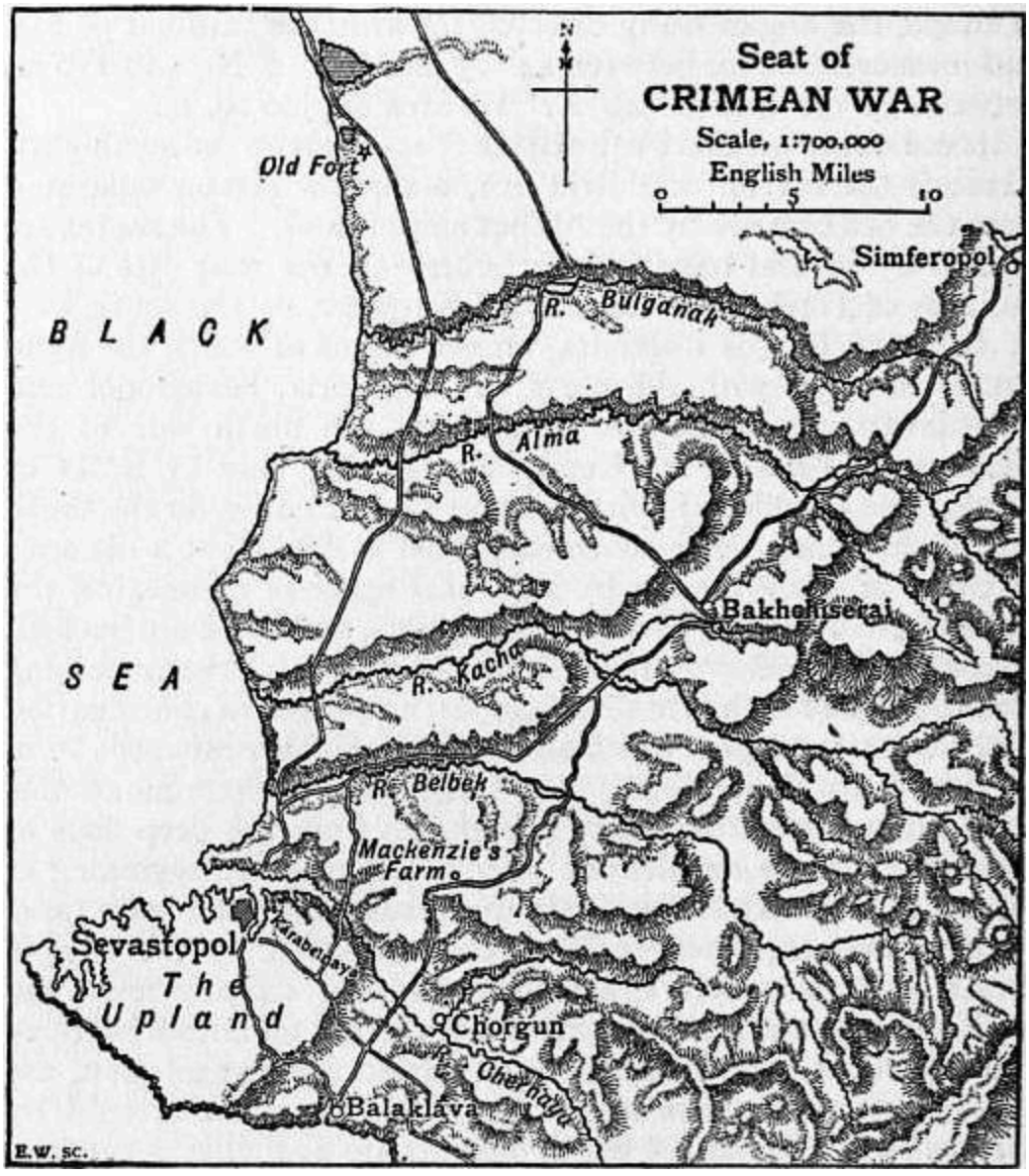
Hadji Ghirai. He and his successors reigned first at Solkhat (Eski-krym), and from the beginning of the 15th century at Bakhchi-sarai. But from 1478 they ruled as tributary princes of the Ottoman empire down to 1777, when having been defeated by Suvarov they became dependent upon Russia, and finally in 1783 the whole of the Crimea was annexed to the Russian empire. Since that date the only important phase of its history has been the Crimean War of 1854-56, which is treated of under a separate article. At various times, *e.g.* after the acquisition by Russia, after the Crimean War of 1854-56, and in the first years of the 20th century, the Tatars emigrated in large numbers to the Ottoman empire.

See *Antiquités du Bosphore cimmérien* (3 vols., St Petersburg, 1854); C. Bossoll, *The Beautiful Scenery of the Crimea* (52 large drawings, London, 1855-1856); P. Brunn, *Notices hist. et topogr. concernant les colonies italiennes en Gazarie* (St Petersburg, 1866); J. B. Telfer, *The Crimea and Transcaucasia* (2 vols., London, 2nd ed., 1877); F. Remy, *Die Krim in ethnographischer, landschaftlicher und hygienischer Beziehung* (Leipzig, 1872); Joseph, Baron von Hammer-Purgstall, *Geschichte der Chane der Krim unter osmanischer Herrschaft* (Vienna, 1856); M. G. Canale, *Della Crimea e dei suoi dominatori dalle sue origini fino al trattato di Parigi* (3 vols., Genoa, 1855-1856); and Sir Evelyn Wood, *The Crimea in 1854 and 1894* (London, 1895). (See also BOSPORUS CIMMERIUS.)

(P. A. K.; J. T. BE.)

CRIMEAN WAR. The war of 1853-56, usually known by this name, arose from causes the discussion of which will be found under the heading TURKEY: *History*. When Turkey, after a period of irregular fighting, declared war on Russia in October 1853, Great Britain and France (subsequently assisted by Sardinia) intervened in the quarrel. At first this intervention was represented merely by the presence of an allied squadron in the Bosporus, but the storm of indignation aroused in Great Britain and France by the destruction of the Turkish fleet at Sinope (30th November) soon impelled these powers to more active measures. On the 27th of January 1854 they declared war on the tsar, and prepared to carry their armaments to the Danube. In this, the main, theatre of war, the Turks had hitherto proved quite capable of holding their own. The Russian commander, Prince Michael Gorchakov, had crossed the Pruth with two corps early in July 1853, and had overrun Moldavia and Wallachia without difficulty. Omar Pasha, however, disposing of superior forces, was able to check any further advance. During October, November and December the Turks won a succession of actions, of which that at Oltenitza (Nov. 4th) may be particularly mentioned, and a little later Gorchakov found himself compelled to fight at Cetatea (Tchetati) before reinforcements could come up. The defeat he sustained was for the time being decisive (6th Jan. 1854). Three months later, the Russians, now under command of the veteran Prince Paskievich, took the offensive in great force. Crossing the Danube near its mouth at Galatz and Braila, they advanced through the Dobrudja and closed upon the fortress of Silistria, which offered a strong and steady resistance, with an effect all the greater as the Turks from the side of Shumla, now supported by the leading British and French brigades at Varna, prevented a close investment. The Turks, however, avoided a decisive encounter, and the stormers stood ready in the trenches before Silistria, when the siege was suddenly raised. The decision had passed into other hands. The tsar had learned that the Austrian army of observation in Transylvania, 50,000

strong under Feldzeugmeister Hess, was about to enforce the wishes of the "Four Powers." The Russian offensive was at an end, the army hastily fell back, and on the 2nd of August 1854 the last man recrossed the Pruth. The principalities were at once occupied by Hess.



The Invasion of the Crimea.—The primary object of the war had thus easily been obtained. But Great Britain and France were by no means content with a triumph that left untouched the vast resources of an enemy who was certain to employ them at the next opportunity. The two nations felt that Sevastopol, the home of the Black Sea fleet, the port whence Admiral Nachimov had sailed for Sinope, must be crippled for some years at least, and as early as June 29th Lord Raglan and Marshal Saint Arnaud, the allied commanders of England and France, had received instructions to "concert measures for the siege of Sevastopol." Dynastic considerations reinforced the arguments of policy and popular opinion in the case of France; in Great Britain soldier and civilian alike saw the menace of a Russian Mediterranean fleet in the unfinished forts and busy dockyards. The popular strategy for once coincided with the views of the responsible leaders. Yet there is no sign that either the commanders on the spot or their governments realized the magnitude of the undertaking. Few but the most urgently necessary preparations were made, and cholera, breaking out virulently amongst the French at this time, reduced the army at Varna, and even the fleet at sea, to impotence. The troops were so weakened that, even in September, the five-mile march from camp to transport exhausted most of the men. Heavy weather still further delayed the start, and it was not until the 7th of September that the expedition began to cross the Black Sea. One hundred and fifty war-vessels and transports conveyed the army, which, guarded on all sides by the fighting fleet, crossed without incident and drew up on the Crimean coast on September 13th. Tactical considerations prevailed in the choice of place. The landlocked harbours south of Sevastopol were for the time being neglected, and a spot known as Old Fort preferred, because the long beach, the heavy metal of the ships' broadsides, and a line of lagoons covering the front offered singularly favourable conditions for the delicate operation of disembarkation. Still, on this side of Sevastopol there was no good harbour, and it is quite open to question

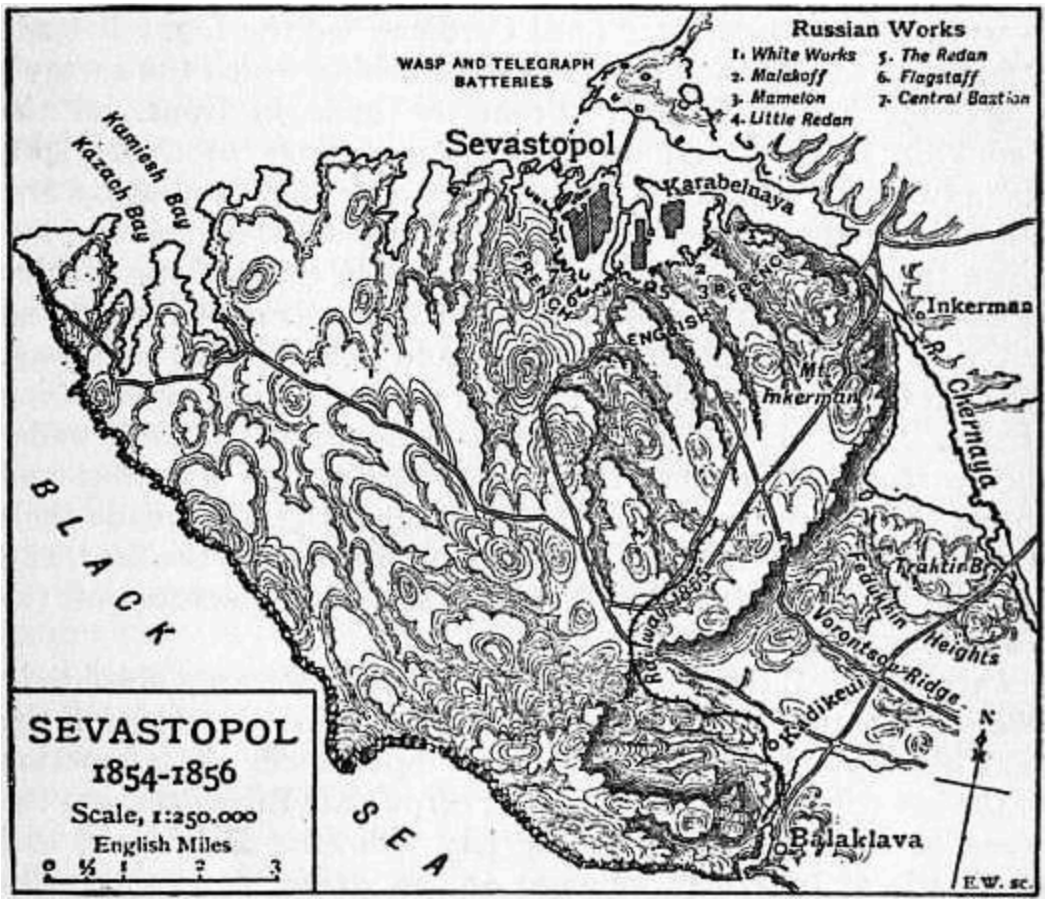
whether in this case the strategic necessities of the situation were not neglected in favour of purely tactical and temporary advantages. As a matter of fact no opposition was offered to the landing, but the weather prevented the disembarkation being completed until the 18th. St Arnaud and Raglan had at this time under their orders 51,000 British, French and Turkish infantry, 1000 British cavalry, and 128 guns, and on the 19th this force (less some detachments) began the southward march in order of battle, the British (who alone had their cavalry present) on the exposed left flank, the French next the sea, the fleet moving in the same direction parallel to the troops.

The Alma.—Old Fort was beyond the reach of Menshikov, the Russian commander, but, as the fortress communicated with the interior of Russia via Kerch and Simferopol, it was to be expected that he would either accept battle on the Sevastopol road, or cover Simferopol by a flank attack on Lord Raglan. Both these contingencies were provided for by the order of march, and in due course it was ascertained that the Russians adopted the former alternative, and barred the Sevastopol road on the heights of the river Alma. Menaced by the guns of the fleet, Menshikov had wheeled back his left, and at the same time he strengthened his right in order to cover the Simferopol road. From this it followed naturally that the brunt of the attack fell upon the British divisions, whilst the French, nearer the sea, struck to some extent *dans le vide*. The two commanders, after a reconnaissance, decided upon their plan. The French divisions in echelon from the right were to cross the river and force Menshikov inwards, whilst the British were to move straight to their front against the strongest part of the Russian line. Substantially this plan was carried out on the 20th of September. Owing to want of men (he had but 36,400 against over 50,000) Menshikov was unable to hold his left wing very strongly, and the French were scarcely checked save by physical obstacles; but opposite the British force the ground sloped glacis-wise up to the Russian line, and nothing but their iron discipline, the best heritage of

the Peninsular War, brought them victorious to the crest of Kurghane hill. The Russians had no option but to retreat, which they did without molestation. The allies lost about 3000 men, mostly British (though Prince Napoleon's men also suffered heavily); the Russians reported 5709 casualties.

The March on Sevastopol.—On the 23rd of September the advance was resumed, and by the 25th Sevastopol was in full view of the allied outposts. It was now that the necessary consequences of the choice of Old Fort as the landing-place presented themselves as a problem for instant solution. Whatever chance there had been of assaulting the north side of Sevastopol was now gone. Menshikov had sacrificed some ships in order to seal up the harbour mouth, and naval co-operation in attack was now impossible, while the other Russian ships could in safety aid the defenders with their heavy guns. A siege, based on the beach of Old Fort or the open roads of Kacha, was out of the question, as was re-embarkation for a fresh landing. There remained only a flank march by Mackenzie's farm and the river Chernaya. Once established on the south side, the allies could use the excellent harbours of Kamiesh and Balaklava; this could almost certainly be effected without fighting, while in besieging Sevastopol itself and not merely the north side, the allies would be striking at the heart. But a flank march is almost always in itself a hazardous undertaking, and in this case the invaders were required further to abandon their line of retreat on Old Fort. In point of fact, the army, covered by a division opposite the Russian works, successfully accomplished the task. At the same moment Menshikov, after providing for the defence of Sevastopol, had marched out with a field army towards Bakhchiserai, and on the 25th of September each army, without knowing it, actually crossed the other's front. On arrival at Balaklava the allies regained contact with the fleet, and the detachment left on the north side, its mission being at an end, followed the same route and rejoined the

main body. The French now took possession of Kamiesh, the British of Balaklava.



Beginning of the Siege.—Thus secured, the allies closed upon the south side of the fortress. A siege corps was formed, and the British army and General Bosquet's French corps covered its operations against interruption from the Russian field army. The harbour of Sevastopol, formed by the estuary of the Chernaya, was protected against attack by sea not only by the Russian war-vessels, afloat and sunken, but also by heavy granite forts on the south side and by the works which had defied the allies on the north. For the town itself and the Karabelnaya suburb the trace of the works had

been laid down for years. The Malakoff, a great tower of stone, covered the suburb, flanked on either side by the Redan and the Little Redan. The town was covered by a line of works marked by the Flagstaff and central bastions, and separated from the Redan by the inner harbour. Lieut.-Col. Todleben, the Russian chief engineer, had very early begun work on these sites, and daily re-creating, rearming and improving the fortifications, finally connected them by a continuous enceinte. Yet Sevastopol was not, early in October 1854, the towering fortress it afterwards became, and Todleben himself maintained that, had the allies immediately assaulted, they would have succeeded in taking the place. There were, however, many reasons against so decided a course, and it was not until the 17th of October that the first attack took place. All that day a tremendous artillery duel raged. The French siege corps lost heavily and its guns were overpowered. The fleet engaged the harbour batteries close inshore, and suffered a loss of 500 men, besides severe damage to the ships. On the other hand the British siege batteries silenced the Malakoff and its annexes, and, if failure had not occurred at the other points of attack, an assault might have succeeded. As it was, Todleben, by daybreak, had repaired and improved the damaged works. Meanwhile General Canrobert had succeeded St Arnaud (who died on the 29th of September) in the joint leadership of the allies. It was not long before Menshikov and the now augmented field army from Bakhchiserai appeared on the Chernaya and moved towards the Balaklava lines and the British base.

Balaklava.—A long line of works on the upland secured the siege corps from interference, and the Balaklava lines themselves were strong, but the low Vorontsov ridge between the two was weakly held, and here the Russian commander hoped to sever the line of communications. On the 25th of October Liprandi's corps carried its slight redoubts at the first rush. But the British cavalry stationed at the foot of the upland was situated on their flank, and as the Russian cavalry moved towards Kadikoï, the "Heavy

Brigade" under General Scarlett charged home with such effect that Menshikov's troopers only rallied behind their field batteries near Traktir bridge. At the same time some of the Russian squadrons, coming upon the British 93rd regiment outside the Balaklava lines, were completely broken by the steady volleys of the "thin red line." The "Light Brigade" of British cavalry, farther north, had hitherto remained inactive, even when the Russians, broken by the "Heavies," fled across their front. The cavalry commander, Lord Lucan, now received orders to prevent the withdrawal of the guns taken by Liprandi. The aide-de-camp who carried the order was killed by the first shell, and the whole question of responsibility for what followed is wrapped in obscurity. Lord Cardigan led the Light Brigade straight at the Russian field batteries, behind which the enemy's squadrons had re-formed. From the guns in front, on the Fedukhin heights, and on the captured ridge to their right, the advancing squadrons at once met a deadly converging fire, but the gallant troopers nevertheless reached the guns and cut down the artillerymen. Small parties even charged the cavalry behind, and at least two unbroken squadrons struck out right and left with success, but the combat could only end in one way. The 4th Chasseurs d'Afrique relieved the British left by a dashing charge. The "Heavies" made as if to advance, but came under such a storm of fire that they were withdrawn. By twos and threes the gallant survivors of the "Light Brigade" made their way back. Two-thirds of its numbers were left on the field, and the day closed with the Russians still in possession of the Vorontsov ridge.

Inkerman.—If the heights lost in this action were not absolutely essential to the safety of the allies, the point selected for the next attempt at relief was of vital importance. The junction of the covering army and the siege corps near Inkerman was the scene of a slight action on the day following Balaklava, and the battle of Inkerman followed on the 5th of November. By that time the French had made good the losses of the 17th of October, their approaches were closing upon Flagstaff bastion, and the British batteries

daily maintained their superiority over the Malakoff. On the 5th there was to have been a meeting of generals to fix the details of an assault, but at dawn the Russian army, now heavily reinforced from Odessa, was attacking with the utmost fury the British divisions guarding the angle between Bosquet and the siege corps. The battle of Inkerman defies description; every regiment, every group of men bore its own separate part in the confused and doubtful struggle, save when leaders on either side obtained a momentary control over its course by means of reserves which, carrying all before them with their original impetus, soon served but to swell the mêlée. It was a "soldiers' battle" pure and simple. After many hours of the most desperate fighting the arrival of Bosquet (hitherto contained by a force on the Balaklava ground) confirmed a success won by supreme tenacity against overwhelming odds, and Menshikov sullenly drew off his men, leaving over 12,000 on the field. The allies had lost about 3300 men, of whom more than two-thirds belonged to the small British force on which the strain of the battle fell heaviest. Their losses included several generals who could ill be spared, but they had held their ground, which was all that was required of them, with almost unrivalled tenacity. Lord Raglan was promoted to be field marshal after the battle.

The Winter of 1854-1855.—It was now obvious that the army must winter in the Crimea, and preparations in view of this were begun betimes. But on the night of November 14th a violent storm arose which wrecked nearly thirty vessels with their precious cargoes of treasure, medical comforts, forage, clothing and other necessaries. After so grave a calamity it was to be expected that the troops would be called upon to undergo great hardships. But the direct cause of sufferings that have become a byword for the utmost depths of misery was the loss of twenty days' forage in the great storm. Of food and clothing enough was in store to tide over temporary difficulties, but the only paved road from Balaklava to the British camps was now in Russian hands, and the few starving transport animals were

utterly inadequate for the work of drawing wagons over the miry plain; things went from bad to worse with Raglan's troops, until from the outposts before the Redan to the hospitals at Scutari a state of the utmost misery prevailed, relieved only by the example of devotion and self-sacrifice set by officers and men. The British hospital returns showed eight thousand sick at the end of November. Even the French, whose base of Kamiesh had escaped the storm, were not unhurt by the severity of the winter, but Napoleon III. sent freely all the men his general asked, while the Russians in Sevastopol, who had made long painful marches from the interior, were the survivors of the fittest. Canrobert took over the lines before the Malakoff to relieve the British. He had at the end of January 1855 78,000 men for duty; Raglan could barely muster 12,000. But, with the advent of spring, paved roads and a railway were promptly taken in hand, and during the remainder of the war the British troops were so well cared for that their death-rate was lower than at home, while the hospitals in rear, thanks to the energy and devotion of Florence Nightingale and her nurses, became models of good management.

Course of the Siege.—Meanwhile the siege works were making but slow progress, and the fortress grew day by day under the skilful direction of Todleben. Rifle-pits pushed out in front of the defenders' lines were connected so as to form a veritable envelope. Beyond the left wing a new line, the "White Works," sprang up in a single night, and the hill of the Mamelon was suddenly crowned with a lunette to cover the still defiant Malakoff. But the absence of bomb-proof cover exposed the huge working parties necessary for these defences to an almost incessant *feu d'enfer*, by which the Russians every week suffered the losses of a pitched battle. Meanwhile the field army was idle, Menshikov had been replaced by Prince Michael Gorchakov, Liprandi's corps had withdrawn from the Vorontsov ridge, and Omar Pasha, with a detachment of the troops he had led at Oltenitza and Cetatea, repulsed a Russian attack on Eupatoria (Feb. 17th).

The besiegers steadily approached the White Works, Mamelon, Redan and Flagstaff bastion, and as spring arrived the logistic and material advantages of the allies returned. On Easter Sunday (April 8th, 1855) another terrific bombardment began, which lasted almost uninterruptedly for ten days. The White Works and the Mamelon were practically destroyed, and the Russians, drawn up in momentary expectation of assault, lost between six and seven thousand men.

But the bombardment ceased, and assault did not follow. For, at the allied headquarters and at Paris, grave differences of opinion on the conduct of the war had developed. Napoleon III. wished active operations to be undertaken against the Simferopol field army, whereas the leaders on the spot, while admitting the theoretical soundness of the French emperor's views, considered that they were wholly beyond the means of the two armies. The discussions culminated in Canrobert's resignation of the chief command, though he would not leave the army, and took a subordinate post, which he filled with great distinction to the end of the war. His successor, General Pélissier, was a soldier trained in the hard school of Algerian warfare, and endowed, as was soon evident, with the most inflexible resolution of character. He did not hesitate to take up and maintain a position of decided opposition to his sovereign's views; and the capture of Kerch (24th May 1855), carried out by a joint expedition, was the first earnest of new vigour in the operations. This success served all the purposes of a complete investment of Sevastopol, the want of which had greatly troubled the allied generals. The line of communication and supply between Sevastopol and the interior was cut, vast stores intended for the fortress were destroyed, and the sea of Azov was cleared of shipping. On the 25th Canrobert established himself on the Fedukhin heights, his right continued along the Chernaya by General la Marmora's newly arrived Sardinians, 15,000 strong, while masses of Turks occupied the Vorontsov ridge and the old Balaklava battlefield.

As June approached, Raglan and Pélissier, who, unlike most allied commanders, were in complete accord and sympathy, initiated very vigorous methods of attack. They decided that the works west of Flagstaff could be comparatively neglected, and the full weight of the bombardment once more fell upon the Mamelon and the Malakoff. Once more these works were reduced to ruins, but the rest of the defences still held out.

The Assault of the Redan.—On the 7th of June 1855 the French stormed the Mamelon and the White Works, the British captured and maintained some quarries close to the Redan, and next morning the whole of Todleben's envelope had become a siege-parallel. The losses were, as usual, heavy, 8500 to the Russians, 6883 to the allies. This was merely a preliminary to the great assault fixed for the 18th, the fortieth anniversary of Waterloo. But meanwhile Pélissier's temper and Raglan's health had been strained to breaking-point by continued dissensions with Paris and London. The telegraph, a new strategic factor, daily tormented the unfortunate commanders with the latest ideas of the Paris strategists, and on the fateful day the two armies rushed on to failure. The French attack on the Malakoff dwindled away into a meaningless fire-fight: the British, attacking the Redan in face of a cross-fire of one hundred heavy guns, at first succeeded in entering the work, but in the end sustained a bloody and disastrous repulse. Of the six generals who led the two attacks, four were killed and one wounded, and on the 17th and 18th the losses to the Russians were 5400, to the allies 4000. But the defenders' resources were almost at an end, and the bombardment reopened at once with increased fury. On the 20th Todleben was wounded, and soon afterwards Nakhimov, the victor of Sinope, found a grave by the side of three other admirals who had fallen in the defence. Pélissier resolutely clung to his plans, in spite of the failure of the 18th, against ever-increasing opposition at home. Raglan, worn out by his troubles and heartbroken at the Redan failure, died on the 28th, mourned by none more deeply than by his stern colleague.

The Storming of the Malakoff.—During July the Russians lost on an average 250 men a day, and at last it was decided that Gorchakov and the field army must make another attack at the Chernaya—the first since Inkerman. On the 16th of August the corps of Generals Liprandi and Read furiously attacked the 37,000 French and Sardinian troops on the heights above Traktir Bridge. The assailants came on with the greatest determination, but the result was never for one moment doubtful. At the end of the day the Russians drew off baffled, leaving 260 officers and 8000 men on the field. The allies only lost 1700. With this defeat vanished the last chance of saving Sevastopol. On the same day (Aug. 16th) the bombardment once more reduced the Malakoff and its dependencies to impotence, and it was with absolute confidence in the result that Pélissier planned the final assault. On the 8th of September 1855 at noon, the whole of Bosquet's corps suddenly swarmed up to the Malakoff. The fighting was of the most desperate kind. Every casemate, every traverse, was taken and retaken time after time, but the French maintained the prize, and though the British attack on the Redan once more failed, the Russians crowded in that work became at once the helpless target of the siege guns. Even on the far left, opposite Flagstaff and Central bastions, there was severe hand-to-hand fighting, and throughout the day the bombardment mowed down the Russian masses along the whole line. The fall of the Malakoff was the end of the siege. All night the Russians were filing over the bridges to the north side, and on the 9th the victors took possession of the empty and burning prize. The losses in the last assault had been very heavy, to the allies over 10,000 men, to the Russians 13,000. No less than nineteen generals had fallen on that day. But the crisis was surmounted. With the capture of Sevastopol the war loses its absorbing interest. No serious operations were undertaken against Gorchakov, who with the field army and the remnant of the garrison held the heights at Mackenzie's Farm. But Kinburn was attacked by sea, and from the naval point of view the attack is interesting as

being the first instance of the employment of ironclads. An armistice was agreed upon on the 26th of February and the definitive peace of Paris was signed on the 30th of March 1856.

Decisive Importance of the Victory.—The importance of the siege of Sevastopol, from the strategical point of view, lies beneath the surface. It may well be asked, why did the fall of a place, at first almost unfortified, bring the master of the Russian empire to his knees? At first sight Russia would seem to be almost invulnerable to a sea power, and no first success, however crushing, could have humbled Nicholas I. Indeed the capture of Sevastopol in October 1854 would have been far from decisive of the war, but once the tsar had decided to defend to the last this arsenal, the necessity for which he was in the best position to appreciate, the factor of unlimited resources operated in the allies' favour. The sea brought to the invaders whatever they needed, whilst the desert tracks of southern Russia were marked at every step with the corpses of men and horses who had fallen on the way to Sevastopol. The hasty nature, too, of the fortifications, which, daily crushed by the fire of a thousand guns, had to be re-created every night, made huge and therefore unprotected working parties necessary, and the losses were correspondingly heavy. The double cause of loss completely exhausted even Russia's resources, and, when large bodies of militia appeared in line of battle at Traktir Bridge, it was obvious that the end was at hand. The novels of Tolstoy give a graphic picture of the war from the Russian point of view; the miseries of the desert march, the still greater miseries of life in the casemates, and the almost daily ordeal of manning the lines under shell-fire to meet an assault that might or might not come; and no student of the siege can leave it without feeling the profoundest respect for the courage, discipline and stubborn loyalty of the defenders.

Minor Operations.—A few words may be added on the minor operations of the war. The Asiatic frontier was the scene of severe fighting between the

Turks and the Russians. Hindered at first by Shamyl and his Caucasian mountaineers, the Russians stood on the defensive during 1853, but next year they took the offensive, and, while their coast column won an action on the 16th of June at the river Churuk, another force from Erivan gained an important success on the Araxes and took Bayazid, and General Bebutov completely defeated a Turkish column from Kars at Kuruk Dere (July 31st, 1854). Next year Count Muraviev completely isolated the garrison of Kars, which made a magnificent defence, inspired by Fenwick Williams Pasha and other British officers. In one assault alone 7000 Russians were killed and wounded, and it was not until the 26th of November 1855 that the fortress was forced to surrender. The naval operations in the Baltic furnish many interesting examples for the study of naval war. The allied fleet in 1854, after a first repulse, succeeded in landing a French force under Baraguay d'Hilliers before Bomarsund, and the place fell after an eight days' siege. In 1855 seventy allied warships appeared before Kronstadt, which defied them. Reinforced they attacked Sveåborg, but after two days' fighting had to draw off baffled.

The numbers engaged in the Crimean War and the cost in men and money is stated in round numbers below. In May 1855 the Crimean theatre of war occupied 174,500 allies (of whom 32,000 were British) and 170,000 Russians. The losses in battle were: allies 70,000 men, Russians 128,700; and the total losses, from all causes and in all theatres of the war: allies 252,600 (including 45,000 English), Russians 256,000 men (Berndt, *Die Zahl im Kriege*, p. 35). In the siege of Sevastopol the Russians are stated by Berndt to have lost 102,670 men dead, wounded and missing. Mulhall (*Dict. of Statistics*, 1903 ed., pp. 586-587) gives much greater losses to each of the four powers principally engaged. The cost of the war in money is stated by Mulhall to have been £69,000,000 to Great Britain, £93,000,000 to France, £142,000,000 to Russia.

AUTHORITIES.—Of the many works on the Crimean War those of the greatest value are the following. English: the official work on the *Siege of Sebastopol*; A. W. Kinglake, *The Invasion of the Crimea* (London, 1863; "Student's edition" by Sir G. S. Clarke); Sir E. B. Hamley, *The War in the Crimea* (London, 1891); (Sir) W. H. Russell, *The War in the Crimea* (London, 1855-1856); Sir Evelyn Wood, *The Crimea in 1854 and in 1894* (London, 1895); Sir D. Lysons, *The Crimean War from First to Last* (London, 1895); Col. A. Lake, *The Defence of Kars* (London, 1857). French: Official, *Guerre de l'Orient, Hist. de l'artillerie* (Paris, 1859); (Marshal Niel), *Siège de Sébastopol* (official account of engineer operations, Paris, 1858), and *Atlas historique et topographique de la guerre de Crimée* (see also the map of Russia by the French staff, sheets 56 and 57); Baron C. de Bazancourt, *L'Expédition de Crimée* (Paris, 1856); C. Rousset, *Histoire de la guerre de Crimée* (Paris, 1877). Russian: the work of Todleben, *Die Vertheidigung von Sevastopol* (St. Petersburg, 1864); *Défense de Sébastopol* (St Petersburg, 1863); Anitschkoff, *Feldzug in der Krim* (German trans., Berlin, 1857); Bogdanovitch, *Der Orientkrieg* (St Petersburg, 1876); Petroff, *Der Donaufeldzug Russlands gegen Türkei* (German trans., Berlin, 1891). Of German works the most useful are: Kunz, *Die Schlachten und Treffen des Krimkrieges* (Berlin, 1889); *Der Feldzug in der Krim; Sammlung der Berichte beider Parteien* (Leipzig, 1855-1856).

(C. F. A.)

CRIMINAL LAW. By criminal, or penal, law is now understood the law as to the definition, trial and punishment of crimes, *i.e.* of acts or omissions forbidden by law which affect injuriously public rights, or constitute a breach of duties due to the whole community. The sovereign is taken to be the person injured by the crime, as he represents the whole community, and prosecutions are in his name. Criminal law includes the rules as to the prevention, the investigation, prosecution and punishment of crime (*q.v.*). It lays down what constitutes a criminal offence, what proof is necessary to establish the fact of a criminal offence and the culpability of the offender, what excuse or justification for the act or omission can be legally admitted, what procedure should be followed in a criminal court, what degrees and kinds of punishment should be imposed for the various offences which come up for trial. Finally, it regulates the constitution of the tribunals established for the trial of offences according to the gravity of the infraction of law, and deals with the organization of the police and the proper management of prisons, and the maintenance of prison discipline. (See EVIDENCE; PRISON; POLICE.)

Many acts or omissions, which are technically criminal and classified as offences and punished by fine or imprisonment, cannot be said to have a strictly criminal character, since they do not fall within the popular conception of crime. To this class belong such matters as stopping up a highway under claim of right, or failing to repair it, or allowing a chimney to emit black smoke in excessive quantities, or to catch fire from being unswept, or breach of building by-laws, or driving a motor car on a highway at a speed in excess of the legal limit. Such breaches of law are under the French law described as *contraventions*. In England most of them are described as petty misdemeanours or offences punishable on summary conviction, or less happily as “summary offences,” and some writers speak of them as *mala prohibita* as distinguished from *mala in se*, *i.e.* as not involving any breach of ordinary morality other than a breach of positive

regulations. Continental jurists at times speak of crimes *de droit commun* (*i.e.* offences common to all systems of law as distinguished from offences which are crimes only by a particular municipal law). To this class of crimes *de droit commun* belong most of the offences included in extradition treaties.

Criminal and civil law overlap, and many acts or omissions are not only "wrongs" for which the person injured is entitled to recover compensation for his own personal injury or damage, but also "offences" for which the offender may be prosecuted and punished in the interest of the state. In non-English European systems care is taken to prevent civil remedies from being extinguished by punishment: it is quite usual for the civil and criminal remedies to be pursued concurrently, the individual appearing as *partie civile* and receiving an award of compensation by the judgment which determines the punishment to be inflicted for the offence against the state. Under English law it is now exceptional to allow civil and criminal remedies to be pursued concurrently or in the same proceeding, or to award compensation to the injured party in criminal proceedings, and he is usually left to seek his remedy by action. Among the exceptions are the restitution of stolen goods on conviction of the thief if the prosecution has been at the instance or with the aid of the owner of the goods (Larceny Act 1861, § 100), and the award of compensation to persons who have suffered injury to property by felony (Forfeiture Act 1870).

Development of modern criminal law.

As Sir Henry Maine says (*Ancient Law*, ed. 1906, p. 381), "All civilized systems of law agree in drawing a distinction between offences against the state or community (crimes or *crimina*) and offences against the individual (wrongs, *torts* or *delicta*)." But the process of historical development by which this distinction has been ultimately established has given great occasion for study of early laws and institutions by eminent men, whose

researches have disclosed the extremely gradual evolution of the modern notion of criminal law enforced by the state from the primitive conceptions and customs of barbarous or semi-civilized communities. Of the oldest codes or digests of customs which are available to the student it has been said the more archaic a code the fuller and minuter is its penal legislation: but this penal legislation is not true criminal law; it is the law, not of crimes, but of wrongs. The intervention of the community or tribe is in the first instance to persuade or compel the wronged person or his family or tribe to abandon private vengeance or a blood feud and to accept compensation for the wrong collectively or individually sustained; and in the tariffs of compensation preserved in early laws the importance of the injured person was the measure of the compensation or vengeance which he was recognized to be entitled to exact, and the scales of punishment or compensation are fixed from this point of view.

Babylon.

The laws of Khammurabi (2285-2242), the oldest extant code, contain definite schemes and scales of offences and punishments, and indicate the existence of tribunals to try the offences and to award the appropriate remedy. The punishments are very severe. It is not distinctly indicated whether the proceedings were at the instance of the state or the person wronged, but compensation and penalty could be awarded in the same proceeding, and the provisions as to the *lex talionis* and scale of compensation for injuries tend to show that the procedure was on private complaint and not on behalf of the state (see further BABYLONIAN LAW).

Greece.

Of the early criminal laws of Greece only fragments survive, *e.g.* those of Solon and Draco. In Athens in early times crime was dealt with in the Areopagus from the point of view of religion and by the archons from the point of view of compensation: and it was only when the state interests were directly affected

that proceedings by way of εἰσαγγελία or impeachment were taken. In classical times crimes fell to be tried by panels of jurors or judges drawn from the assembly and described as δικαστήρια.

The earliest materials for ascertaining the criminal law of Rome are to be found in the Twelve Tables, Table VIII. The criminal law of imperial Rome is collected in books 47 and 48 of the Digest. The classification of crimes therein is capricious and anomalous. "In the early Roman law the idea of legislative power was so fully grasped and that of judicial power so little understood that the criminal jurisdiction arose in the form of a legislative enactment applicable to particular cases." Crimes were classified according to the mode of prosecution into:

Rome.

1. *Publica judicia*, dealing with crimes specifically forbidden by definite laws, which took the place of the standing commissions (*quaestiones perpetuae*) of the time of the republic. In the earlier stages of Roman law the state only interfered to punish offences which gravely affected it, and did so by *privilegia*, which correspond to impeachment or Bill of Pains and Penalties.

2. *Extraordinaria crimina*, crimes for which no special procedure or punishment was provided: the punishment being, within limits, left to the discretion of the judge and the prosecution to the injured party.

3. *Privata delicta*, offences for which a special form of action was open to the injured party, *e.g. actio furti*.

The multiplicity of tribunals under the republic was replaced under the empire by a complete organization of the judiciary throughout the districts (dioceses) under the supervision of the emperor in his privy council (see Maine, *Ancient Law*, ed. 1906, p. 393). Public prosecution under the empire began by arrest of the accused, who was taken before an *eirenarcha*, who

examined him (by torture in the case of a slave or parricide) and sent him on for trial before the *praeses* of the diocese (διοίκησις). Private prosecution followed, a procedure closely resembling that of civil actions, beginning with *citatio* (summons), followed by *libellus* or accusation, and appointment of a day for hearing. The right of either party to call witnesses was very imperfectly established.

Celtic law.

The early laws of the Celtic races are preserved as to Wales in the laws of Hywel Dda, and as to Ireland in the Book of Aicill and other Brehon law tracts, which are professional collections of precedents and formulae made by the hereditary law caste (Brehons), whose business it was "to pass sentence from precedents and commentaries." (See BREHON LAWS.) The development of Celtic law was arrested by the Saxon and Anglo-Norman conquest: but the materials preserved indicate an origin common with that of Germanic law.

The special characteristics of Irish criminal law, if it can be so called, were:—

1. The law was customary and theoretically unchangeable, and no legislative or judicial authority existed to alter or enforce it.

2. All crimes were treated as wrongs, for which compensation was made by assessment of damages by a consensual tribunal whose power to make awards depended on submission of the parties and the ultimate sanction of public opinion or custom. A customary tariff for compensation existed for all offences from wilful murder downwards. No crime was unamendable. The Irish law recognized a body price or compensation (S. *bot*) and an honour price or *eric* (S. *wer*), for which the family or tribe of the offender was collectively liable; but there is no clearly ascertained equivalent to the Saxon *wite*, or fine to the chief.

The laws of the Germanic tribes, so far as preserved in the *Germania* of Tacitus, and in the compilations of customs known as the Salic and Ripuarian laws, the Leges Barbarorum, the Dooms of Æthelberht and the collections of Anglo-Saxon law and custom (to be found in Thorpe's *Ancient Laws and Institutes of England*), do not indicate any adequate or definite division between crimes and causes of civil action, but, like the laws of Babylon, recognize the system and contain the tariffs of compensation for wrongs. The idea of the compensation was originally to put an end (*finis*) to blood feuds and private war or vengeance.

Germanic law.

These laws formed the foundation of the criminal law of Germany, including the Netherlands, of England and of Scandinavia. But in each country the development of criminal law has been affected by influences other than Germanic, mainly consisting in an infusion more or less great of ideas derived from Roman law. In England under Alfred some part of the Levitical law (Exod. xxi. 12-15) was incorporated, just as in 1567 the criminal law as to incest in Scotland was taken bodily from Leviticus xviii.

The stage which the development of criminal law had reached in England by the reign of Edward the Confessor is thus described by Pollock and Maitland (*Hist. Eng. Law*, ii. 447): "On the eve of the Norman Conquest what we may call the criminal law of England (but it was also the law of torts or civil wrongs) contained four elements which deserve attention: Its past history had in the main consisted of the varying relations between them. We have to speak of outlawry, of the blood feud (*faidus*), of the tariffs of *wer* and *wite* (*fredus* or *friede*), and *bot*, of punishment in life and limb. As regards the malefactor the community may assume one of four attitudes: it may make war on him; it may have him exposed to the vengeance of those whom he has wronged; it may suffer him to make atonement; it may inflict on him a

Anglo-Saxon law.

determinate punishment, death, mutilation or the like." The *wite* or sum paid to the king or lord is now thought to have been originally not a penalty but a fee for time and trouble taken in hearing and determining a controversy. But at an early stage fines for breach of peace were imposed. An evil result from the public point of view followed from the system of atoning for crime by pecuniary mulct. "Criminal jurisdiction became a source of revenue." So early as Canute's time certain crimes were pleas of the crown; but grants of criminal jurisdiction, with the attendant forfeitures, were freely made to prelates, towns and lords of manors, and some traces of this jurisdiction still survive (*e.g.* the criminal jurisdiction of the justices of the *soke* (*soc*) of Peterborough, and the rights of some boroughs, *e.g.* Nottingham, to forfeitures). Outlawry soon ceased to be a mode of punishment, and became, as it still is, a process to compel submission to justice (Crown Office Rules, 1906, rules 88-110). Certain crimes, such as murder, rape, arson and burglary, became unamendable or bootless, *i.e.* placed the offender's life, limb, lands and goods at the king's mercy. These crimes came to be generally described by the name felony (*q.v.*). Other crimes became punishable by fines which took the place of *wites*. These were styled trespasses and correspond to what is now called misdemeanour (*q.v.*).

Anglo-Norman period.

Minor acts of violence, dishonesty or nuisance, were dealt with in seigniorial and borough courts by presentment of the jurors of courts baron and courts leet, and punished by fine or in some cases by pillory, tumbril or stocks. Grave acts were dealt with by the sheriff as breaches of the peace. He sat with the freeholders in the county court, which sat twice a year, or in the hundred court, which sat every four weeks. So far as this involved dealing with pleas of the crown the sheriff's jurisdiction was abolished and was ultimately replaced by that of the justices or conservators of the peace. The sheriff then ceased to be a judge in criminal cases, but remained and

still is in law responsible for the peace of his county, and is the officer for the execution of the law. The royal control over crime was effectually established by the itinerant justices sent regularly throughout the realm, who not only dealt with the ordinary proprietary and fiscal rights of the crown but also with the graver crimes (treason and felony), and ultimately were commissioned to deal with the less grave offences now classed as indictable misdemeanours. The change resulted from the strengthening of royal authority throughout England, which enabled the crown gradually to enlarge the pleas of the crown and to weaken and finally to supersede the criminal jurisdiction, notably of the sheriff, but also of prelates and lords in ecclesiastical and other manors and franchises. “In the early English laws and constitution there existed a national sovereignty and original criminal jurisdiction, but the ideas of legislative power and crime were very slowly developed.” During the 12th century the criminal law was affected by the influence of the church, which introduced into it elements from the Canon and Mosaic laws, and also by the memory of the Roman empire and the renewed study of the Roman law, which enabled lawyers to draw a clearer distinction than had before been recognized between the criminal (*dolus*) and civil (*culpa*) aspect of wrongful acts. The Statute of Treasons (1351) is to a large extent an admixture of Roman with feudal law; and to the same source is probably due the more careful analysis of the mental elements necessary to create criminal responsibility, summed up in the somewhat misleading expression *nemo reus est nisi mens sit rea*.

In the 14th century justices of the peace and quarter sessions were established to deal with offences not sufficiently important for the king’s judges, and from that time the course of criminal justice in England has run substantially on the same lines, with the single and temporary interruption caused by the court of star chamber.

The penal laws of modern states classify crimes somewhat differently, but in the main on the same general principles, dividing them into:—

Classification of crimes.

1. Offences against the external and internal order and security of the state.

2. Offences against the administration of police and against public authority.

3. Acts injurious to the public in general.

4. Offences against the person (life, health, liberty and reputation), and conjugal and parental rights and duties.

5. Offences relating to property and contracts (including theft, fraud, forgery and malicious damage).

The terminology by which crimes are described by reference to their comparative gravity varies considerably. In many continental codes distinctions are drawn between crimes (Ger. *Verbrechen*; Norse *vorbrydelser*; Span. *crimenes*; Ital. *reato*), delicts (Ger. *Vergehen*; Ital. *delitti*; Span, *delitos*), and contraventions (Ital. *contravenzioni*; Span, *faltas*).

The classification adopted by English law is peculiar to itself, "treason," "felony" and "misdemeanour," with a tentative fourth class described as "summary offences." The particular distinctions between these three classes are dealt with under the titles TREASON; FELONY; MISDEMEANOUR, &c. Here it is enough to say that the distinction is a result of history and is marked for abolition and reclassification. Treason and most felonies and some misdemeanours would under foreign codes fall under the head of crime. Misdemeanour, roughly but not exactly, corresponds to the French *délit*, and summary offence to *contravention*.

In all systems of criminal law it is found necessary to determine the criterion of criminal responsibility, the mental elements of crime, the degrees of criminality and the point at which the line is to be drawn between intention and commission.

Elements of criminal responsibility.

The full definition of every crime contains expressly or by implication a proposition as to a state of mind, and in all systems of criminal law, competent age, sanity and some degree of freedom from coercion, are assumed to be essential to criminality; and it is also generally recognized that an act does not fall within the sanction of the criminal law if done by pure accident or in an honest and reasonable belief in circumstances which if true would make it innocent; *e.g.* when a married person marries again in the honest and reasonable but mistaken belief that the former spouse is dead. Honest and reasonable mistake of fact stands on the same footing as absence of the reasoning faculty, as in infants, or perversion of that faculty, as in lunatics.

Besides the elements essential to constitute crime generally, particular mental elements, which may differ widely, are involved in the definition of particular crimes; and in the case of statutory offences adequately and carefully defined, the mental elements necessary to constitute the crime may be limited by the definition so as to make the prohibition of the law against a particular act absolute for all persons who are not infants or lunatics. As a general rule of English law, it is enough to prove that the acts alleged to constitute a crime were done by the accused, and to leave him to rebut the presumption that he intended the natural consequences of the acts by showing facts justifying or excusing him or otherwise making him not liable. Children are conclusively presumed to be incapable of crime up to seven years of age; and from seven to fourteen the presumption is against the capacity, but is not absolute.

Under the common law, insanity was an absolute answer to an accusation of crime. Since 1883, where insanity is proved to have existed at the date of the commission of the incriminated acts, the accused is found guilty of the acts but insane when he did them, and is relegated to a criminal lunatic asylum. There was also at common law a presumption that a married woman committing certain crimes in the presence of her husband did so under his coercion. But under modern decisions and practice the presumption has become feeble almost to inanition (*R.* v. *Mary Baines*, 1900, 69 L.J. Q.B. 681). Distinctions are also drawn between degrees of guilt or complicity.

English criminal law punishes attempts to commit crime if the attempt passes from the stage of resolution or intention to the stage of action, when the completion of the full offence is frustrated by something other than the will of the accused. Except in the case of attempt to commit murder, which is a felony, attempts to commit a crime are punished as misdemeanours. It also punishes the solicitation or incitement of others to commit crime, as a separate offence if the incitement fails, as the offence of being accessory before the fact or abettor if the offence is committed as a result of the incitement; and it punishes persons who, after a more serious crime—felony—has been committed, do any act to shield the offender from justice. In the case of the crimes described as felonies the law distinguishes between principals in the first or second degree and accessories before or after the fact. In the case of misdemeanours the same punishment is incurred by the principal offenders, and by persons who are present aiding and abetting the commission of the offence, or who, though not present, counselled or procured the commission of the offence (see ACCESSORY). Besides these degrees of crime there is one almost peculiar to English law known as conspiracy, *i.e.* an agreement to commit crime or to do illegal acts (including interference with the due course of justice), which is punishable even if the conspiracy does not get beyond the stage of agreement. The

exact nature of this form of crime and the propriety of abolishing it or limiting its scope have been the subject of much controversy, especially with reference to combinations by trade unions.

The English law does not, but most European laws do, allow the jury to reduce the penalty of an offence by finding in their verdict that the commission of the offence was attended by extenuating circumstances; but when the jury recommend to mercy a person whom they find guilty the judge may give effect to the recommendation or report it to the Home Office.

In systems of criminal law derived from England the forms of crime or degrees of complicity above stated reappear with or without modification, but as to conspiracy with a good deal of alteration. In the Indian penal code, for instance, conspiracy is limited to cases of treason (§ 121 A), and when it goes beyond agreement in the case of other offences it is merely a form of abetment or participation (§ 107).

The criminal law of England[1] is not codified, but is composed of a large number of enactments resting on a basis of common law. A very large part is reduced to writing in statutes. The unwritten portion of the law includes (1) principles relating to the excuse or justification of acts or omissions which are prima facie criminal, (2) the definitions of many offences, *e.g.* murder, assault, theft, forgery, perjury, libel, riot, (3) parts of the law relating to procedure. The law is very rich in principles and rules embodied in judicial decisions and is extremely detailed and explicit, leaving to the judges very little latitude of interpretation or expression. So far as the legislature is concerned there is an absence of systematic arrangement. The definitions of particular crimes are still to be sought in the common law and the decisions of the judges. The Consolidation Acts of 1861 for the most part leave definitions as they stood, *e.g.* the Larceny Act 1861 does not define the

Definitions of particular crimes.

crime of larceny. The consequence is that exact definitions are very difficult to frame, and the technical view of a crime sometimes includes more, sometimes less, than it ought. Thus the crime of murder, as settled by the existing law, would include offences of such very different moral gravity as killing a man deliberately for the sake of robbing him, and killing a man accidentally in an attempt to rob him. On the other hand, offences which ought to have been criminal were constantly declared by the judges not to fall within the definition of the particular crimes alleged, and the legislature has constantly had to fill up the *lacunae* in the law as interpreted by the judges.

The jurisdiction to deal with crime is primarily territorial, and can be exercised only as to acts done within the territory or territorial waters, or on the ships of the law-giver. *Extra territorium jus dicenti impune non paretur.*

Jurisdiction.

No state will enforce the penal laws of another nor permit the officer of another state to execute its laws outside its own territory. But international law recognizes the competence of a state to make its criminal law binding on its own subjects wherever they are, and perhaps even to punish foreigners who outside its territory do acts which menace its internal or external security, *e.g.* by dynamite plots or falsification of coin. Apart from extradition arrangements the national law cannot reach such persons, be they citizens or aliens, until they come within the territory of the state whose law has been broken.

The codes of France, Germany and Italy make the penal law national or personal and not territorial. In some British colonies whose legislatures have a derived and limited legislative authority, indirect methods have been taken to deal within the colony with persons who commit offences outside its territory.

Throughout the development of the English criminal law it showed and retains one particular characteristic that crime was treated as local, which means not merely that the common law of England was limited to English soil, but that an offence on English soil could be "inquired of, dealt with, tried, determined and punished" only in the particular territorial division of England in which it was committed, which was and is known as the venue (*q.v.*). Each township was responsible for crimes within its boundaries, a responsibility made effective by the "view of frankpledge," now obsolete, and the guilt or innocence of every man had to be determined by his neighbours. This rule excluded from trial by the courts of common law, treasons, &c. committed by Englishmen abroad and piracy; and it was not till Henry VIII.'s reign (1536, 1544) that the common-law mode of trial was extended to these offences. The legislature has altered the common law as to numerous offences, but on no settled plan, and except for a bill introduced about 1888, at the instance of the 3rd marquess of Salisbury, no attempt has been made to make the English criminal law apply generally to subjects when outside the realm; and in view of the complicated nature of the British empire and the absence of a common criminal code it has been found desirable to remain content with extradition in the case of crimes abroad, and with the provisions of the Fugitive Offenders Act 1881 in the case of criminals who flee from one part to another of the empire.

The localization in England of crime, and the procedure for punishing it, differ largely from the view taken in France and most European countries. The French theory is that a Frenchman owes allegiance to the French state, and commits a breach of that allegiance whenever he commits a crime against French law, even although he is not at the time within French territory. In modern days this theory has been extended so as to allow French and German courts to punish their subjects for crimes committed in foreign countries, and by reason of this power certain countries refuse to extradite their subjects who have committed crimes in other states.

The principle of the French law, though not expressly recognized in England, must be invoked to justify two departures from the English principle—(1) as regards offences on the high seas, and (2) as regards certain offences committed outside the United Kingdom.

Offences on the high seas.

In early days offences committed by Englishmen on the high seas were punished by the lord high admiral, and he encroached so much on the ordinary courts as to render it necessary to pass an act in Richard II.'s reign (15 Rich. II. st. 2, c. 3) to restrain him.

In the time of Henry VIII. (1536, 28 Hen. VIII. c. 15) an act was passed stating that, as the admiral tried persons according to the course of civil law, they could not be convicted unless either they confessed or they or the witnesses were submitted to torture, and that therefore it was expedient to try the offences according to the course of the common law. Under that act a special commission of oyer and terminer was issued to try these offences at the Old Bailey, and English law was satisfied by permitting the indictment to state that the offence was committed on board a ship on the high seas, to wit in the county of Middlesex. Since 1861 these special commissions have been rendered unnecessary by the provision (contained in each of the Criminal Law Consolidation Acts of that year) that all offences committed on the high seas may be tried as if they had been committed in England. As regards offences on land, it was found necessary as early as the reign of Henry VIII. (1544) to provide for the trial in England of treasons and murders committed on land outside England. This was largely due to the constant presence in France of the king and many of his nobles and knights, but the aid of this statute had to be invoked in 1903 in the case of Lynch, tried for treason in South Africa. The latest legislation on the subject was in 1861 (Offences against the Person Act, § 9), and any murder or manslaughter committed on land

Offences committed on land outside England.

out of the United Kingdom, whether within the king's dominions or without, and whether the person killed were a subject of His Majesty or not, may be dealt with in all respects as if it were committed in England. The jurisdiction has been extended to a few other cases such as slave trade, bigamy, perjury, committed with reference to proceedings in an English court, and offences connected with explosives. But these offences must be committed on land and not on board a foreign ship, because if a man takes service on board a foreign ship he is treated for the time as being a member of the foreign state to which that ship belongs. The principle has been also extended to misdemeanours (but not to felonies) committed by public officers out of Great Britain, whether within or without the British dominions. Thus a governor or an inferior officer of a colony, if appointed by the British government, may be prosecuted for any misdemeanour committed by him by virtue of his office in the colony; and cases have occurred where governors have been so prosecuted, such as that of General Picton at the beginning of the 19th century, and of Governor Eyre of Jamaica in 1865, and the attempt to prosecute Governor MacCallum of Natal in 1906. As a corollary to the system of "capitulations" applied to certain non-Christian states in Asia and Africa, it has been necessary to take powers for punishing under English law offences by British subjects in those states, which would otherwise go unpunished either by the law of the land where the offence was committed or by the law of the state to which the offender belonged (Jenkyns, *Foreign Jurisdiction of the Crown*).

Misdemeanours committed by public officers in colonies.

An essential part of the criminal law is the punishment or sanction by which the state seeks to prevent or avenge offences. See also under CRIMINOLOGY. Here it is enough to say that during the 19th century great changes have been made throughout the world in the modes of punishing crime.

Punishment.

In England until early in the 19th century, punishments for crime were ferocious. The severity of the law was tempered by the rule as to benefit of clergy and by the rigid adherence of the judges (*in favorem vitae*) to the rules of correct pleading and proof, whereby the slightest error on the part of the prosecution led to an acquittal. Bentham pointed out that certainty of punishment was more effective than severity, that severe punishments induced juries to acquit criminals, and that thus the certainty of punishment was diminished. But his arguments and the eloquence of Sir Samuel Romilly produced no effect until after the reform of parliament in 1832, shortly after which statutes were passed abolishing the death sentence for all felonies where benefit of clergy existed. The severity of capital sentences had already been modified by the pardoning power of the crown, which pardoned convicts under sentence of death on their consenting to be transported to convict settlements in the colonies. (See DEPORTATION.) For some years this was only done by the consent of the convict, who agreed to be transported if his death sentence was remitted, but in 1824, when a convict refused to give this consent, parliament authorized the crown to substitute transportation for a death sentence, and the same course was adopted in Ireland in 1851 when some treason-felony prisoners refused commutation of their sentence to transportation.

The punishments now in use under the English law for indictable offences are:—

1. Death, inflicted by hanging, with a provision that other modes of execution may be authorized by royal warrant in cases of high treason.

2. Penal servitude, which in 1853 was substituted for transportation to penal settlements outside the United Kingdom. The minimum term of penal servitude is three years (Penal Servitude Act 1891), and the sentence is carried out in a convict prison, in the United Kingdom, but there is still power to send the convicts out of the United Kingdom.

3. Imprisonment in a local prison, which must be without hard labour unless a statute specially authorizes a sentence of hard labour. At common law there is no limit to a term of imprisonment for misdemeanour; but for many offences (both felonies and misdemeanours) the term is limited by statute to two years, and in practice this limit is not exceeded for any offence. The treatment of prisoners is regulated by the prison acts and rules.

4. Police supervision, on conviction or indictment of felony and certain misdemeanours after a previous conviction of such offences. Prevention of Crimes Act, c. 112, §§ 8, 20.

5. Pecuniary fine, a punishment appropriate only to misdemeanours and never imposed for a felony except under statutory authority, *e.g.* manslaughter (Offences against the Person Act, § 5). The amount of the fine is in the discretion of the judge, subject to the directions of Magna Carta and the Bill of Rights and of any statute limiting the maximum for a particular offence.

6. Whipping was a common law punishment for misdemeanants of either sex. Under the present law the whipping of females is prohibited, and the punishment is not inflicted on males except under statutory authority, which is given in the case of certain assaults on the sovereign, of certain forms of robbery with violence or assaults with intent to commit felony (Garrotters Act 1863), of incorrigible rogues, larceny and malicious damage, and certain other offences by youthful offenders.

7. Recognizances (caution) to keep peace and be of good behaviour, *i.e.* a bond with or without sureties creating a debt to the crown not enforceable unless the conditions as to conduct therein made are broken. This bond may be taken from any misdemeanant, and, under statutory authority, from persons convicted of any felony (except murder) falling within the Criminal Law Consolidation Acts of 1861.

8. In the case of any offence which is not capital the court, if it is a first offence or if any other grounds for mercy appear, may simply bind the offender over to come up for judgment when required, intimating to him that if his conduct is good no further steps will be taken to punish him.

Except in the case of the death penalty, the court of trial has a discretion as to the *quantum* of a particular punishment, no minimum being fixed. In the case of offences punishable on summary conviction the maximum punishment is always fixed by statute. It consists of imprisonment with or without hard labour, or a fine of a limited amount, or both. The imprisonment in very few cases may exceed six months. If the maximum exceeds three months the accused must be informed that he has a right, if he so elects, to be tried by a jury.

Where power is given to deal summarily with offences which under ordinary circumstances would be tried on indictment, the punishments are as follows (Summary Jurisdiction Act 1879):—

(a) In the case of adults pleading guilty, imprisonment not exceeding six months without the option of a fine.

(b) In the case of adults (consenting to be summarily tried), where the offence affects property not worth over forty shillings, imprisonment not over three months, or fine not exceeding £20.

(c) In the case of young persons, between twelve and sixteen years, imprisonment not over three months, or fine not exceeding £10.

(d) In the case of children under twelve, imprisonment not over one month, or fine not exceeding forty shillings.

If the offence is trifling, the accused may be discharged without punishment, and under the First Offenders Act (1887) the justices have a discretionary power to forgo punishment. The justices have also the power,

under the Prevention of Crime Act 1908, in lieu of passing a sentence of penal servitude or imprisonment, to commit persons between the ages of sixteen and twenty-one to a Borstal institution, for a period of detention ranging from one to three years (see JUVENILE OFFENDERS).

In the criminal law of Europe the scale of punishments is on similar lines in most states, and is more elaborate than that of England, and less is left to the discretion of the court of trial. The following examples will indicate the kind of punishments awarded under the French penal code. Punishments are classified as (1) *afflictives et infamantes*, including death, *travaux forcés à perpétuité ou à temps*, *déportation*, *détention*, *reclusion*; (2) *infamantes*, viz. banishment and civil degradation; (3) *peines en matière correctionnelle*, viz. imprisonment in a house of correction (six days to five years), interdiction from certain civic rights, and fine. The punishments in no case have any effect to extinguish the civil claims of individuals who have suffered by the offence (arts. 6 and 55). Special provisions are made for *récidivistes*, police supervision and first offenders (*Loi Bérenger*).

In the German code of 1872 the legal punishments are: (1) death; (2) penal servitude for life or for a term not exceeding fifteen years nor less than one year; (3) imprisonment with labour for a term not exceeding five years nor less than one day; (4) confinement in a fortress (terms same as for penal servitude but involving only withdrawal of freedom and supervision); (5) arrest for not more than six weeks nor less than one day; (6) fine (not less than three marks in the case of crimes or delicts nor one mark in case of petty offences). Sentence of imprisonment is in certain cases followed by liability to be placed under police supervision for a term after release. In the case of a sentence of death or of penal servitude, the court may order forfeiture of civil privileges, and a condemnation to penal servitude permanently disqualifies for service in the army and public office (Code pt. 1, chap. 1, arts. 13-40).

Under the Italian code of 1889 (arts. 11-30) the punishments are (1) *ergastolo* (for life); (2) *reclusione* (from three days to twenty-four years), which involves hard labour and cellular confinement; (3) *detenzione* (like term), which involves labour and at night separate confinement; (4) *confino* (one month to three years), a form of banishment from the commune of origin or residence of the offender; (5a) fine (*multa*), from ten to ten thousand lire; (5b) *amende*, from one to two thousand lire; (6) arrest (one day to two years); (7) interdiction from public office; (8) suspension from professional calling. Punishments (5b), (6) and (8) are applied only to contraventions, the others to crimes (*delitti*).

The Spanish law (*Codigo Penal*, title 3, chaps. 2 and 3) contains a general scale of punishments classified as afflictive, correctional, light and accessory. The first class begins with death and runs down through many forms of imprisonment to disqualification (*inhabilitacion*). The second includes forms of imprisonment, (*presidio* and *prisión*), and arrest, public censure and suspension from the exercise of certain offices or callings. The slight punishments are minor arrest and private censure. Offenders in any of the three classes may also be fined or put under recognizance (*caución*). The accessory punishments include payment of costs, degradation, civil interdiction.

In England indictable offences (*i.e.* offences which must be tried by a judge and jury) are thus dealt with:—

Tribunals.

1. Courts of assize (sitting under old commissions known as commissions of assize, oyer and terminer, and general gaol delivery) are held twice or oftener in every year in each county and also in some large cities and boroughs. They are the lineal successors of the justices *in eyre*[2] of the middle ages; but they are now integral parts of the High Court of Justice. These courts can try any

indictable offence presented by a grand jury for the district in which they sit.

2. For the counties of London and Middlesex and certain adjoining districts, a special court of assize known as the central criminal court sits monthly.

3. In all counties and many boroughs the justices of the peace sit quarterly or oftener under the commission of the peace to try the minor indictable offences. (See QUARTER SESSIONS, COURT OF.)

4. The High Court of Justice in the king's bench division tries a few special offences in its original jurisdiction, and where justice requires may transfer indictments from other courts for trial before itself.

5. The court of criminal appeal has been instituted by the Criminal Appeal Act 1907; to it all persons convicted on indictment have a right of appeal. (See APPEAL.)

The substantive law as to crime applies in England to all persons except the reigning sovereign, and criminal procedure is the same for all subjects alike, except in the case of peers or peeresses charged with felony, who have the right of trial by their peers in the House of Lords if it be sitting, or in the court of the lord high steward.

Special tribunals.

There are in England no courts of a special character, such as exist in some foreign countries, for the determination of disputes between the governing classes themselves or with the governed classes, whether of a civil or criminal character. There are a few exceptional courts with criminal jurisdiction. The court of chivalry, which used to punish offences committed within military lines outside the kingdom, is obsolete. Special tribunals exist for trying naval or military offences committed by members of the navy and army, but

those members are not exempt from being tried by the ordinary tribunals for offences against the ordinary law, as though they were civilians. The naval courts can be held only on board a ship, and can as a general rule try only persons entered on the books of a king's ship. The military courts can only try persons who are actually members of the army at the time, and their authority is annually renewed by parliament, in consequence of the jealousy still felt against the trial of any man except by the ordinary courts of law. Military and naval courts can try in any part of the world, and whenever the forces are in active service can try followers of the camp as if they were actual members of the forces. (See MILITARY LAW; MARTIAL LAW.)

Ecclesiastical courts.

The ecclesiastical courts, which were formerly very powerful in England, and punished persons for various offences, such as perjury, swearing, and sexual offences, have now almost fallen into disuse. Their authority over Protestant dissenters from the established church was taken away by statute; their authority over lay members of the Church of England has disappeared by disuse. Occasionally suits are instituted in them against the clergy for offences either against morality or against doctrine or ritual. In these cases their sentences are enforced by penalties, such as suspension, or deprivation of benefice, or by imprisonment; which has replaced the old punishment of excommunication.

Procedure.

A system of procedure, with the judicial machinery required to work it, may be created either by the direct legislative action of the supreme power or by custom and the action of the courts. Both at Rome and in England it was through usage and by the courts themselves that the earlier system was slowly moulded: both at Rome and in England it was direct legislation that established the later system. (See Bryce, *Studies in History and Jurisprudence*, 1901, ii. 334.)

The characteristics of English criminal procedure which most distinguish it from the procedure of other countries are as follows:—

1. It is litigious or accusatory and not inquisitorial (Stephen, *Prel. View Cr. Law*). It is for the prosecutor to prove by evidence the commission of the alleged offence. No power exists to interrogate the accused unless he consents to be sworn as a witness in his own defence, which since 1898 he may do. The right to cross-examine him even when he is so sworn is limited by law, with the object of excluding inquiry into his past character or into past offences not relevant to the particular charge on which he is being tried.

2. The forms of criminal pleading still in use are in substance framed on the lines of the old system of pleading at common law in civil cases, which was swept away by the judicature acts. Criminal pleadings have, however, one peculiarity. Indictments, being in form the presentment of a grand jury, could not be amended until provision for that purpose was made in 1851. (See INDICTMENT.)

3. Criminal prosecutions are ordinarily undertaken by the individuals who have suffered by a crime. There is not in England, as in Scotland and all European countries, a public department concerned to deal with all prosecutions for crime. The result is that the prosecution of most ordinary crime is left to individual enterprise or the action of the local police force or the justices' clerk.

The attorney-general has always represented the crown in criminal matters, and in state prosecutions appears in person on behalf of the crown, and when he so appears has certain privileges as respects the reply to the prisoner's defence and the mode of trial. In the Prosecution of Offences Acts of 1879, 1884 and 1908 there is to be found the nucleus of a system of public prosecution such as obtains in other countries in case of crime.

Under these acts the director of public prosecutions (up to 1908 an office conjoint with that of solicitor to the Treasury) acts under the attorney-general, but unless specially directed he only undertakes a limited number of prosecutions, *e.g.* for murder, coining and serious crimes affecting the government.

4. Where an indictable offence is supposed to have been committed the accused is arrested, with or without the warrant of a justice, according to the nature of the offence, or is summoned by a justice before him. On his appearance a preliminary inquiry is held for the purpose of ascertaining whether there is a prima facie case against him. The procedure is regulated by the Indictable Offences Act 1848, and is entirely different from the procedure for summary offences. It may be, though usually it is not, held in private; it is an inquiry and not a trial; the justices have to consider not whether the man is guilty, but whether there is such a prima facie case against him that he ought to be tried. If they think that there is, they commit him to prison to wait his trial, or require him to give security, with or without sureties, to the amount named by them, for appearing to take his trial. If they think the charge unsubstantial they discharge the accused at once. The prosecutor in cases of felony may if he likes go before the grand jury whether the case has or has not been the subject of a preliminary inquiry, but in the case of many misdemeanours it is obligatory first to have a preliminary inquiry, as a protection against vexatious indictments.

Whether there has or has not been a preliminary inquiry before a magistrate, no person can be tried for any of the graver crimes, treason or felony, except upon indictment found by a grand jury of the county or place where the offence is said to have been committed or is by statute made cognizable. In olden days, and even now in theory, the grand jury inquire of their own knowledge, by the oath of good and lawful men of the neighbourhood, into the crime of the

The grand jury.

county, but in practice the charges against the accused persons are always first submitted to the proper officer of the court. The grand jurors are instructed as to their inquisition by a charge from the judge, as regards the indictments concerning which they are called upon to enquire whether there is a prima facie case to send them for trial to the petty jury. The grand jury must consist of not less than twelve, nor more than twenty-three, good and lawful men of the county. But any person who prefers an indictment is entitled to have it presented to the grand jury. Officers of the court lay the indictments before the grand jury. The charges are then called bills, and if the grand jury considers that there is no prima facie case the foreman endorses the bill with the words "no true bill," and it is then presented to the judge. The jury are then said to have ignored the bill, and if the person charged is in custody he is released, but is liable to be indicted again on better evidence.

As a means of constitutional protection in times of monarchical aggression this practice had no doubt a great value, but in the present day, when few offenders are tried without a preliminary inquiry by justices, the functions of a grand jury are of secondary importance, and the jurors' time is perhaps needlessly occupied. The institution of the grand jury prevented the crown in the days of its great power from removing a person whom it wished to get rid of from among his neighbours, and placing him on trial in a strange place where the influence of the crown was greater. This is still true to a certain extent, as great injustice may be caused to a man by removing him from his neighbours and trying him at a distance from his friends, and from the witnesses whom he might call for his defence. In Ireland, for instance, the greatest injustice might be done by removing an Orangeman from Belfast and trying him in a Roman Catholic county or vice versa. But it has its evils where the area from which the jurors are drawn is small, such as a town of a few thousand inhabitants. In that case a man charged, say, with fraud, may be protected by his friends from being

properly punished for that fraud. But where justice requires, an order may be made for the trial of the offence in another county or at the central criminal court.

In many colonies the Scottish system has been adopted, by which the ordinary form of accusation is by indictment framed by the public prosecutor, and a grand jury is only impannelled in cases where an individual claims to prosecute an offence as to which the public officials decline to proceed. In England criminal informations by the attorney-general, or by leave of the court without the intervention of a grand jury, are permitted in cases of misdemeanour, but are now rarely preferred.

Coroner's courts.

If a coroner's jury, on inquiring into any sudden death, finds that murder or manslaughter has been committed, that finding has the same effect as an indictment by a grand jury, and the man charged may be tried by the petty jury accordingly. The law and procedure of the coroner's courts are now regulated by the Coroners Act 1887. When there is a dead body of a person lying within the area of his jurisdiction, and there is reasonable cause to suspect that such person died a violent or unnatural death, or a sudden death of which the cause is unknown, or has died in prison, the coroner is entitled to hold an inquest, and if the verdict or inquisition finds murder or manslaughter, it is followed by trial in the same way as if the person accused had been indicted.

Trial by jury.

When an indictment is found by the grand jury (twelve at least must concur) the person charged is brought before the court, the indictment is read to him, he is asked whether he is guilty or not guilty. If he pleads guilty he is then sentenced by the court; if he pleads not guilty, a petty jury of twelve is formed from the panel or list of jurors who have been summoned by the sheriff to attend the court. He is tried by these jurors in open court. The common law

method of trial of crimes by a jury of twelve, native to English law, has been in modern times transplanted to European countries. It was not the original form of trial, for it was preceded by wager of battle (which was not finally abolished till 1819); and by ordeal, which was suppressed as to criminal trials in 1219 in consequence of the decree of the Lateran Council (1216). The first was allowed only on an appeal by an individual accuser; the second was resorted to on an accusation by public fame, which the accused was allowed to meet by submitting to the ordeal. It was after 1219 that trial by the jury of twelve (known as trial in pais) began to develop. At the outset the accused used to be asked how he would be tried, and could not be directly compelled to plead to the charge or to accept trial by a jury; which led to the indirect pressure known as the *peine forte et dure*, which fell into disuse after the Revolution and was formally abolished in 1772. But it was not until 1827 that refusal to plead was treated as a plea of not guilty, entailing a trial by a jury, and some old-fashioned officials still ask the old question “How will you be tried?” to which the old answer was “By God and my country.”

The original trial jury or inquest certainly acted on its own knowledge or inquiries without necessarily having evidence laid before it in court. The impartiality of the jurors was to some extent secured by the power of challenge. The exact time when the jury came into its present position is difficult accurately to define. On the trial before the petty jury the procedure and the rules of evidence differ in very few points from an ordinary civil case. The proceedings as already stated are accusatory. The prosecutor must begin to prove his case. Confessions (which are the object sought by French procedure) are regarded with some suspicion, and admissions alleged to have been made by the accused are not admitted unless it is clear that they were not extracted by inducements of a temporal nature held out by persons in authority over him. During the spring assizes of 1877 a prisoner was charged with having committed a murder twenty years before, and the

counsel for the prosecution, with the consent of the judge, withdrew from the case because the only evidence, besides the prisoner's own confession, was that of persons who either had never known him personally or could not identify him. The accused may not be interrogated by the judge or the prosecuting counsel unless he consents to be sworn as a witness. In this respect the contrast between a criminal trial in England and a criminal trial in France is very striking. The interrogation and browbeating of the prisoner by the judge, consistent as it may be with the inquisitorial theory of their procedure, is strange to English lawyers, accustomed to see in every criminal trial a fair fight between the prisoner and the prosecution, and not a contest between the judge and the prisoner. The accused may, if he choose, be defended by counsel, and if poor may get legal aid at the public expense if the court certify for it. He is entitled to cross-examine the witnesses for the prosecution and to call witnesses in his defence. At the conclusion of the evidence and speeches the judge sums up to the jury both as to the facts and the law, and the jury by their verdict acquit or convict. Immediate discharge follows on acquittal; sentence by the judge on conviction.

Summary trials.

Justices of the peace may under many statutes convict in a summary manner (without the intervention of a jury) for offences of minor importance. The procedure for punishing summary offences is before two justices, or a stipendiary magistrate. This proceeding must not be confused with the preliminary inquiry already mentioned before justices for an indictable offence, nor with the procedure before justices in relation to civil matters, such as the recovery of small sums of money. The proceeding begins either by the issue of a warrant for the arrest of the person charged, in which case a sworn information must be filed, or by a summons directing the person charged to appear on a certain day to answer the complaint made by the prosecutor. The justices hear the case in open court; the person charged can make his defence either in person or by his solicitor or counsel, he can

Procedure for summary offences.

cross-examine the witnesses for the prosecution, call his own witnesses, and address the justices in his defence. The justices, after hearing the case, either acquit or convict him, and in case of conviction award the sentence. If the sentence is a fine, and the fine is not paid, the person convicted is liable to be imprisoned for the term fixed by the justices, not exceeding a scale fixed by an act of 1879, the maximum of which is one month. The imprisonment may be with or without hard labour.

Of late years this summary jurisdiction of the justices has received very large extensions, and many offences which were formerly prosecuted as serious offences by an indictment before the court of assize or quarter sessions have, where the offence was a trivial one, been made punishable, on summary proceedings before justices, by a small fine or a short term of imprisonment.

The extension of the jurisdiction of the justices is open to the observation that it deprives a person charged of the protection of a jury, and also that it throws upon him, if convicted, and upon the prosecution if there is no conviction, the cost of the proceedings. The former objection is much mitigated by the enactment made in 1879, that a person if liable on conviction to be sentenced to imprisonment for more than three months, or to a fine exceeding £100, can claim to be tried by a jury. But the objection as to the costs remains, and the payment of costs is often a very serious addition to the trivial fine; and it is anomalous that a person convicted of a trifling offence should bear the cost of the prosecution, while if he is convicted before a superior tribunal of the most serious offence he does not pay the costs.

In English law until 1907, where a criminal case had been tried by a jury the verdict of the jury of guilt or innocence was final and there was no appeal on the facts. Any considerable defect or informality in the procedure

Appeal.

might be the subject of a writ of error. And if any question of law arose at the trial, the judge might, if he chose, reserve it for the opinion of the court for the consideration of crown cases reserved, by whom the conviction might be either quashed or confirmed.

By the Criminal Appeal Act 1907, a new court was established, to which any person convicted on indictment might appeal. (See APPEAL.)

Costs.

The expenses of prosecution for crime in England are dealt with in the following manner. Prosecutions for high treason and the cognate offence known as treason-felony are at the expense of the state, which alone undertakes such prosecutions. In the case of all other felonies and of many misdemeanours the expense of the prosecution falls on the local rate. In the case of other misdemeanours the expense falls on the prosecutor. Where an offence is summarily prosecuted the costs are in the discretion of the court, which may order the accused to pay them, if convicted, or the prosecutor to pay on acquittal, or may leave the parties to pay their own expenses. On charges of felony and a few misdemeanours the court may order the accused person to pay the expenses of his prosecution in relief of the local rate. In a few cases, chiefly where the prosecution is vexatious, the court may order the prosecution to pay the expenses of the defence. The expenses of witnesses for the defence in any indictable offence may be paid out of the local rate when they have been called at the preliminary inquiry; and where the court in the case of a poor prisoner has certified that he should have legal aid, the expenses of the defence may be charged to the local rate. The local rate upon which the expenses fall is usually that of the county or borough in which the offence was committed; but sometimes is that of the place where the offence is tried.

Between 1852 and 1888 parliament reimbursed to the local authorities the expense imposed on the local rate. In 1888 the proceeds of certain taxes were set aside and handed over to the local authorities as a set-off to the expense incurred in prosecutions. In one class of case, offences committed in the admiralty jurisdiction, *i.e.* outside England, the treasury directly reimburses to the local authorities the expense incurred.

Under most, if not all, European codes, the state pays for the prosecution, subject to reimbursement by the accused, if the court so orders.

The English system of criminal procedure is the basis of that of most of the states which form the United States of America, and, with few exceptions, of the procedure throughout the British empire.

Non-British criminal procedure.

The French penal code and code of criminal procedure are substantially the model of all systems of continental criminal law. They were promulgated in 1811 by Napoleon I., and although he called in the aid of the greatest French jurists, he guided, and occasionally even revised, their labours. The French codes have been improved upon by later European codes, and more especially by the Italian penal code. All European codes have an opening chapter where the general principles of criminal law in its practical application are enunciated, such as, for instance, the rules that—(1) no person is liable to punishment for any act not expressly declared to be an offence; (2) no person can be punished for an act which by virtue of a subsequent law is declared not to be an offence; (3) whoever commits an offence within the kingdom is tried and punished according to the criminal law of the kingdom, and by the tribunals created for the administration of justice, to the exclusion of special tribunals created for temporary purposes. This rule really lays down that no citizen can be deprived of his own judges when he is accused of a criminal offence. (4) A citizen, although he may have been tried in a foreign country for an

offence committed within the kingdom, can be retried according to the law of the kingdom. (5) Extradition only applies to foreigners, not to citizens. The preliminary chapter is followed by the classification of offences according to the importance of the punishments the law assigns to them. The lowest degree of offence is denominated "contravention." It applies mainly to the pettiest offences, or to infractions of police regulations, and can be punished by fine or by imprisonment under a week, or by both fine and imprisonment, limited to a week. Next comes the "*délit*," which includes all offences punished by imprisonment over a week and under five years. Then, finally, we arrive at the "*crime*," the highest form of offence in French criminal law. It includes all offences subject to a more severe sentence than the punishment assigned to a *délit*. All cases are held to be crimes where death, life-imprisonment with or without hard labour, deportation out of the kingdom, detention or seclusion in a fortress or other expressly assigned place, are the punishments mentioned by the law. A certain number of explanatory definitions follow, of which the most important concern *attempts* to commit offences, and in "crimes" they are punishable if the execution of the attempt was only prevented by circumstances beyond the will of the offender, whilst in "*délits*" an attempt is not punishable as an offence unless the law specially provides that it should be punished. As regards "contraventions," attempts not carried out are not held to be offences at all. Accomplices are generally subject to the same punishment as the principal. Old offenders (*récidivistes*) are subject to severer punishments. The usual exceptions as regards responsibility for crime, such as madness and extreme youth and *force majeure*, are to be found in all codes. The excuse of youth extends to all offenders under the age of sixteen, when the tribunal decides whether the offender has acted without "discernment," and acquits where the discernment is not found, whilst one-half of the usual punishment is inflicted where discernment is found. Foreign codes differ from the English law in allowing the injured

party to claim damages in the criminal suit, appearing as *partie civile*. On another question there is a wide divergence on the continent of Europe from English law. According to the law of England there is no prescription in criminal law (with a few exceptions created by statute). An offender is always liable to punishment whatever time may have elapsed since the committal of the offence. On the continent of Europe the limitation of a judgment and sentence for a crime is twenty years; five years for a *délit*, and for a contravention two years. No proceedings can be taken as regards a crime after a lapse of ten years, whilst as regards a *délit* the limit is three years, and two years for a contravention.

There are three main differences between English criminal procedure and European criminal procedure.

1. A criminal prosecution directed on European criminal procedure at once passes into the hands of the state as an infringement of law which must be repressed, on the ground that the whole community bases its security on obedience to law. In England the repression of all minor crime is left to the injured party.

2. In England every criminal trial from beginning to end is, and has always been, public. Preliminary inquiries into an indictable offence may be, but rarely if ever are, conducted in private. On the continent of Europe, with rare exceptions, all preliminary proceedings in a criminal charge are secret. Outside English-speaking countries this secret investigation continues more or less. But of the two systems, accusatory or inquisitorial —the first meaning the right of the accused to defend himself, the second meaning the right of the state to examine any legal offence in private in order to ensure the safety of society,—the accusatory is gaining ground in every country. In English-speaking countries it is an established law that an accused person should have the right of publicity of the proceedings and the right to defend himself by counsel and by witnesses. In Europe the

inquisitorial system is gradually being abandoned. Perhaps the best code of criminal procedure in Europe is that promulgated in Austria in 1873. It followed a fundamental law of the Empire which laid down *inter alia* that all legal proceedings, civil or criminal, should be oral and public, and that the accusatory system in criminal cases should be adopted. Germany followed this example. Italy, Holland. Switzerland and Spain have followed Austria and Germany as regards the preliminary investigation; Italy and Belgium have surrounded the accused with guarantees against arbitrary confinement before trial; Holland has conferred upon the accused the right of seeing the adverse testimony and of being confronted with the witnesses, and, further, has formally insisted that no insidious questions, such as questions assuming a fact as true which is not known to be true, should be allowed. Other countries still remain on the old lines. But everywhere, whether reform has actually been accomplished or not, there is a demand for even-handed justice, and a growing conviction that the accused should have all his rights, now that society is no longer in danger from undiscovered criminals and unpunished crime. Even in France, the champion of the inquisitorial system, a change is being made. Up to 1897 secrecy was imposed invariably in the preliminary investigation of crime, and was held necessary for the discovery and punishment of the offender. The *Loi de l'instruction contradictoire*, December 8, 1897, however, was a long step towards complete justice in the treatment of the accused in the preliminary inquiry. The main reform is that the accused, after he has once appeared before the judge and a formal charge has been made against him, is entitled to the assistance of counsel, either chosen by himself or assigned to him if he is poor. If he is in prison he is allowed to communicate freely with his counsel, who is entitled to see all the proceedings, and in every appearance before the judge his counsel accompanies him. There are, however, certain limitations. The counsel cannot address the judge without leave, which may be refused, nor can he insist on any proceeding he thinks

necessary in his client's interest. He can only solicit. He has no right to be present at the examination of witnesses, who continue to be interrogated by the judge alone and not in the presence of the accused; but he must receive twenty-four hours' notice of every appearance of the accused, and he is entitled to be present whenever his client, after the first formal appearance, comes before the judge. In England, as already pointed out, although the prosecution is in the name of the crown, and although a public prosecutor has been appointed, still as a rule it is conducted by the person injured as the person injured, or by the police.

3. In England the single-judge system is universal, save in appeal; on the continent of Europe plurality of judges is insisted upon, save in the most trivial cases, where the punishment is insignificant. In most countries of the continent of Europe the whole machinery for the prevention, investigation and punishment of crime, is conducted by what is called the *parquet*, which represents society as a collective unit and not the individual injured. The head of the whole parquet in France is the *procureur-général*, who holds equal rank with the members of the supreme court. Under him there are procureurs-généraux attached to each of the courts of appeal, of which in France there are twenty-six, and under each of these subordinate procureurs there are procureurs (prosecutors) of a lesser degree. The next stage to the parquet is the *juge d'instruction*, who corresponds to the English magistrate, and is the most formidable personage in the whole system of French criminal law. He can detain and accuse a person in prison, can send for him at any time and ask him such questions as he pleases.

After the first examination the prisoner is entitled, in most European countries, to the assistance of counsel, but the powers of counsel are so limited that the juge d'instruction has a complete discretionary power regarding the investigation of the case. The natural consequence of this

procedure is that the preliminary investigation really decides the ultimate result, and the final trial becomes more or less a solemn form.

Ireland.

The criminal law of Ireland is to a great extent the same as that of England, resting on the same common law and on statutes which extend to both countries or are in almost the same terms, and is administered by courts of assize and quarter sessions, and by justices, as in England. In a few instances statutes passed for England or Great Britain before the Union have not been extended to Ireland, or statutes passed by the Irish parliament before the Union or by the British parliament since the Union create offences not known to English law. In Ireland the system of prosecution is nominally the same as in England, but in practice almost all prosecutions are instituted and conducted under the direction of the attorney-general for Ireland, who is a member of the government of the day, and so responsible to parliament, as in the case of the lord advocate. In Ireland, owing to the police being a centralized force, under the management of commissioners residing in Dublin, any prosecution which in England might be conducted by the local police, would in Ireland be conducted under the direction of the chief of the police in Dublin, who is necessarily in close communication with and under the control of the attorney-general.

Scotland.

In Scotland hardly any crimes are constituted by statute law, the common law being to the effect that if a judge will direct any act to be a crime, and a jury will convict, that act is a crime. This great elasticity of the common law to include every sort of new crime which might arise was in times past very dangerous to political liberty, as it greatly enlarged the power of the crown to oppress political opponents, but in modern days it has its convenience in facilitating the punishment of persons committing crimes for the punishment of which in England a new act of parliament may be necessary. Criminal procedure

in Scotland is regulated by an act of 1887 which greatly simplified indictments and proceedings. The prosecution of crime is in the hands of public officers, procurators fiscal, under the control of the lord advocate. Private prosecutions are possible, but rare. Except in the case of the law of treason, imported from England at the Union, no grand jury is required, and the indictments are filed by the public officer.

Other British possessions.

The criminal law of England forms the basis of the criminal law of all British possessions abroad, with a few exceptions, *e.g.* the Channel Islands (still subject to the custom of Normandy) and the anomalous case of Cyprus, where Mahommedan law is to some extent in force. As to India, see INFRA.

In many British colonies the criminal law has been codified or at the least consolidated. Criminal codes have been passed in Canada, New Zealand (1893), Queensland (1899) and W. Australia (1901). Many crown colonies have codes framed on the model prepared by the late Sir R. S. Wright for Jamaica and revised in 1901, and in British Guiana opportunity was taken (in 1893) to abolish the remnants of Roman-Dutch criminal law.

The criminal law of South Africa, which is based on the Roman-Dutch law, including the *Constitutio Criminalis Carolina* (1532), is not codified. In the Transvaal and Orange River colonies codes of criminal procedure are in force, drawn mainly from the common and statute law of the Cape Colony with the addition of provisions borrowed from English and colonial legislation.

In Mauritius the criminal law is comprised in a penal code of 1838 and a procedure code of 1853, which, with the incorporated amendments, are to be found in the *Revised Laws of Mauritius* (1903-1904), ii. 466 et seq. The penal code is based on the Code Napoléon.

"Criminal law has everywhere grown out of custom, and has in all civilized states been largely dealt with by direct legislation. In most civilized states (including Japan) it has been codified by statute, to the general satisfaction of the people; and the conspicuous success of the Indian penal code shows that English criminal law is susceptible of being so treated" (Bryce, *Studies*, ii. 34).

Codification.

The expediency, if not the necessity, of codifying the criminal law of England has long been apparent. The writings of Bentham drew attention to many of its substantial defects, and the efforts of Romilly and Mackintosh led to certain improvements embodied in what are known as Peel's Acts (1826 to 1832). In 1833, at the instance of Lord Chancellor Brougham, a royal commission was appointed to deal with the criminal law. The nature of the instructions indicate the crudity of the ideas then ruling as to codification. The commissioners were directed to digest into one statute all enactments touching crimes and the punishment thereof, and into another statute the provisions of the common unwritten law touching the same. The commission was renewed in 1836 and 1837, and in 1843 a second commission was appointed. Numerous and voluminous reports were published, including (1848) a bill for consolidating and amending the law as to crimes and punishments, and (1849) a like bill for criminal procedure, indicating that the commissioners had in the meantime learned the distinction between substantive and adjective law. Lord Brougham in 1848 unsuccessfully introduced the first bill, and in the end the only fruit of the reports has been certain amendments of procedure in 1851 and the passing of the seven Criminal Law Consolidation Acts of 1861, which deal with the statute law as to theft, forgery, malicious injuries to property, coinage offences and offences against the person. The reports, however, proved of value in the revision of Macaulay's draft of the Indian penal code, and led to the formation of the Statute Law Committee, which has relieved the

statute book of much dead matter. On his return from India, impressed by the success of the Indian penal code, Sir J. Stephen made a strong effort to obtain codification. In 1878, at the instance of Lord Cairns, he prepared a draft code (based on his well-known *Digest of the Criminal Law*), which was laid before parliament and then submitted to judicial criticism and revision. As a result of this revision a code bill was introduced in 1880; but a dissolution intervened and no serious effort was then made. The obstacle in the way is not lack of reports or digests on which to frame a code, but the incapacity of parliament to do the work itself, and its unwillingness to trust the work to other hands.

India.

The Indian penal code and criminal procedure code, by their history, their form, and the extent and diversity of the races and peoples to which they apply, are perhaps the most important codes in the whole world. While the East India Company was merely a trading company holding certain forts and trading ports in India and elsewhere, such criminal justice as was administered under its auspices was in the main based on the English criminal law, said to have been introduced to some extent by the company's charter of 1661, but reintroduced into the presidency laws by later charters of 1726, 1753 and 1774. (See *Nuncomar and Impey*, by Sir J. Stephen.) From 1771 until 1860 the criminal law administered was the Mahommedan law. When in 1771 the East Indian Company determined to stand forth as diwan, Warren Hastings required the courts of the mofussil (provinces), as distinct from those of the presidency town of Fort William, to be guided in the administration of criminal justice by Mahommedan law, which under the Moguls had been used in criminal cases to the exclusion of Hindu law. Difficulties arose in administration, from the definition of crime, the nature of punishments, and in matters of procedure, which were removed by regulations and by enactments on English lines, especially in Bombay

(1827); and great delays and considerable injustice were caused by the want of unity in judicial organization.

Between 1834 and 1837 Macaulay with three other commissioners, Macleod, Anderson and Millet, prepared a draft penal code for India, for which they drew not only upon English and Indian laws and regulations but also upon Livingstone's Louisiana code and the Code Napoléon. Little or nothing was taken from the Mahommedan law. A revised draft of the penal code by Sir B. Peacock, Sir J. W. Colville and others was completed in 1856. In framing it the reports of the English criminal law commissioners (published after Macaulay's draft code) were considered. The draft was presented to the legislative council in 1856, but owing to the mutiny and to objections from missionaries, &c., its passing was delayed till the 6th of October 1860. A draft scheme of criminal procedure was prepared in India in 1847-1848, which, after submission to a commission in England in 1853 (Government of India Act 1853), was moulded into a draft code which passed the India legislative council in 1861 (Act No. XXV.) and came into force in 1862. It has been re-enacted with amendments in 1872 (Act X.), 1882 (Act X.) and 1898 (Act V.).

The result is that in India the criminal law is the law of the conqueror, though for many civil purposes the law of race, religion and caste governs. Under the codes, one set of courts has been established throughout the country, composed of well-paid, well-educated judges, most of the higher judicial appointments being held by Englishmen; all those who hold subordinate judicial posts at the same time are subjected to a combined system of appeal and revision. The arrangement of the Indian penal code is natural as well as logical; its basis is the law of England stripped of technicality and local peculiarities, whilst certain modifications are introduced to meet the exigencies of a country such as British India. It opens with a chapter of general explanations, and interpretations of the

terms used throughout the code. It then describes the various punishments to which offenders are liable; follows with a list of the exceptions regarding criminal responsibility under which a person who otherwise would be liable to punishment is exempted from the penal consequences of his act, such as offences committed by children, by accident or misfortune without any criminal intention, offences committed by lunatics, offences committed in the exercise of the right of private defence. It may be worth while to add, as an innovation on English law, that an act which results in harm so slight that no person of ordinary sense and temper would complain of such harm is not considered an offence under the code. Then follows a chapter on abetment, in other words, the instigation of a person to do a wrongful act. The next chapters deal with offences against the public, including the state, the army and navy, public tranquillity, public servants, contempts of the lawful authority of public servants, perjury; offences relating to coin and government stamps, to weights and measures; offences affecting the public health, safety, convenience, decency and morals; offences relating to religion; and offences relating to the human body, from murder down to the infliction of any hurt. The code then passes on to offences against property; offences relating to forgery, including trade marks, criminal breach of contracts for service; offences relating to marriage, defamation, criminal intimidation, insult and annoyance. Under this last head is included an attempt to cause a person to do anything which that person is not legally bound to do, by inducing him to believe that he would otherwise become subject to Divine displeasure. The last chapter deals with attempts to commit offences punishable by the code with transportation or imprisonment, and the punishment is limited to one-half of the longest term provided for the offence had it been carried out.

One peculiarity of the Penal Code which has proved eminently successful lies in the system of illustration of the offence declared in every section by a brief statement of some concrete case. For instance,

as illustration of the offence of an attempt to commit an offence the following examples are given:—

I. "A. makes an attempt to steal some jewels by breaking open a box, and finds on opening the box there is no jewel in it. He has done an act towards the commission of theft, and therefore is guilty under this section.

II. "A. makes an attempt to pick the pocket of Z. by thrusting his hand into Z.'s pocket. A. fails in the attempt in consequence of Z. having nothing in his pocket. A. is guilty under this section."

Passing on to the system of criminal procedure which is set forth in detail in the Code of Criminal Procedure as amended in 1898, it is no doubt modelled on the English system, but with considerable modifications. The principal steps are—(1) arrest by the police and inquiries by the police; (2) the issue of summons or warrant by the magistrate; (3) the mode of procedure before the magistrate, who may either try the accused himself or commit him to the sessions or the High Court, according to the importance of the case; (4) procedure before the court of session; (5) appeals, reference and revision by the High Court.

Indian code of criminal procedure.

Elaborate provision is made for the prevention of offences, as regards security for keeping the peace and for good behaviour, the dispersion of unlawful assemblies, the suppression of nuisances, disputes as to immovable property, which in all Oriental countries constitute one of the most frequent causes of a breach of the peace.

Ample provision is thus made for the prevention of offences, and the code next deals with the mode of prosecution of offences actually committed.

As a general rule, every offence is inquired into and tried by the court within the local limits of whose jurisdiction it was committed. Differing from the practice of continental countries, all offences, even attempts, may be prosecuted after any lapse of time. As in England, there is no statutory limitation to a criminal offence.

A simple procedure is provided for what are called summons cases, as distinguished from warrant cases—the first being offences for which a police officer may arrest without warrant, the second being offences where he must have a warrant, or, in other words, minor offences and important offences. In summons cases no formal charge need be framed. The magistrate tells the accused the particulars of the offence charged; if he admits his guilt, he is convicted; if he does not, evidence is taken, and a finding is given in accordance with the facts as proved. When the complaint is frivolous or vexatious, the magistrate has the power to fine the complainant. The code gives power of criminal appeal which goes much further than the system in England.

In cases tried by a jury, no appeal lies as to matters of fact, but it is allowed as to matters of law; in other cases, criminal appeal is admitted on matters of law and fact.

In addition to the system of appeal, the superior courts are entrusted with a power of revision, which is maintained automatically by the periodical transmission to the High Courts of calendars and statements of all cases tried by the inferior courts; and at the same time, whenever the High Court thinks fit, it can call for the record of any trial and pass such orders as it deems right. All sentences of death must be confirmed by the High Court. No appeal lies against an acquittal in any criminal case. This system of appeal, superintendence and revision would be totally inapplicable to England, but it has proved eminently successful as applied to the present social condition of the inhabitants of India. The appeals keep the judges up

to their work, revision corrects all grave mistakes, superintendence is necessary as a kind of discipline over the conduct of judges, who are not subjected, as in England, to the criticism of enlightened public opinion.

These Indian codes form the basis of the penal, &c., codes in force in Ceylon (superseding there the Roman-Dutch law), the Straits Settlements, the Sudan and the East Africa protectorates.

Foreign codes.

It has already been stated that most European states have codified their criminal law. The earliest of continental codes is that of Charles V., promulgated in 1532, and known as *Constitutio Criminalis Carolina*. Austria made further codes in 1768 (*Constitutio Criminalis Theresiana*) and 1787 (Emperor Joseph's code). A new code was framed in 1803, and amended in 1852 by reference to the Code Napoléon; and in 1906 a completely new code existed in draft. The Hungarian penal code dates from 1880. The Bavarian code of 1768 of Maximilian, revised in 1861, and the Prussian code of 1780, have been superseded by the German penal code of 1872.

The most important of the continental criminal codes are those of France, the *Code Pénal* (1810) and the *Code d'Instruction Criminelle* (1808)—the work of Napoleon the Great and his advisers, which professedly incorporate much of the Roman law.

The Belgian codes (1867), and the Dutch penal code (1880), closely follow the French model. In Spain the penal code dates from 1870, the procedure code from 1886. The Spanish American republics for the most part also have codes. Portugal has a penal code (1852). In Italy the procedure code and the penal code, perhaps the completest yet framed, are of 1890. The Swedish code dates from 1864. The Norwegian code was passed in May 1902, and came into force in 1905. Japan has a code based

on a study of European and American models; and Switzerland is framing a federal criminal code.

In the United States no federal criminal code is possible; but most states, following the lead of Louisiana, have digested their criminal law and procedure more or less effectually into penal codes.

(W. F. C.)

---

1 "It is founded," said Sir J. Fitzjames Stephen, writing in 1863, "on a set of loose definitions and descriptions of crimes, the most important of which are as old as Bracton. Upon this foundation there was built, principally in the course of the 18th century, an entire and irregular superstructure of acts of parliament, the enactments of which were for the most part intended to supply the deficiencies of the original system. These acts have been re-enacted twice over in the present generation—once between 1826 and 1832 and once in 1861; besides which they were all amended in 1837. Finally, every part of the whole system has been made the subject of judicial comments and constructions occasioned by particular cases, the great mass of which have arisen within the last fifty years." (*View of the Criminal Law of England*, by J. Fitzjames Stephen.)

2 *i.e.* Itinerant justices. From the Latin *in itinere*, on a journey.

CRIMINOLOGY, the name given to a new branch of social science, devoted to the discussion of the genesis of crime (*q.v.*), which has received much attention in recent years. The expression is one of modern coinage, and originated with the speculative theories first advanced by the school of sociologists which had the Italian savant, Professor Lombroso, at its head. He discovered or was supposed to have discovered a criminal type, the "instinctive" or "born" criminal, a creature who had come into the world predestined to evil deeds, and who could be surely recognized by certain

stigmata, certain facial, physical, even moral birthmarks, the possession of which, presumably ineradicable, foredoomed him to the commission of crime. Dr Lombroso, in his ingenious work *L'Uomo delinquente*, found many attentive and appreciative, not to say bigoted followers. Large numbers of dissentients exist, however, and the conclusions of the Italian school have been warmly contested and on very plausible grounds. If the doctrines be fully accepted the whole theory of free-will breaks down, and we are faced with the paradox that we have no right to punish an irresponsible being who is impelled to crime by congenital causes, entirely beyond his control. The "instinctive" criminal, under this reasoning, must be classed with the lunatic whom we cannot justly, and practically never do, punish. There are other points on which proof of the existence of the criminal type fails absolutely. The whole theory illustrates a modern phase of psychological doctrine, and the subject has exercised such a potent effect on modern thought that the claims and pretensions of the Lombroso school must be examined and disposed of.

The alleged discovery of the "born-criminal" as a separate and distinct genus of the human species was first published by Dr Lombroso in 1876 as the result of long continued investigation and examination of a number of imprisoned criminals. The personality of this human monster was to be recognized by certain inherent moral and physical traits, not all displayed by the same individual but generally appearing in conjunction and then constituting the type. These traits have been defined as follows:—various brain and cerebral anomalies; receding foreheads; massive jaws, prognathous chins; skulls without symmetry; ears long, large and projecting (the ear *ad ansa*); noses rectilinear, wrinkles strongly marked, even in the young and in both sexes, hair abundant on the head, scanty on the cheeks and chin; eyes feline, fixed, cold, glassy, ferocious; bad repellent faces. Much stress is laid upon the physiognomy, and it is said that it is independent of nationality; two natives of the same country do not so nearly

resemble each other as two criminals of different countries. Other peculiarities are:—great width of the extended arms (*l'envergure* of the French), extraordinary ape-like agility; left-handedness as well as ambi-dexterism; obtuse sense of smell, taste and sometimes of hearing, although the eyesight is superior to that of normal people. "In general," to quote Lombroso, "the born criminal has projecting ears, thick hair and thin beard, projecting frontal eminences, enormous jaws, a square and protruding chin, large cheek bones and frequent gesticulation." So much for the anatomical and physiological peculiarities of the criminal. There remain the psychological or mental characteristics, so far as they have been observed. Moral insensibility is attributed to him, a dull conscience that never pricks and a general freedom from remorse. He is said to be generally lacking in intelligence, hence his stupidity, the want of proper precautions, both before and after an offence, which leads so often to his detection and capture. His vanity is strongly marked and shown in the pride taken in infamous achievements rather than personal appearance.

No sooner was this new theory made public than the very existence of the supposed type was questioned and more evidence demanded. A French savant declared that Lombroso's portraits were very similar to the photographs of his friends. Save for the dirt, the recklessness, the weariness and the misery so often seen on it, the face of the criminal does not differ from that of an honest man's. It was pointed out that if certain traits denoted the criminal, the converse should be seen in the honest man. A pertinent objection was that the deductions had been made from insufficient premises. The criminologists had worked upon a comparatively small number of criminals, and yet made their discoveries applicable to the whole class. The facts were collected from too small an area and no definite conclusions could be based upon them. Moreover, the criminologists were by no means unanimous. They differed amongst themselves and often contradicted one another as to the characteristics exhibited.

The controversy was long maintained. Many eminent persons have been arrayed on either side. In Italy Lombroso was supported by Colajanni, Ferri, Garofalo; in France by J. A. Lacassagne. In Germany Lombroso has found few followers; Dr Naëcke of Hubertusburg near Leipzig, one of the most eminent of German alienists, declined to admit there was any special animal type. Van Hamel of Amsterdam gives only a qualified approval. In England it stands generally condemned, because it gives no importance to circumstance and passing temptation, or to domestic or social environment, as affecting the causation of crime. Dr Nicholson of Broadmoor has said that "if the criminal is such by predestination, heredity or accidental flaws or anomalies in brain or physical structure, he is such for good and all; no cure is possible, all the plans and processes for his betterment, education, moral training and disciplinary treatment are nugatory and vain." No weight can then be attached to evil example, or unfavourable social surroundings, in moulding and forming character, particularly during the more plastic periods of childhood and youth.

The pertinent question remains, has the study and development of criminology served any useful purpose? Little perhaps can come of it in its restricted sense, but it has taken a wider meaning and embraces larger researches. It has inquired into the sources and causes of crime, it has collected criminal statistics and deduced valuable lessons from them, it has sought and obtained guidance in the best methods of prevention, repression, and forms of procedure. The champions of law and order have been greatly aided by the criminologist in carrying on the continual combat with crime, and in dealing with the most complicated of social phenomena. The new science has, in fact, by accumulating a number of curious details, in recording the psychology, the secret desires, the springs of the criminal's nefarious actions, his corrigibility or the reverse, "prepared the way to his sociological explanation" (Tarde). Thanks to the labours of the criminologist we are moving steadily forward to a future improved

treatment of the criminal, and may thus arrive at the increased morality and greater safety of society. Very appreciable advance has been made in the increased attention paid to juvenile and adult crime, the acceptance of the theory, now well established, that there is an especially criminal age, a period when the moral fibre is weaker and more yielding to temptation to crime, when happily human nature is more malleable and susceptible to improvement and reform.

The study of criminology has, however, gone far to satisfy us that the true genesis of crime is not to be sought in the anatomical anomalies of individuals, or in the fact that there are people who under "any social conditions whatever and of any nationality at no matter what epoch, would have undoubtedly become murderers and thieves." On the contrary it may be safely assumed that many such would have done no wrong if they had, *e.g.*, been born rich, had been free from the pressing needs that drove them into crime, and had escaped the evil influences of their surroundings. The criminologists have strengthened the hands of administrators, have emphasized the paramount importance of child-rescue and judicious direction of adults, have held the balance between penal methods, advocating the moralizing effect of open-air labour as opposed to prolonged isolation, and have insisted upon the desirability of indefinite detention for all who have obstinately determined to wage perpetual war against society by the persistent perpetration of crime.

AUTHORITIES.—See A. Weingart, *Kriminaltaktik, ein Handbuch für das Untersuchen von Verbrechen* (Leipzig, 1904); F. H. Wines, *Punishment and Reformation* (New York, 1895); C. Perrier, *Les Criminels* (Paris, 1905); G. Macé, *Femmes criminelles* (Paris, 1904); E. Carpenter, *Prisons, Police and Punishment* (1905); R. R. Rentoul, *Proposed Sterilization of certain Mental and Physical Degenerates* (1904); R. Sommer, *Kriminalpsychologie und strafrechtliche Psychopathologie auf naturwissenschaftlicher Grundlage* (Leipzig, 1904); F. Kitzinger, *Die internationale kriminalistische Vereinigung* (1905); Reports of Committee on the best mode of giving efficiency to Secondary Punishments (1831-1832); Reports of the House of Commons Committee of 1853, of the royal commission of 1884, of the departmental committee of 1895, and the annual reports of H. M. inspectors for Great Britain and Ireland.

(A. G.)

CRIMMITZSCHAU, or KRIMMITSCHAU, a town of Germany, in the kingdom of Saxony, on the Pleisse and the main Leipzig-Hof railway, 7 m. N.W. from Zwickau. Pop. (1900) 22,845. The most important industries of the town are the manufacture of buckskin, the spinning of carded yarn and vicuna-wool, and the processes of dyeing, finishing and wool-spinning connected with these. Among other manufactures are brushes, boilers and the like, machinery, metal ware generally, the cases and other parts of watches. The town has a modern school (Realschule), a commercial school, and technical schools for weaving and finishing.

CRIMP (possibly connected with “crimp,” to draw together, or fold in parallel lines, in the sense of “confine”; the primary meaning, however, seems to be that of “agent,” and the word may be a distinct one, of which the origin is lost), an agent for the supplying of soldiers and sailors, by kidnapping, drugging, decoying or other illegal means. Crimps were formerly regularly employed in the days of impressment (*q.v.*). Now the term is used, first of any one who engages to supply merchant seamen without a licence from the Board of Trade, and is not either the owner, master or mate of the ship, or is not bona fide the servant, and in the constant employment of the owner, or is not a superintendent (Merchant Shipping Act 1894, § 111); and, with a wide application, of the extortionate lodging or boarding-house keepers, who are generally in league with the “crimp” proper.

Sections 212 to 219 inclusive of the above act provide for the protection of merchant seamen in the United Kingdom from imposition. Local authorities at seaports have power to make by-laws for the licensing and regulating of lodging-houses for sailors, and to inflict penalties for the infringement thereof. If this power be not exercised, the Board of Trade may do so. Penalties are also imposed by the act for overcharging by lodging-house keepers, for detaining of seamen’s effects, and for soliciting. Unauthorized persons are prohibited from boarding a ship in port without leave. The Board of Trade officer at a port may provide money for sending a seaman to his home on discharge, and may forward his wages after deducting the expenses. Facilities are also given for having wages sent home from foreign ports at a small charge. These provisions have

practically killed “crimping” in the United Kingdom. In the ports of the United States of America crimping was long prevalent, especially on the Pacific coast, and its prevention was very difficult, but state regulations as to the licensing of boarding-houses, and the limitation of the amount of so-called “blood-money” paid by masters of vessels to the suppliers of crews to ships denuded by desertions, have reduced the abuse materially.

The term “to shanghai” is used of a more serious offence. Literally meaning “to ship to Shanghai,” in China, it is applied to the drugging or rendering unconscious by violence or other means of persons, whether sailors or not, and shipping them to distant ports, in order fraudulently to obtain money in advance of wages, or for the sake of the premium paid for supplying crews.

CRIMSON, the name of a strong, bright red colour tinged to a greater or less degree with purple. It is the colour of the dye produced from the dried bodies of the cochineal insect (*Coccus cacti*). The word, in its earlier forms *cremesin, crymysyn*, also *cramoysin*, cf. “cramoisy,” the name of a red cloth, is adapted from the Med. Lat. *cremesinus* for *kermesinus* or *carmesinus*, the dye produced from the insect *Kermes* (*Coccus ilicis*), Arab. *quirmiz*, which Skeat (*Etym. Dict.*, 1898) connects with the Sanskrit *krimi*, cognate with Lat. *vermis* and Eng. “worm.” From the Lat. *carminus*, a shortened form of carmesinus, comes “carmine” (*q.v.*).

CRINAGORAS, of Mytilene, Greek epigrammatist, flourished during the reign of Augustus (Strabo xiii. p. 617). A number of epigrams appear under his name in the Greek Anthology. From inscriptions discovered at Mytilene, he appears to have been one of the ambassadors sent from that city to Rome in 45 and 26 B.C.

The epigrams have been edited by M. Rubensohn (1888).

CRINOLINE (a Fr. word formed of the Lat. *crinis*, hair, and *linum*, thread), a stiffening material made of horse-hair and cotton or linen thread. Substitutes for this, such as the straw-like material used in making hat shapes, are also known by the same name. From the use of the material to expand ladies' skirts the term was applied, during the third quarter of the 19th century, when the fashion of wearing greatly expanded skirts was at its height, to the whalebone and steel hoops employed to support the skirts thus worn (see COSTUME). The term is also used of structures resembling these articles, especially of the framework of booms, spars and netting forming a protection for a warship against torpedo attack.

CRINUM, a genus (nat. ord. Amaryllidaceae) of bulbous plants with rather broad leaves and a solid leafless stem, bearing a cluster of handsome

white or red funnel-shaped regular flowers. They are well known in cultivation, and owing to the wide distribution of the genus different methods are adopted with different species. Some require the hot, moist temperature of a stove; such are *C. amabile*, a native of Sumatra, *C. amoenum* (India), *C. Balfourii* (Socotra), *C. giganteum* (West tropical Africa), *C. Kirkii* (Zanzibar), *C. latifolium* (India), *C. zeylanicum* (tropical Asia and Africa), and others. Others thrive in a greenhouse; such are *C. asiaticum*, a widely distributed plant on the sea-coast of tropical Asia, *C. capense* and *C. longiflorum*, from the Cape, and *C. Macowani* and *C. Moorei* from Natal. *C. asiaticum*, *C. capense* and *C. Macowani* will also thrive in sheltered positions in the garden.

CRIOBOLIUM, the sacrifice of a ram in the cult of Attis and the Great Mother. It seems to have been a special ceremony instituted after the rise, and on the analogy of the taurobolium (*q.v.*), which was performed in honour of the Great Mother, for the purpose of giving fuller recognition to Attis in the duality which he formed with the Mother. There is no evidence of its existence either in Asia or in Italy before the taurobolium came into prominence (after A.D. 134). When the criobolium was performed in conjunction with the taurobolium, the altar was almost invariably inscribed to both the Mother and Attis, while the inscription was to the Mother alone when the taurobolium only was performed. The celebration of the criobolium was widespread, and its importance such that it was sometimes performed in place of the taurobolium (*Corp. Inscr. Lat.* vi. 505, 506). The

details and effect of the ceremony were no doubt similar to those of the taurobolium.

(G. Sn.)

CRIPPLE CREEK, a city and the county-seat of Teller county, almost at the geographical centre of Colorado, U.S.A., one of the phenomenal mining camps of the West. Pop. (1900) 10,147 (1408 foreign-born); (1910) 6206. The city is served by three railways—the Colorado Springs & Cripple Creek District (a branch of the Colorado & Southern), the Midland Terminal (which connects at Divide, 30 m. distant by rail, with the Colorado Midland), and the Florence & Cripple Creek. Cripple Creek is situated on a mountain slope in a pocket amid the ranges, about 9600 ft. above the sea at the head of the stream after which it is named. The municipal water-supply is drawn from Pike's Peak, 10 m. distant. The interest of the city is in its extraordinary mines and their history. Cripple Creek's site was frequently prospected after 1860, and "colours" and gold "float" were always found, but not until February 1891 was the source discovered. Cripple Creek was at that time a cattle range. In 1891 the output of gold in the district was valued at $449, in 1892 at $583,010, and in the next three years at $2,010,367, $2,908,702 and $6,879,137 respectively. From 1891 to 1906 the total production of gold was valued at $168,584,331; in 1905[1] the product of gold was valued at $15,411,724, the total for the whole state being valued at $25,023,973; in 1906 the output for the district was valued at $14,253,245, out of $23,210,629 for the entire state. The development of the camp into a yellow-pine town and then into something more like a substantial city was marvellously rapid. The first

railway was completed in 1894. In the same year a great strike—one of the most famous in American industrial history—threatening civil war, temporarily closed the mines; in 1896 fire almost destroyed the city; in 1903-1904 a second strike, lasting more than a year and greater than the first, occurred. The first strike, which was for an eight-hour day and $3.00 wage, was won by the miners. The second, for the recognition outright of the union organization of the miners, secured only a reaffirmation of the former conditions. The ores are almost exclusively gold, tellurides being the most characteristic form, and occur in fissure veins. Outcroppings were very rare, as the veins were covered with loose wash, and this accounted for the late opening of the field. The field covers a district about 8 × 10 m. Some peculiarities of the ores have required the use of new methods in their treatment, and in general the development of mining methods and machinery is of a wonderful character. The whole surrounding country is seamed with miles of tunnels in granite, and the hillsides are dotted everywhere with enormous dumps. The most famous mines have been the "Independence" (1891) and the "Portland" (1892). The latter had in 1904 more than 25 m. of workings above the 1100-ft. level. In 1903 the El Paso drain was completed, to unwater the western half of the field to the 880-ft. level, greatly increasing many mine values and outputs; in 1906 the work of drainage was again taken up, and work on a long bore was begun in May 1907. There are smelters and cyanide extracters in the district, but the bulk of the ore product is shipped to other places for treatment. Among the towns around Cripple Creek in the same mining district is Victor, pop. (1910) 3162, incorporated in 1894, chartered as a city in 1898.

See W. Lindgren and F. L. Ransome, *Geology and Gold Deposits of the Cripple Creek District, Colorado*, with maps (Washington, 1906), being Professional Paper No. 54 of the United States Geological Survey; and Benjamin McKie Rastall, *The Labor History of the*

Cripple Creek District; A Study in Industrial Evolution (Madison, Wis., 1908), a full account of the strikes of 1894 and of 1903-1904.

---

1 The value of gold mined in 1899-1902 was greater, annually, than the product of 1905 or 1906; up to 1905 the greatest annual value was in 1900, $18,073,539.

CRISA, or CRISSA, in ancient geography, one of the oldest cities of Greece, situated in Phocis, on one of the spurs of Parnassus. Its name occurs both in the *Iliad* and in the Homeric *Hymns*, where it is described as a powerful place, with a rich and fertile territory, reaching to the sea, and including within its limits the sanctuary of Pytho. As the town of Delphi grew up around the shrine, and the seaport of Cirrha arose on the Crisean Gulf, Crisa gradually lost much of its importance. By the ancients themselves the name of Cirrha was so often substituted for that of Crisa, that it soon became doubtful whether these names indicated the same city or not. The question was practically settled by the investigations of H. N. Ulrichs. From its position Cirrha commanded the approach to Delphi, and its inhabitants became obnoxious to the Greeks from the heavy tolls which they exacted from the devotees who thronged to the shrine. The Amphictyonic Council declared war (the first Sacred War) against the Criseans in 595 B.C., and having taken the town, razed it to the ground, and consecrated its territory to the temple at Delphi. The plunder of the town was sold to defray the expenses of the Pythian games. In 339 the people of Amphissa began to rebuild the town of Cirrha and to cultivate the plain. This act brought on the second Sacred War, the conduct of which was entrusted by the Amphictyons to Philip of Macedon, who took Amphissa

(mod. Salona) in the following year. The ruins of Crisa may be still seen where the ravine of the Pleistus joins the plain; its name is probably preserved by the modern Chryso.

See J. G. Frazer's *Pausanias*, v. 459 (note on x. 37.5).

(E. Gr.)

CRISPI, FRANCESCO (1819-1901), Italian statesman, was born at Ribéra in Sicily on the 4th of October 1819. In 1846 he established himself as advocate at Naples. On the outbreak of the Sicilian revolution at Palermo (January 12, 1848) he hastened to the island and took an active part in guiding the insurrection. Upon the restoration of the Bourbon government (May 15, 1849) he was excluded from the amnesty and compelled to flee to Piedmont. Here he unsuccessfully applied for a situation as communal secretary of Verolengo, and eked out a penurious existence by journalism. Implicated in the Mazzinian conspiracy at Milan (February 6, 1853), he was expelled from Piedmont, and obliged to take refuge at Malta, whence he fled to Paris. Expelled from France, he joined Mazzini in London, and continued to conspire for the redemption of Italy. On the 15th of June 1859 he returned to Italy after publishing a letter repudiating the aggrandizement of Piedmont, and proclaiming himself a republican and a partisan of national unity. Twice in that year he went the round of the Sicilian cities in disguise, and prepared the insurrectionary movement of 1860.

Upon his return to Genoa he organized, with Bertani, Bixio, Medici and Garibaldi, the expedition of the Thousand, and overcoming by a stratagem the hesitation of Garibaldi, secured the departure of the expedition on the

5th of May 1860. Disembarking at Marsala on the 11th, Crispi on the 13th, at Salemi, drew up the proclamation whereby Garibaldi assumed the dictatorship of Sicily, with the programme: “Italy and Victor Emmanuel.” After the fall of Palermo, Crispi was appointed minister of the interior and of finance in the Sicilian provisional government, but was shortly afterwards obliged to resign on account of the struggle between Garibaldi and the emissaries of Cavour with regard to the question of immediate annexation. Appointed secretary to Garibaldi, Crispi secured the resignation of Depretis, whom Garibaldi had appointed pro-dictator, and would have continued his fierce opposition to Cavour at Naples, where he had been placed by Garibaldi in the foreign office, had not the advent of the Italian regular troops and the annexation of the Two Sicilies to Italy brought about Garibaldi’s withdrawal to Caprera and Crispi’s own resignation. Entering parliament in 1861 as deputy of the extreme Left for Castelvetrano, Crispi acquired the reputation of being the most aggressive and most impetuous member of the republican party. In 1864, however, he made at the chamber a monarchical profession of faith, in the famous phrase afterwards repeated in his letter to Mazzini: “The monarchy unites us; the republic would divide us.” In 1860 he refused to enter the Ricasoli cabinet; in 1867 he worked to impede the Garibaldian invasion of the papal states, foreseeing the French occupation of Rome and the disaster of Mentana. By methods of the same character as those subsequently employed against himself by Cavallotti, he carried on the violent agitation known as the Lobbia affair, in which sundry conservative deputies were, on insufficient grounds, accused of corruption. On the outbreak of the Franco-German War he worked energetically to impede the projected alliance with France, and to drive the Lanza cabinet to Rome. The death of Ratazzi in 1873 induced Crispi’s friends to put forward his candidature to the leadership of the Left; but Crispi, anxious to reassure the crown, secured the election of Depretis. After the advent of the Left he was elected (November 1876) president of the chamber. During the autumn

of 1877 he went to London, Paris and Berlin on a confidential mission, establishing cordial personal relationships with Gladstone, Granville and other English statesmen, and with Bismarck.

In December 1877 he replaced Nicotera as minister of the interior in the Depretis cabinet, his short term of office (70 days) being signalized by a series of important events. On January 9, 1878, the death of Victor Emmanuel and the accession of King Humbert enabled Crispi to secure the formal establishment of a unitary monarchy, the new monarch taking the title of Humbert I. of Italy instead of Humbert IV. of Savoy. The remains of Victor Emmanuel were interred in the Pantheon instead of being transported to the Savoy Mausoleum at Superga. On the 9th of February, 1879, the death of Pius IX. necessitated a conclave, the first to be held after the unification of Italy. Crispi, helped by Mancini and Cardinal Pecci (afterwards Leo XIII.), persuaded the Sacred College to hold the conclave in Rome, and prorogued the chamber lest any untoward manifestation should mar the solemnity of the event. The statesmanlike qualities displayed on this occasion were unavailing to avert the storm of indignation conjured up by Crispi's opponents in connexion with a charge of bigamy not susceptible of legal proof. Crispi was compelled to resign office, although the judicial authorities upheld the invalidity of his early marriage, contracted at Malta in 1853, and ratified his subsequent union with Signora Barbagallo. For nine years Crispi remained politically under a cloud, but in 1887 returned to office as minister of the interior in the Depretis cabinet, succeeding to the premiership upon the death of Depretis (July 29, 1887).

One of his first acts as premier was a visit to Bismarck, whom he desired to consult upon the working of the Triple Alliance. Basing his foreign policy upon the alliance, as supplemented by the naval *entente* with Great Britain negotiated by his predecessor, Count Robilant, Crispi assumed a resolute attitude towards France, breaking off the prolonged and unfruitful

negotiations for a new Franco-Italian commercial treaty, and refusing the French invitation to organize an Italian section at the Paris Exhibition of 1889. At home Crispi secured the adoption of the Sanitary and Commercial Codes, and reformed the administration of justice. Forsaken by his Radical friends, Crispi governed with the help of the Right until, on the 31st of January 1891, an intemperate allusion to the *sante memorie* of the conservative party led to his overthrow. In December 1893 the impotence of the Giolitti cabinet to restore public order, then menaced by disturbances in Sicily and in Lunigiana, gave rise to a general demand that Crispi should return to power. Upon resuming office he vigorously suppressed the disorders, and steadily supported the energetic remedies adopted by Sonnino, minister of finance, to save Italian credit, which had been severely shaken by the bank and financial crises of 1892-1893. Crispi's uncompromising suppression of disorder, and his refusal to abandon either the Triple Alliance or the Eritrean colony, or to forsake his colleague Sonnino, caused a breach between him and the radical leader Cavallotti. Cavallotti then began against him a pitiless campaign of defamation. An unsuccessful attempt upon Crispi's life by the anarchist Lega brought a momentary truce, but Cavallotti's attacks were soon renewed more fiercely than ever. They produced so little effect that the general election of 1895 gave Crispi a huge majority, but, a year later, the defeat of the Italian army at Adowa in Abyssinia brought about his resignation. The ensuing Rudini cabinet lent itself to Cavallotti's campaign, and at the end of 1897 the judicial authorities applied to the chamber for permission to prosecute Crispi for embezzlement. A parliamentary commission, appointed to inquire into the charges against him, discovered only that Crispi, on assuming office in 1893, had found the secret service coffers empty, and had borrowed from a state bank the sum of £12,000 for secret service, repaying it with the monthly instalments granted in regular course by the treasury. The commission, considering this proceeding irregular, proposed, and the

chamber adopted, a vote of censure, but refused to authorize a prosecution. Crispi resigned his seat in parliament, but was re-elected by an overwhelming majority in April 1898 by his Palermo constituents. For some time he took little part in active politics, chiefly on account of his growing blindness. A successful operation for cataract restored his eyesight in June 1900, and notwithstanding his 81 years he resumed to some extent his former political activity. Soon afterwards, however, his health began to give way permanently, and he died at Naples on the 12th of August 1901.

The importance of Crispi in Italian public life depended less upon the many reforms accomplished under his administrations than upon his intense patriotism, remarkable fibre, and capacity for administering to his fellow-countrymen the political tonic of which they stood in constant need. In regard to foreign politics he greatly contributed to raise Italian prestige and to dispel the reputation for untrustworthiness and vacillation acquired by many of his predecessors. If in regard to France his policy appeared to lack suavity and circumspection, it must be remembered that the French republic was then engaged in active anti-Italian schemes and was working, both at the Vatican and in the sphere of colonial politics, to create a situation that should compel Italy to bow to French exigencies and to abandon the Triple Alliance. Crispi was prepared to cultivate good relations with France, but refused to yield to pressure or to submit to dictation; and in this attitude he was firmly supported by the bulk of his fellow-countrymen. The criticism freely directed against him was based rather upon the circumstances of his unfortunate private life and the misdeeds of an unscrupulous *entourage* which traded upon his name than upon his personal or political shortcomings.

See *Scritti e discorsi politici di F. Crispi, 1847-1890* (Rome, 1890); *Francesco Crispi*, by W. J. Stillman (London, 1899).

CRISPIN and **CRISPINIAN**, the patron saints of shoemakers, whose festival is celebrated on the 25th of October. Their history is largely legendary, and there exists no trace of it earlier than the 8th century. It is said that they were brothers and members of a noble family in Rome. They gave up their property and travelled to Soissons (Noviodunum, Augusta Sucessionum), where they supported themselves by shoemaking and made many converts to Christianity. The emperor Maximianus (Herculius) condemned them to death. His prefect Rictiovarus endeavoured to carry out the sentence, but they emerged unharmed from all the ordeals to which he subjected them, and the weapons he used recoiled against the executioners. Rictiovarus in disgust cast himself into the fire, or the caldron of boiling tar, from which they had emerged refreshed. At last Maximian had their heads cut off (c. 287-300). Their remains were buried at Soissons, but were afterwards removed, partly by Charlemagne to Osnabrück (where a festival is observed annually on the 20th of June) and partly to the chapel of St Lawrence in Rome. The abbeys of St Crépin-en-Chaye (the remains of which still form part of a farmhouse on the river Aisne, N.N.W. of Soissons), of St Crépin-le-Petit, and St Crépin-le-Grand (the site of which is occupied by a house belonging to the Sisters of Mercy), in or near Soissons, commemorated the places sanctified by their imprisonment and burial. There are also relics at Fulda, and a Kentish tradition claims that the bodies of the martyrs were cast into the sea and cast on shore on Romney Marsh (see *Acta SS. Bolland*, xi. 495; A. Butler, *Lives of the Saints*. October 25th).

Especially in France, but also in England and in other parts of Europe, the festival of St Crispin was for centuries the occasion of solemn processions and merry-making, in which gilds of shoemakers took the chief part. At Troyes, where the gild of St Crispin was reconstituted as late as 1820, an annual festival is celebrated in the church of St Urban. In England and Scotland the day acquired additional importance as the anniversary of the battle of Agincourt (cf. Shakespeare, *Henry V.* iv. 3); the symbolical

processions in honour of “King Crispin” at Stirling and Edinburgh were particularly famous.

For other examples see *Notes and Queries*, 1st series, v. 30, vi. 243; W. S. Walsh, *Curiosities of Popular Customs* (London, 1898).

CRITIAS, Athenian orator and poet, and one of the Thirty Tyrants. In his youth he was a pupil of Gorgias and Socrates, but subsequently devoted himself to political intrigues. In 415 B.C. he was implicated in the mutilation of the Hermae and imprisoned. In 411 he helped to put down the Four Hundred, and was instrumental in procuring the recall of Alcibiades. He was banished (probably in the democratic reaction of 407) and fled to Thessaly, where he stirred up the Penestae (the helots of Thessaly) against their masters, and endeavoured to establish a democracy. Returning to Athens he was made ephor by the oligarchical party; and he was the most cruel and unscrupulous of the Thirty Tyrants who in 404 were appointed by the Lacedaemonians. He was slain in battle against Thrasybulus and the returning democrats. Critias was a man of varied talents—poet, orator, historian and philosopher. Some fragments of his elegies will be found in Bergk, *Poetae Lyrici Graeci*. He was also the author of several tragedies and of biographies of distinguished poets (possibly in verse).

See Xenophon, *Hellenica*, ii. 3. 4. 19, *Memorabilia*, i. 2; Cornelius Nepos, *Thrasybulus*, 2; R. Lallier, *De Critiae tyranni vita ac scriptis* (1875); Nestle, *Neue Jahrb. f. d. kl. Altert.* (1903).

CRITICISM (from the Gr. κρίτης, a judge, κρίνειν, to decide, to give an authoritative opinion), the art of judging the qualities and values of an aesthetic object, whether in literature or the fine arts.[1] It involves, in the first instance, the formation and expression of a judgment on the qualities of anything, and Matthew Arnold defined it in this general sense as "a disinterested endeavour to learn and propagate the best that is known and thought in the world." It has come, however, to possess a secondary and specialized meaning as a published analysis of the qualities and characteristics of a work in literature or fine art, itself taking the form of independent literature. The sense in which criticism is taken as implying censure, the "picking holes" in any statement or production, is frequent, but it is entirely unjustifiable. There is nothing in the proper scope of criticism which presupposes blame. On the contrary, a work of perfect beauty and fitness, in which no fault could possibly be found with justice, is as proper a subject for criticism to deal with as a work of the greatest imperfection. It may be perfectly just to state that a book or a picture is "beneath criticism," *i.e.* is so wanting in all qualities of originality and technical excellence that time would merely be wasted in analysing it. But it can never be properly said that a work is "above criticism," although it may be "above censure," for the very complexity of its merits and the fulness of its beauties tempt the skill of the analyser and reward it.

It is necessary at the threshold of an examination of the history of criticism to expose this laxity of speech, since nothing is more confusing to a clear conception of this art than to suppose that it consists in an effort to detect what is blameworthy. Candid criticism should be neither benevolent nor adverse; its function is to give a just judgment, without partiality or bias. A critic (κριτικός) is one who exercises the art of criticism, who sets himself up, or is set up, as a judge of literary and artistic merit. The irritability of mankind, which easily forgets and neglects praise, but cannot forgive the rankling poison of blame, has set upon the word *critic* a seal

which is even more unamiable than that of *criticism*. It takes its most savage form in Benjamin Disraeli's celebrated and deplorable *dictum*, "the critics are the men who have failed in literature and art." It is plain that such names as those of Aristotle, Dante, Dryden, Joshua Reynolds, Sainte-Beuve and Matthew Arnold are not to be thus swept by a reckless fulmination. There have been many critics who brought from failure in imaginative composition a cavilling, jealous and ignoble temper, who have mainly exercised their function in indulging the evil passion of envy. But, so far as they have done this, they have proved themselves bad critics, and neither minute care, nor a basis of learning, nor wide experience of literature, salutary as all these must be, can avail to make that criticism valuable which is founded on the desire to exaggerate fault-finding and to emphasize censure unfairly. The examination of what has been produced by other ages of human thought is much less liable to this dangerous error than the attempt to estimate contemporary works of art and literature. There are few indeed whom personal passion can blind to the merits of a picture of the 15th or a poem of the 17th century. In the higher branches of historical criticism, prejudice of this ignoble sort is hardly possible, and therefore, in considering criticism in its ideal forms, it is best to leave out of consideration that invidious and fugitive species which bears the general name of "reviewing." This pedestrian criticism, indeed, is useful and even indispensable, but it is, by its very nature, ephemeral, and it is liable to a multitude of drawbacks. Even when the reviewer is, or desires to be, strictly just, it is almost impossible for him to stand far enough back from the object under review to see it in its proper perspective. He is dazzled, or scandalized, by its novelty; he has formed a preconceived notion of the degree to which its author should be encouraged or depressed; he is himself, in all cases, an element in the mental condition which he attempts to judge, and if not positively a defendant is at least a juryman in the court over which he ought to preside with remote impartiality.

It may be laid down as the definition of criticism in its pure sense, that it should consist in the application, in the most competent form, of the principles of literary composition. Those principles are the general aesthetics upon which taste is founded; they take the character of rules of writing. From the days of Aristotle the existence of such rules has not been doubted, but different orders of mind in various ages have given them diverse application, and upon this diversity the fluctuations of taste are founded. It is now generally admitted that in past ages critics have too often succumbed to the temptation to regulate taste rigidly, and to lay down rules that shall match every case with a formula. Over-legislation has been the bane of official criticism, and originality, especially in works of creative imagination, has been condemned because it did not conform to existing rules. Such instances of want of contemporary appreciation as the reception given to William Blake or Keats, or even Milton, are quoted to prove the futility of criticism. As a matter of fact they do nothing of the kind. They merely prove the immutable principles which underlie all judgment of artistic products to have been misunderstood or imperfectly obeyed during the life-times of those illustrious men. False critics have built domes of glass, as Voltaire put it, between the heavens and themselves, domes which genius has to shatter in pieces before it can make itself comprehended. In critical application formulas are often useful, but they should be held lightly; when the formula becomes the tyrant where it should be the servant of thought, fatal error is imminent. What is required above all else by a critic is knowledge, tempered with good sense, and combined with an exquisite delicacy of taste. He who possesses these qualities may go wrong in certain instances, but his error cannot become radical, and he is always open to correction. It is not his business crudely to pronounce a composition “good” or “bad”; he must be able to show why it is “good” and wherein it is “bad”; he must admire with independence and blame with careful candour. He must above all be assiduous to escape from pompous generalizations,

which conceal lack of thought under a flow of words. The finest criticism should take every circumstance of the case into consideration, and hold it necessary, if possible, to know the author as well as the book. A large part of the reason why the criticism of productions of the past is so much more fruitful than mere contemporary reviewing, is that by remoteness from the scene of action the critic is able to make himself familiar with all the elements of age, place and medium which affected the writer at the moment of his composition. In short, knowledge and even taste are not sufficient for perfect criticism without the infusion of a still rarer quality, breadth of sympathy.

Criticism has been one of the latest branches of literature to reach maturity, but from very early times the instinct which induces mankind to review what it has produced led to the composition of imperfect but often extremely valuable bodies of opinion. What makes these early criticisms tantalizing is that the moral or political aspects of literature had not disengaged themselves from the purely intellectual or aesthetic.

To pass to an historical examination of the subject, we find that in antiquity Aristotle was regarded as the father and almost as the founder of literary criticism. Yet before his day, three Greek writers of eminence had examined, in more or less fulness, the principles of composition; these were Plato, Isocrates and Aristophanes. The comedy of *The Frogs*, by the latter, is the earliest specimen we possess of hostile literary criticism, being devoted to ridicule of the plays of Euripides. In the cases of Plato and Isocrates, criticism takes the form mainly of an examination of the rules of rhetoric. We reach, however, much firmer ground when we arrive at Aristotle, whose *Poetics* and *Rhetoric* are among the most valuable treatises which antiquity has handed down to us. Of what existed in the literature of his age, extremely rich in some branches, entirely empty in others, Aristotle speaks with extraordinary authority; but Mr G. Saintsbury has justly

remarked that as his criticism of poetry was injuriously affected by the non-existence of the novelist, so his criticism of prose was injuriously affected by the omnipresence of the orator. This continues true of all ancient criticism. A work by Aristotle on the problems raised by a study of Homer is lost, and there may have been others of a similar nature; in the two famous treatises which remain we have nothing less important than the foundation on which all subsequent European criticism has been raised. It does not appear that any of the numerous disciples of Aristotle understood his attitude to literature, nor do the later philosophical schools offer much of interest. The Neoplatonists, however, were occupied with analysis of the Beautiful, on which both Proclus and Plotinus expatiated; still more purely literary were some of the treatises of Porphyry. There seems to be no doubt that Alexandria possessed, in the third century, a vivid school of critic-grammarians; the names of Zenodotus, of Crates and of Aristarchus were eminent in this connexion, but of their writings nothing substantial has survived. They were followed by the scholiasts, and they by the mere rhetoricians of the last Greek schools, such as Hermogenes and Aphthonius. In the 2nd century of our era, Dio Chrysostom, Aristides of Smyrna, and Maximus of Tyre were the main representatives of criticism, and they were succeeded by Philostratus and Libanius. The most modern of post-Christian Greek critics, however, is unquestionably Dionysius of Halicarnassus, who leads up to Lucian and Cassius Longinus. The last-mentioned name calls for special notice; in "the lovely and magnificent personality of Longinus" we find the most intelligent judge of literature who wrote between Aristotle and the moderns. His book *On the Sublime* (Περὶ ὕψους), probably written about A.D. 260, and first printed in 1554, is of extreme importance, while his intuitions and the splendour of his style combine to lift Longinus to the highest rank among the critics of the world.

In Roman literature criticism never took a very prominent position. In early days the rhetorical works of Cicero and the famous *Art of Poetry* of

Horace exhaust the category. During the later Augustan period the only literary critic of importance was the elder Seneca. Passing over the valuable allusions to the art of writing in the poets, especially in Juvenal and Martial, we reach, in the Silver Age, Quintilian, the most accomplished of all the Roman critics. His *Institutes of Oratory* has been described as the fullest and most intelligent application of criticism to literature which the Latin world produced, and one which places the name of Quintilian not far below those of Aristotle and Longinus. He was followed by Aulus Gellius, by Macrobius (whose reputation was great in the middle ages), by Servius (the great commentator on Virgil), and, after a long interval, by Martianus Capella. Latin criticism sank into mere pedantry about rhetoric and grammar. This continued throughout the Dark Ages, until the 13th century, when rhythmical treatises, of which the *Labyrinthus* of Eberhard (1212?) and the *Ars rhythmica* of John of Garlandia (John Garland) are the most famous, came into fashion. These writings testified to a growing revival of a taste for poetry.

It is, however, in the masterly technical treatise *De vulgari eloquio*, generally attributed to Dante, the first printed (in Italian) in 1529, that modern poetical criticism takes its first step. The example of this admirable book was not adequately followed; throughout the 14th and 15th centuries, criticism is mainly indirect and accidental. Boccaccio, indeed, is the only figure worthy of mention, between Dante and Erasmus. With the Renaissance came a blossoming of Humanist criticism in Italy, producing such excellent specimens as the *Sylvae* of Poliziano, the *Poetics* (1527) of Vida, and the *Poetica* of Trissino, the best of a whole crop of critical works produced, often by famous names, between 1525 and 1560. These were followed by sounder scholars and acuter theorists: by Scaliger with his epoch-making *Poetices* (1561); by L. Castelvetro, whose *Poetica* (1570) started the modern cultivation of the Unities and asserted the value of the

Epic; by Tasso with his *Discorsi* (1587); and by Francesco Patrizzi in his *Poetica* (1586).

In France, the earliest and for a long time the most important specimen of literary criticism was the *Défense et illustration de la langue française*, published in 1549 by Joachim du Bellay. Ronsard, also, wrote frequently and ably on the art of poetry. The theories of the Pléiade were summed up in the *Art poétique* of Vauquelin de la Fresnaye, which belongs to 1574 (though not printed until 1605).

In England, the earliest literary critic of importance was Thomas Wilson, whose *Art of Rhetoric* was printed in 1553, and the earliest student of poetry, George Gascoigne, whose *Instruction* appeared in 1575. Gascoigne is the first writer who deals intelligently with the subject of English prosody. He was followed by Thomas Drant, Harvey, Gosson, Lodge and Sidney, whose controversial pamphlets belong to the period between 1575 and 1580. Among Elizabethan "arts" or "defences" of English poetry are to be mentioned those of William Webbe (1586), George Puttenham (1589), Thomas Campion (1602), and Samuel Daniel (1603). With the tractates of Ben Jonson, several of them lost, the criticism of the Renaissance may be said to close.

A new era began throughout Europe when Malherbe started, about 1600, a taste for the neo-classic or anti-romantic school of poetry, taking up the line which had been foreshadowed by Castelvetro. *Enfin Malherbe vint*, and he was supported in his revolution by Regnier, Vaugelas, Balzac, and finally by Corneille himself, in his famous prefatory discourses. It was Boileau, however, who more than any other man stood out at the close of the 17th century as the law-giver of Parnassus. The rules of the neo-classics were drawn together and arranged in a system by René Rapin, whose authoritative treatises mainly appeared between 1668 and 1674. It is in writings of this man, and of the Jesuits, Le Bossu and Bouhours, that the

preposterous rigidity of the formal classic criticism is most plainly seen. The influence of these three critics was, however, very great throughout Europe, and we trace it in the writings of Dryden, Addison and Rymer. In the course of the 18th century, when the neoclassic creed was universally accepted, Pope, Blair, Kames, Harris, Goldsmith and Samuel Johnson were its most distinguished exponents in England, while Voltaire, Buffon (to whom we owe the phrase "the style is the man"), Marmontel, La Harpe and Suard were the types of academic opinion in France.

Modern, or more properly Romantic, criticism came in when the neo-classic tradition became bankrupt throughout Europe at the very close of the 18th century. It has been heralded in Germany by the writings of Lessing, and in France by those of Diderot. Of the reconstruction of critical opinion in the 19th century it is impossible to speak here with any fulness, it is contained in the record of the recent literature of each European language. It is noticeable, in England, that the predominant place in it was occupied, in violent contrast with Disraeli's dictum, by those who had obviously *not* failed in imaginative composition, by Wordsworth, by Shelley, by Keats, by Landor, and pre-eminently by S. T. Coleridge, who was one of the most penetrative, original and imaginative critics who have ever lived. In France, the importance of Sainte-Beuve is not to be ignored or even qualified; after manifold changes of taste, he remains as much a master as he was a precursor. He was followed by Théophile Gautier, Saint-Marc, Girardin, Paul de Saint Victor, and a crowd of others, down to Taine and the latest school of individualistic critics, comparable with Matthew Arnold, Pater, and their followers in England.

See G. Saintsbury, *A History of Criticism* (3 vols., 1902-1904); J. E. Spingarn, *A History of Literary Criticism in the Renaissance* (2nd ed. 1908); Théry, *Histoire des opinions littéraires* (1849); J. A. Symonds, *The Revival of Learning* (1877); Matthew Arnold, *Essays in Criticism*,

i. (1865), ii. (1868); Bourgoin, *Les Maîtres de la critique au XVIIe siècle* (1889); Paul Hamelius, *Die Kritik in der englischen Literatur* (1897); S. H. Butcher, *The Poetics of Aristotle* (1898); H. L. Havell and Andrew Lang, *Longinus on the Sublime* (1890). See also the writings of Sainte-Beuve, Matthew Arnold, F. Brunetière, Anatole France, Walter Pater, *passim*.

(E. G.)

---

1 It is in this general sense that the subject is considered in this article. The term is, however, used in more restricted senses, generally with some word of qualification, *e.g.* "textual criticism" or "higher criticism"; see the article TEXTUAL CRITICISM and the article BIBLE for an outstanding example of both "textual" and "higher."

CRITIUS and **NESIOTES**, two Greek sculptors of uncertain school, of the time of the Persian Wars. When Xerxes carried away to Persia the statues of Harmodius and Aristogiton made by Antenor, Critius and Nesiotes were commissioned to replace them. By the help of coins and reliefs, two statues at Naples, wrongly restored as gladiators, have been identified as copies of the tyrannicides of Critius; and to them well apply the words in which Lucian (*Rhetor. praecepta*, 9) describes the works of Critius and Nesiotes, "closely knit and sinewy, and hard and severe in outline." Critius also made a statue of the armed runner Epicharinus.

CRITOLAUS, Greek philosopher, was born at Phaselis in the 2nd century B.C. He lived to the age of eighty-two and died probably before 111 B.C. He studied philosophy under Aristo of Ceos and became one of the leaders of the Peripatetic school by his eminence as an orator, a scholar and a moralist. There has been considerable discussion as to whether he was the immediate successor of Aristo, but the evidence is confused and unprofitable. In general he was a loyal adherent to the Peripatetic succession (cf. Cicero, *De fin.* v. 5 "C. imitari antiquos voluit"), though in some respects he went beyond his predecessors. For example, he held that pleasure is an evil (Gellius, *Noctes Atticae*, ix. 5. 6), and definitely maintained that the soul consists of aether. The end of existence was to him the general perfection of the natural life, including the goods of the soul and the body, and also external goods. Cicero says in the *Tusculans* that the goods of the soul entirely outweighed for him the other goods ("tantum propendere illam bonorum animi lancem"). Further, he defended against the Stoics the Peripatetic doctrine of the eternity of the world and the indestructibility of the human race. There is no observed change in the natural order of things; mankind re-creates itself in the same manner according to the capacity given by Nature, and the various ills to which it is heir, though fatal to individuals, do not avail to modify the whole. Just as it is absurd to suppose that man is merely earth-born, so the possibility of his ultimate destruction is inconceivable. The world, as the manifestation of eternal order, must itself be immortal. The life of Critolaus is not recorded. One incident alone is preserved. From Cicero (*Acad.* ii. 45) it appears that he was sent with Carneades and Diogenes to Rome in 156-155 B.C. to protest against the fine of 500 talents imposed on Athens in punishment for the sack of Oropus. The three ambassadors lectured on philosophy in Rome with so much success that Cato was alarmed and had them dismissed the city. Gellius describes his arguments as *scita et teretia*.

Consult the article PERIPATETICS, and histories of ancient philosophy, *e.g.* Zeller.

CRITTENDEN, JOHN JORDAN (1787-1863), American statesman, was born in Versailles, Kentucky, on the 10th of September 1787. After graduating at the College of William and Mary in 1807, he began the practice of law in his native state. He served for three months, in 1810, as attorney-general of Illinois Territory, but soon returned to Kentucky, and during the War of 1812 he was for a time on the staff of General Isaac Shelby. In 1811-1817 he served in the state House of Representatives, being speaker in 1815-1816, and in 1817-1819 was a United States senator. Settling in Frankfort, he soon took high rank as a criminal lawyer, was in the Kentucky House of Representatives in 1825 and 1829-1832, acting as speaker in the latter period, and from 1827 to 1829 was United States district-attorney. He was removed by President Jackson, to whom he was radically opposed. In 1835, as a Whig, he was again elected to the United States Senate, and was re-elected in 1841, but resigned to enter the cabinet of President W. H. Harrison as attorney-general, continuing after President Tyler's accession and serving from March until September. He was again a member of the United States Senate from 1842 to 1848, and in 1848-1850 was governor of Kentucky. He was an ardent and outspoken supporter of Clay's compromise measures, and in 1850 he entered President Fillmore's cabinet as attorney-general, serving throughout the administration. From 1855 to 1861 he was once more a member of the United States Senate. During these years he was perhaps the foremost champion of Union in the

South, and strenuously opposed the Kansas-Nebraska Bill, which he declared prophetically would unite the various elements of opposition in the North, and render the breach between the sections irreparable. Nevertheless he laboured unceasingly in the cause of compromise, gave his strong support to the Bell and Everett ticket in 1860, and in 1860-1861 proposed and vainly contended for the adoption by congress of the compromise measures which bear his name. When war became inevitable he threw himself zealously into the Union cause, and lent his great influence to keep Kentucky in the Union. In 1861-1863 he was a member of the national House of Representatives, where, while advocating the prosecution of the war, he opposed such radical measures as the division of Virginia, the enlistment of slaves and the Conscription Acts. He died at Frankfort, Kentucky, on the 26th of July 1863.

See the *Life of J. J. Crittenden*, by his daughter Mrs Chapman Coleman (2 vols., Philadelphia, 1871).

His son, George Bibb Crittenden (1812-1880), soldier, was born in Russellville, Kentucky, on the 20th of March 1812, and graduated at West Point in 1832, but resigned his commission in 1833. He re-entered the army as a captain of mounted rifles in the Mexican War, served with distinction, and was breveted major for bravery at Contreras and Churubusco. After the war he remained in the army, and in 1856 attained the rank of lieutenant-colonel. In June 1861 he resigned, and entered the service of the Confederacy. He was commissioned major-general and given a command in south-east Kentucky and Tennessee, but after the defeat of his forces by General George H. Thomas at Mill Springs (January 9, 1862), he was censured and gave up his command. He served subsequently as a volunteer aide on the staff of Gen. John S. Williams. From 1867 to 1871 he was state librarian of Kentucky. He died at Danville, Kentucky, on the 27th of November 1880.

Another son, Thomas Leonidas Crittenden (1815-1893), soldier, was also born at Russellville, Kentucky. He studied law, and practised with his father, and in 1842 became commonwealth's attorney. He served in the Mexican War as a lieutenant-colonel of Kentucky volunteers, and was an aide on Gen. Zachary Taylor's staff at the battle of Buena Vista. From 1849 to 1853 he was United States consul at Liverpool, England. Like his father, he was a strong Union man, and in September 1861 he was commissioned by President Lincoln a brigadier-general of volunteers. He commanded a division at Shiloh, for gallantry in which battle he was promoted major-general in July 1862. He was in command of a corps in the army of the Ohio under Gen. D. C. Buell, and took part in the battles of Stone River and Chickamauga. Subsequently he served in the Virginia campaign of 1864. He resigned his commission in December 1864, but in July 1866 entered the regular army with the rank of colonel of infantry, receiving the brevet of brigadier-general in 1867, served on the frontier and in several Indian wars, and retired in 1881. He died on the 23rd of October 1893.

CRIVELLI, CARLO, Venetian painter, was born in the earlier part of the 15th century. The only dates that can with certainty be given are 1468 and 1493; these are respectively the earliest and the latest years signed on his pictures—the former on an altar-piece in the church of San Silvestro at Massa near Fermo, and the latter on a picture in the Oggioni collection in Milan. Though born in Venice, Crivelli seems to have worked chiefly in the March of Ancona, and especially in and near Ascoli; there are only two pictures of his proper to a Venetian building, both of these being in the

church of San Sebastiano. He is said to have studied under Jacobello del Fiore, who was painting as late at any rate as 1436; at that time Crivelli was probably only a boy. The latter always signed as “Carolus Crivellus Venetus”; from 1490 he added “Miles,” having been then knighted (“Cavalière”) by Ferdinand II. of Naples. He painted in tempera only, and is seen to most advantage in subject pictures of moderate size. He introduced agreeable landscape backgrounds; and was particularly partial to giving fruits and flowers (the peach is one of his favourite fruits) as accessories, often in pendent festoons. The National Gallery in London is well supplied with examples of Crivelli; the “Annunciation,” and the “Beato Ferretti” (of the same family as Pope Pius IX.) in religious ecstasy, may be specified. Another of his principal pictures is in San Francesco di Matelica; in Berlin is a “Madonna and Saints” (1491); in the Vatican Gallery a “Dead Christ,” and in the Brera of Milan the painter’s own portrait, with other examples. Crivelli is a painter of marked individuality,—hard in form, crudely definite in contour; stern, forced, energetic, almost grotesque and repellent, in feature and expression, and yet well capable of a prim sort of prettiness; simply vigorous in his effect of detachment and relief, and sometimes admitting into his pictures objects actually raised in surface; distinct and warm in colour, with an effect at once harsh and harmonious. His pictures gain by being seen in half-light, and at some little distance; under favouring conditions they grip the spectator with uncommon power. Few artists seem to have worked with more uniformity of purpose, or more forthright command of his materials, so far as they go. It is surmised that Carlo was of the same family as the painters Donato Crivelli (who was working in 1459, and was also a scholar of Jacobello) and Vittorio Crivelli. Pietro Alamanni was his pupil.

See, along with Crowe and Cavalcaselle, Berenson, *Venetian Painters of the Renaissance* (1899); Morelli, *Italian Painters* (1892-1893); Rushforth, *Carlo Crivelli* (1900).

(W. M. R.)

CROATIA-SLAVONIA (Serbo-Croatian *Hrvatska i Slavonija*; Hung. *Horvát-Szlavonország*; Ger. *Kroatien und Slawonien*), a kingdom of the Hungarian monarchy; bounded on the N. by Carniola, Styria and Hungary proper; E. by Hungary and Servia; S. by Servia, Bosnia and Dalmatia; and W. by the Adriatic Sea, Istria and Carniola. Until 1881 Croatia, in the N.W. of this region, was divided from Slavonia, in the N.E., by a section of the Austrian Military Frontier. This section is now the county of Bjelovar, and forms part of the united kingdom of Croatia-Slavonia. The river Kulpa, which bisects the county of Agram, is usually regarded as the north-eastern limit of the Balkan Peninsula; and thus the greater part of Croatia, lying south of this river, falls within the peninsular boundary, while the remainder, with all Slavonia, belongs to the continental mainland. According to the official survey of 1900, the total area of the country is 16,423 sq. m. The Croatian littoral extends for about 90 m. from Fiume to the Dalmatian frontier. A narrow strait, the Canale della Morlacca (or della Montagna), separates it from Veglia, Arbe, Pago and other Istrian or Dalmatian islands. The city and territories of Fiume, the sole important harbour on this coast, are included in Hungary proper, and controlled by the Budapest government. Westward from Warasdin, and along the borders of Styria, Carniola, Istria, Dalmatia and north-western Bosnia, the frontier is generally mountainous and follows an irregular course. The central and eastern region, situated between the Drave and Danube on the north, and the Save on the south, forms one long wedge, with its point at Semlin.

Physical Features.—Croatia-Slavonia is naturally divided into two great sections, the highlands of the west and the lowlands of the east.

The plateau of the Istrian Karst is prolonged in several of the bare and desolate mountain chains between the Save and the Adriatic, notably the Great and Little Kapella (or Kapela), which link together the Karst and the Dinaric Alps, culminating in Biela Lažica (5029 ft.); the Plješevica or Pliševica Planina (5410 ft.), overlooking the valley of the river Una; and the Velebit Planina, which follows the westward curve of the coast, and rises above the sea in an abrupt wall, unbroken by any considerable bay or inlet. As it skirts the Dalmatian border, this range attains its greatest altitude in the adjacent peaks of Sveto Brdo (5751 ft.), and Vakanski Vrh (5768 ft.). Large tracts of the Croatian highlands are well-nigh waterless, and it is only in the more sheltered hollows that sufficient soil collects for large trees to flourish. In northern Croatia and Slavonia the mountains are far more fertile, being often densely wooded with oaks, beeches and pines. They comprise the Uskoken Gebirge, or Uskoks Mountains, named after the piratical Uskoks (*q.v.*) of Zengg, who were deported hither after the fall of their stronghold in 1617; the Warasdin Mountains, with the peak of Ivansciča (3478 ft.); the Agram Mountains, culminating in Sljeme or Slema (3396 ft.), and including the beautiful stretches of Alpine pasture known as the Zagorje, or "land beyond the hills"; the Bilo Gebirge, or White Mountains, a low range of chalk, and, farther to the south, several groups of mountains, among which Psunj (3228 ft.), Papuk (3217 ft.) Crni Vrh (2833 ft.), and the Ravna Gora (2808 ft.) are the chief summits. All these ranges, except the Uskoken Gebirge, constitute the central watershed of the kingdom, between the Drave and Save. In the east Slavonian county of Syrmia[1] the Fruška Gora or Vrdnik Mountains rise to a height of 1768 ft. along the southern bank of the Danube, their picturesque vineyards and pine or oak woods contrasting strongly with the plains that surround them.

The lowlands, in the valleys of the Drave, Danube, Save and Kulpa, belong partly to the great Hungarian Plains, or Alföld. Besides the sterile and monotonous steppes, valuable only as pasture, and so sparsely populated that it is possible to travel for many hours without encountering any sign of human life except a primitive artesian well or a shepherd's hut, there are wide expanses of fen-country, regularly flooded in spring and autumn. The marshes which line the Save below Sissek are often impassable except at Brod and Mitrovica, and the river is constantly scooping out fresh channels in the soft soil, only to abandon each in turn. The total area liable to yearly inundation exceeds 200 sq. m. But along the Drave and Danube the plains are sometimes strikingly fertile, and yield an abundance of grain, fruit and wine.

The main rivers of Croatia-Slavonia, the Danube, Drave and Save, are fully described under separate headings. After reaching Croatian territory 13 m. N.W. of Warasdin, the Drave flows along the northern frontier for 155 m., receiving the Bednja and Karasnica on the right, and falling, near Esseg, into the Danube, which serves as the Hungaro-Slavonian boundary for an additional 116 m. The Save enters the country 16 m. W. of Agram, and, after winding for 106 m. S.E. to Jasenovac, constitutes the southern frontier for 253 m., and meets the Danube at Belgrade. It is joined by the Sotla, Krapina, Lonja, Ilova, Pakra and Oljana, which drain the central watershed; but its only large tributaries are the Una, a Bosnian stream, which springs in the Dinaric Alps, and skirts the Croatian border for 40 m. before entering the Save at Jasenovac; and the Kulpa, which follows a tortuous course of 60 m. from its headwaters north of Fiume, to its confluence with the Save at Sissek. The Mrežnica, Dobra, Glina and Korana are right-hand tributaries of the Kulpa. In the Croatian Karst the seven streams of the Lika unite and plunge into a rocky chasm near Gospić, and the few small brooks of this region usually vanish underground in a similar manner. Near Fiume, the Recina, Rjeka or Fiumara falls into the Adriatic

after a brief course. There is no large lake in Croatia-Slavonia, but the upland pools and waterfalls of Plitvica, near Ogulin, are celebrated for their beauty. After a thaw or heavy rain, the subterranean rivers flood the mountain hollows of the Karst; and a lake thus formed by the river Gajka, near Otočac, has occasionally filled its basin to a depth of 160 ft.

Minerals.—The mineral resources of the kingdom, though capable of further development, are not rich. They are chiefly confined to the mountains, where iron, coal, copper, lead, zinc, silver and sulphur are mined in small quantities. Warm mineral springs rise at Krapina, at Toplice near Warasdin, at Stubica near Agram, and elsewhere.

Climate.—The climate of Croatia-Slavonia varies greatly in different regions. In the Karst it is liable to sudden and violent changes, and especially to the *bora*, a fierce N.N.E. wind, which renders navigation perilous among the islands off the coast, and, in winter, blocks the roads and railway-cuttings with deep snowdrifts. The sheltered bays near Fiume enjoy an equable climate; but in all other districts the temperature in mid-winter falls regularly below zero, and the summer heats are excessive. Earthquakes are common among the mountains, and the eastern lowlands are exposed to the great winds and sandstorms which sweep down the Alföld. At Agram, during the years 1896-1900, the mean annual temperature was 52° F., with 34.6 in. of rain and snow; at Fiume, the figures for the same period were 57° and 71 in.

Agriculture.—The agricultural inquiry of 1895 showed that 94.5% of the country consisted of arable land, gardens, vineyards, meadows, pastures and forests; but much of this area must be set down as mountainous and swampy pasture of poor quality. The richest land occurs in the Zagorje and its neighbourhood, in the hills near Warasdin and in the northern half of Syrmia. The Karst and the fens are of least agricultural value. Indian corn heads the list of cereals, but wheat, oats,

rye and barley are also cultivated, besides hemp, flax, tobacco and large quantities of potatoes. The extensive vineyards were much injured by *phylloxera* towards the close of the 19th century. The Slavonian plum orchards furnish dried prunes, besides a kind of brandy largely exported under the name of *sliwowitz* or *shlivovitsa*. Near Fiume the orange, lemon, pomegranate, fig and olive bear well; mulberries are planted on many estates for silkworms; and the heather-clad uplands of the central region favour the keeping of bees. Large herds of swine fatten in the oak and beech forests; and dairy-farming is a thriving industry in the highlands between Agram and Warasdin, where, during the last years of the 19th century, systematic attempts were made to replace the mountain pastures by clover and sown grass. The proportion of sheep to other live-stock is lower than in most of the South Slavonic lands, and the scarcity of goats is also noteworthy. Horsebreeding is a favourite pursuit in Slavonia; and between 1900 and 1902 many thousands of remounts were shipped to the British army in South Africa. The local administration endeavours to better the quality of live-stock by importing purer breeds, distributing prizes, and other measures; but the native farmers are slow to accept improvements.

Forests.—Forests, principally of oak, pine and beech, covered 3,734,000 acres in 1895, about one-fifth being state property. Especially valuable are the Croatian oak-forests, near Agram and Sissek. Timber is exported from Fiume and down the Danube.

Industries.—Apart from the distilleries and breweries scattered throughout the country, the rude flour-mills which lie moored in the rivers, and a few glass-works, saw-mills, silk-mills and tobacco factories, the chief industrial establishments of Croatia-Slavonia are at Agram, Fiume, Semlin, Buccari and Porto Ré. Only 8.3 of the population was, in 1900, engaged in industries other than farming,

which occupied 85.2%. The exports mainly consist of foodstuffs, especially grain, of live-stock, especially pigs and horses, and of timber. The imports include textiles, iron, coal, wine and colonial products; with machinery and other finished articles. Goods in transit to and from Hungary figure largely in the official returns for Fiume[2] and Semlin, which are the centres of the foreign trade. In 1900 Croatia-Slavonia possessed 253 banking establishments.

Communications.—The commerce of the country is furthered by upwards of 2000 m. of carriage-roads, the most remarkable of these being the Maria Louisa, which connects Karlstadt with Fiume, and the Josephina, which passes inland from Zengg. Many excellent highways were built for strategic purposes before the abolition of the Military Frontier in 1881. The railways, which are all owned and managed by the Hungarian state, intersect most parts of the country except the mountains south of Ogulin, where there is, nevertheless, a considerable traffic over the passes into Dalmatia and Bosnia. Agram is the principal railway centre, from which lines radiate S. W. to Fiume, W. into Austria, N.N.E. to Warasdin and into Hungary, and S.E. into Bosnia by way of Kostajnica. The main line eastward from Agram passes through Brod, where it meets the Bosnian system, and on to Belgrade; throwing out two branch lines to Brčka and Šamac in Bosnia, and several branches on the north, which traverse the central watershed, and cross the Hungarian frontier at Zákány, Barcs, Esseg, Erdar and Peterwardein. Above Agram the Save is used chiefly for floating rafts of timber; east of Sissek it is navigable by small steamboats, but, despite its great volume, the multitude of its perpetually shifting sandbanks interferes greatly with traffic. Steamers also ply on the Una, the Drave below Barcs, and the Danube. The marshes of Syrmia are partially drained by the so-called “Canal of Probus,” the one large

artificial waterway in the country, said to have been cut by the Romans in the 3rd century.

Chief Towns,—The principal towns are Agram, the capital, with 61,002 inhabitants in 1900; Esseg, the capital of Slavonia (24,930); Semlin (15,079); Mitrovica (11,518); Warasdin (12,930); Karlstadt (7396); Brod (7310); Sissek (7047); Djakovo (6824); Karlowitz (5643); Peterwardein (5019); Zengg (3182); and Buccari (1870). These are described in separate articles. The centre of the coasting trade is Novi, and other small seaports are San Giorgio (*Sveto Juraj*), Porto Ré (*Kraljevica*) and Carlopago. Agram, Gospić (10,799), Ogulin (8699), Warasdin and Bjelovar (6056) are respectively the capitals of the five counties which belong to Croatia proper,—Agram (Hung. *Zágráb*), Modruš-Fiume, Lika-Krbava, Warasdin (*Varasd*) and Bjelovar (*Belovár-Körös*); while the capitals of the three Slavonian counties, Virovitica (*Veröcze*), Požega (*Pozsega*) and Syrmia (*Szerém*), are Esseg, Požega (5000) and Semlin.

Population and National Characteristics.—The population rose from 1,892,499 in 1881 to 2,416,304 in 1900, an increase of little less than one-third, resulting from a uniformly low death rate, with a high marriage and birth rate, and characterized by that preponderance of male over female children which is common to all the South Slavonic lands. More than 75% of the inhabitants are Croats, the bulk of the remainder being Serbs, who predominate in eastern Slavonia. Outside Croatia-Slavonia, the Croats occupy the greater part of Dalmatia and northern Bosnia. There are large Croatian settlements in the south of Hungary, and smaller colonies in Austria. The numbers of the whole nation may be estimated at 3,500,000 or 4,000,000. The distinction between Croats and Serbs is religious, and, to a less extent, linguistic. Croats and Serbs together constitute a single branch of the Slavonic race, frequently called the Serbo-Croatian branch. The

literary language of the two nations is identical, but the Croats use the Latin alphabet,[3] while the Serbs prefer a modified form of the Cyrillic. The two nations have also been politically separated since the 7th century, if not for a longer period; but this division has produced little difference of character or physical type. Even the costume of the Croatian peasantry, to whom brilliant colours and intricate embroideries are always dear, proclaims their racial identity with the Serbs; their songs, dances and musical instruments, the chief part of their customs and folk-lore, their whole manner of life, so little changed by its closer contact with Western civilization, may be studied in Servia (*q.v.*) itself. In both countries rural society was based on the old-fashioned household community, or *zadruga*, which still survives in the territories that formed the Military Frontier, though everywhere tending to disappear and be replaced by individual ownership. The Croatian peasantry are least prosperous in the riverside districts, where marsh-fevers prevail, and especially beside the Save. Even in many of the towns the houses are mere cabins of wood and thatch. As in Servia, there is practically no middle class between the peasants and the educated minority; and the commercial element consists to a great extent of foreigners, especially Germans, Hungarians, Italians and Jews. Numerically this alien population is insignificant. The Italians are chiefly confined to the coast; the Germans congregate at Semlin and Warasdin; the Slovenes are settled along the north-western frontier, where they have introduced their language, and so greatly modified the local dialect; the gipsies wander from city to city, as horse-dealers, metal workers or musicians; there are numerous Moravian and Bohemian settlements; and near Mitrovica there is a colony of Albanians. It is impossible to give accurate statistics of the alien population; for, in the compilation of the official figures, language is taken as a test of nationality, an utterly untrustworthy method in a country where every educated person speaks two or three languages. Croatian nationalists also

maintain that official figures are systematically altered in the Hungarian interest.

Constitution and Government.—By the fundamental law of the 21st of December 1867 Austria-Hungary was divided, for purposes of internal government, into Cisleithania, or the Austrian empire, and Transleithania, or the kingdoms of Hungary and Croatia-Slavonia. In theory the viceroy, or *ban* of Croatia-Slavonia is nominated by the crown, and enjoys almost unlimited authority over local affairs; in practice the consent of the crown is purely formal, and the *ban* is appointed by the Hungarian premier, who can dismiss him at any moment. The provincial government is subject to the *ban*, and comprises three ministries—the interior, justice, and religion and education,—for whose working the *ban* is responsible to the Hungarian premier, and to the national assembly of Croatia-Slavonia (*Narodna Skupština*). This body consists of a single chamber, composed partly of elected deputies, partly of privileged members, whose numbers cannot exceed half those of the deputies. There are 69 constituencies, besides the 21 royal free cities which also return deputies. Electors must belong to certain professions or pay a small tax. The privileged members are the heads of the nobility, with the highest ecclesiastics and officials. As a rule, they represent the "Magyarist" section of society, which sympathizes with Hungarian policy. The chamber deals with religion, education, justice and certain strictly provincial affairs, but even within this limited sphere all its important enactments must be countersigned by the minister for Croatia-Slavonia, a member, without portfolio, of the Hungarian cabinet. At the polls, all votes are given orally, a system which facilitates corruption; the officials who control the elections depend for their livelihood on the *ban*, usually a Magyarist; and thus, even apart from the privileged members, a majority favourable to Hungary can usually be secured. The constitutional relations between Hungary and Croatia-Slavonia are regulated by the agreement, or *nagoda*, of 1868. This instrument determines the functions of

the *ban*; the control of common interests, such as railways, posts, telegraphs, telephones, commerce, industry, agriculture or forests; and the choice of delegates by the chamber, to sit in the Hungarian parliament. See also below, under *History*.

Local administration.

For administrative purposes Croatia-Slavonia is divided into 8 rural counties, already enumerated; besides the 4 urban counties, or municipalities of Agram, Semlin, Warasdin and Esseg. These are subdivided into rural and urban communes, each with its representative council. The affairs of each rural county are managed by an assembly chosen for 6 years, which comprises not only elected members, but delegates from all the cities except Agram and Esseg, with certain high ecclesiastics and officials.

Justice.

The highest judicial authority is the supreme court or Septemviral Table, which sits at Agram, and ranks above the royal courts of appeal, the county courts of first instance, and the district courts or magistracies.

Religion.

Fully four-fifths of the population belong to the Roman Catholic Church, which has an archbishop at Agram and bishops at Zengg and Djakovo. There are about 12,000 Greek Catholics, with a bishop at Kreuz (*Križevac*). The Serb congregations, who had previously been classed as Orthodox Greek, were officially recognized as members of the Orthodox Church of Servia after 1883. Their episcopal sees of Karlowitz and Pakrac depend upon the metropolitanate of Belgrade; but from 1830 to 1838 Karlowitz was itself the headquarters of the Servian Church.

During the 19th century strenuous efforts to better the state of education were made by Bishop Strossmayer (1815-1905) and other

reformers; but, although some success was achieved, only one-third of the population could read and write in 1900.

Education.

Foremost among the educational institutions is the South Slavonic Academy of Sciences and Arts (*Jugoslavenska Akademija Znanosti i Umjetnosti*), founded by Strossmayer and others in 1867, as an improvement on a learned society which had existed since 1836. The academy is the headquarters of the nationalist propaganda. Its numerous publications, though sometimes biased by political passion, throw much light on Serbo-Croatian history, law, philology and kindred topics. Agram University, founded in 1874, possesses three faculties—theology, philosophy and law; but, unlike other Hungarian universities, it lacks a faculty of medicine. Its average number of students varies from 300 to 350. In 1900 there were also 19 *real-gymnasia*, teaching science, art and modern languages, as well as classics and mathematics; 1400 elementary schools; and a few special institutions, such as the naval and military academies of Fiume, ecclesiastical seminaries and commercial colleges. In almost every case the language of instruction is Serbo-Croatian. The development of higher education, without a corresponding advance of technical education, has created an intellectual class, comprising many men of letters, and several painters, musicians and sculptors, though none of great eminence; it also tends to produce many aspirants to official or professional careers, who find employment difficult to obtain. The want of a strong native middle class may partly be traced to this tendency.

History.

Medieval historians did not use the terms Croatia and Slavonia in their present sense. The Croatia of the middle ages comprised north-western

Bosnia, Turkish Croatia, and the region now known as Upper Croatia. The whole country between the Drave and Save, thus including a large part of modern Croatia, was called in Latin *Slavonia*, in German *Windisches Land*, and in Hungarian *Tótország*, to distinguish it from the territories in which the Croats were racially supreme (*Horvátország*). At the time of their conquest by the Romans (35 B.C.) both these divisions were occupied by the Pannonians, who in Slavonia had displaced an older population, the Scordisci; and both were included in the Roman province of Pannonia Inferior, although Slavonia had the distinctive name of Pannonia Savia (see PANNONIA). When the Roman dominions were broken up in A.D. 395, Croatia-Slavonia remained part of the Western empire. The Ostrogoths overran it in 489; in 535 it was annexed by Justinian; in 568 it was conquered by the Avars. These were in turn expelled from Croatia by the Croats, a Slavonic people from the western Carpathians, who, according to some authorities, had occupied the territories of the Marcomanni in Bohemia, and been driven thence in the 6th century by the Czechs. The main body of the Croats, whose tribal and racial names respectively are perpetuated in the names of Croatia and Slavonia, entered Croatia between 634 and 638, and were encouraged by the emperor Heraclius to attack the Avars. Smaller bodies had led the way southwards since 548. The Croats formed the western division of the great migratory horde of Serbo-Croats which colonized the lands between Bulgaria and the Adriatic. Contemporary chroniclers called them *Chrobati*, *Belochrobati* ("White Croats"), *Chrovati*, *Horvati*, or by some similar Latin or Byzantine variant of the Slavonic *Khrvaty*. The Croats occupied most of the region now known as Croatia-Slavonia, Dalmatia, and north-western Bosnia, displacing or absorbing the earlier inhabitants everywhere except along the Dalmatian littoral, where the Italian city-states usually maintained their independence, and in certain districts of Slavonia, where, out of a mixed population of Slavonic immigrants, Avars and Pannonians, the Slavs, and especially the

Serbo-Croats, gradually became predominant. The Croats brought with them their primitive tribal institutions, organized on a basis partly military, partly patriarchal, and identical with the Zhupanates of the Serbs (see SERVIA); agriculture, war and hunting were their chief pursuits. Although they at first acknowledged no alien sovereign, they passed gradually under Italian influence in the extreme west, and under Byzantine influence in the south and south-east. In 806 the northern and north-eastern districts were added to the empire of the Franks, and thus won for the Western Church. Frankish predominance was long commemorated by the name Francochorion, given by the Byzantines to Syrmia; it is still commemorated by the name Fruška Gora, "Mountains of the Franks," in that province.

The Croatian Kingdom: c. 910-1091.—In 877 the Croats were temporarily subdued by the Byzantine emperor, but after successive insurrections which tended to centralize their loosely knit tribal organization, and to place all power in the hands of a military chief, they regained their independence and founded a national kingdom about 910. It is probable that Tomislav or Timislav, who had led their armies to victory, assumed the title of king in that year. Some authorities, however, state that Tomislav only bore the title of *veliki župan* or "paramount chief," and was only one in a long line of princes which can be traced without interruption back to 818. On this view, Držislav (c. 978-1000) was the first king properly so called. But Tomislav, whatever his official style, was certainly the first of a series of independent national rulers which lasted for nearly two centuries. The records of this period, regarded by many Croats as the golden age of their country, are often scanty, and its chronology is still unsettled. Little is known of Trpimir, who preceded Držislav, or of Stephen I. (1035-1058), but a few of the kings gained a more lasting fame by their success in war and diplomacy. Among these were Krešimir I. (c. 940—946), his successor Miroslav, and especially Krešimir II., surnamed the Great (c. 1000-1035), who harried the Bulgarians, at that time a powerful

nation, and conquered a large part of Dalmatia, including some of the Italian cities. Already, under his predecessors, the Croats had built a fleet, which they used first for piracy and afterwards for trade. Their skill in maritime affairs, exemplified first in the 9th century by the pagan corsairs of the Narenta (see DALMATIA: *History*), and later by the numerous Dalmatian and Croatian sailors who served in the navies of Venice and Austria, is remarkable in a Slavonic people, and one which had so recently migrated from central Europe. At the end of the 10th century they even for a short period exacted tribute from Venice, but their power was temporarily destroyed in 1000, when the Venetians captured and sacked Biograd or Belgrade, the Italian Zaravecchia. This Dalmatian port was not only the Croatian arsenal, but the seat of the kings, who here sought to enhance their dignity by borrowing the grandiose titles and elaborate procedure of the Byzantine court. Krešimir II. and Krešimir Peter (c. 1058-1073), the hero of many national legends and lays, restored the naval power of the Croats. After the death of Krešimir Peter, Slavic or Slaviža reigned until 1076, when he was succeeded by Zvonimir (Svinimir or Zvoinimir) Demetrius. Zvonimir was crowned by the legate of Pope Gregory VII, and appears to have been regarded as a vassal of the papacy. Both he and Stephen II., a nephew of Krešimir II., died in 1089.

Hungarian Supremacy: 1091-c. 1526.—Amid the strife of rival claimants to the throne, Helena, the widow of Stephen, appealed for aid to her brother Ladislaus I., king of Hungary. Ladislaus took possession of the country in 1091. He founded the bishopric of Agram and introduced Hungarian law. His death in 1095 was the signal for a nationalist insurrection, but after two years the rebels were crushed by his successor Coloman. This monarch reorganized the administration on a system which has been maintained, with modifications in detail, by almost all subsequent rulers. He respected the existing institutions of the conquered territory so far as to leave its autonomy in domestic affairs intact; but delegated his own sovereignty, and

especially the control of foreign affairs and war, to a governor known as the ban (*q.v.*). This office was sometimes held by princes of the royal house, often by Croatian nobles. Coloman also extended his authority over Dalmatia and the islands of the Quarnero, but the best modern authorities reject the tradition that in 1102 he was crowned king of Croatia, Slavonia and Dalmatia. In 1127 Syrmia, which had been annexed to Bulgaria from about 700 to 1018, and to the Eastern empire from 1019, was united to Slavonia. The Hungarian government left much liberty to the Croatian nobles, a turbulent and fanatical class, ever ready for civil war, rebellion or a campaign against the Bosnian heretics. Their most powerful leaders were the counts of Zrin and Bribir (or Brebir), whose surname was Šubić. This family played an important part in local politics from the 13th century to 1670, when Peter Šubić was its last member to hold the office of ban. Paul Šubić (d. 1312) and Mladen Šubić (d. 1322) even for a short period united Croatia, Slavonia, Bosnia and part of Dalmatia under their own rule. From 1322 to 1326 the Croatian nobles successfully withstood the armies of Hungary and Bosnia; from 1337 to 1340, instigated by the Vatican, they carried on a crusade against the Bosnian Bogomils; and in the Krajina (Turkish Croatia) hostilities were resumed at intervals until the Turkish conquest.

The Turkish Occupation: c. 1526-1718.—Here, as elsewhere, the Ottoman invasion was facilitated by the feuds of the Christian sects. When King Matthias Corvinus undertook to defend Slavonia in 1490 it was too late; Matthias lost Syrmia and died in the same year. His successor Ladislaus of Poland (1490-1516) added Slavonia to the kingdoms named in the royal title, which now included the words “King of Dalmatia and Croatia and Slavonia” (*Rex Dalmatiae et Croatiae et Slavoniae*). But he failed to repel the Turks, who in 1526 destroyed the power of Hungary at the battle of Mohács. In 1527 the Croats were compelled to swear allegiance to Ferdinand I. of Austria, who had been elected king of

Hungary. Ferdinand founded the generalcy of Karlstadt and thus laid the foundation of the military frontier. The provinces of Agram, Warasdin and Kreutz, previously included in Slavonia, were added to Croatia, to counterbalance the loss of territory in the Krajina. Throughout the century the Turks continued to extend their conquests until, in 1606, the emperor retained only western Croatia, with the cities of Agram, Karlstadt, Warasdin and Zengg. During the same period the doctrines of the Reformation had spread among the Croats; but they were forcibly suppressed in 1607-1610. The military occupation by the Turks left little permanent impression; colonization was never attempted; and the continuous wars by which the victors strove to secure or enlarge their dominions north of the Save left no time for the introduction of Moslem religion or civilization among the vanquished. Thus in the reconquest of Croatia-Slavonia there was none of the local opposition which afterwards hindered the Austrian occupation of Bosnia. The successes of Prince Eugene in 1697 led two years later to the peace of Carlowitz, by which the Turks ceded the greater part of Slavonia and Hungary to Austria; and the remainder was surrendered in 1718 by the treaty of Passarowitz. Only Turkish Croatia henceforth remained part of the Ottoman empire.

Austrian and French Supremacy: 1718-1814.—Austrian influence predominated throughout Croatia-Slavonia during most of the 18th century, although Slavonia was constitutionally regarded as belonging to Hungary. Despite Magyar protests the misleading name “Croatia” was popularly and even in official documents applied to the whole country, including the purely Slavonian provinces of Virovitica, Požega and Syrmia. From 1767 to 1777 Croatia, Slavonia and Dalmatia were collectively named Illyria, and governed from Vienna, but each of these divisions was subsequently declared a separate kingdom, with a separate administration, while the military frontier remained under military rule. In 1776 the Croatian seaboard, which had previously been under the same administration as the

rest of the Austrian coast, was annexed to Croatia, but three years later Fiume was declared an integral part of Hungary. These administrative changes, and especially the brief existence of united "Illyria," stimulated the dormant nationalism of the Croats and their jealousy of the Magyars. In 1809 Austria was forced to surrender to Napoleon a large part of Croatia, with Dalmatia, Istria, Carinthia, Carniola, Görz and Gradisca. These territories received the name of the Illyrian Provinces, and remained under French rule until 1813. All the Croats capable of service were enrolled under the French flag; their country was divided for administrative purposes into *Croatie civile* and *Croatie militaire*. In 1814 Dalmatia was incorporated in Austria, while Istria, Carinthia, Carniola, Görz and Gradisca became the Illyrian kingdom of Austria, and retained their united government until 1849. Croatia and Slavonia were declared appanages of the Hungarian crown—*partes adnexae*, or subject provinces, according to the Magyars; *regna socia*, or allied kingdoms, according to their own view. Each phrase afterwards became the watchword of a political party: neither is accurate. The Croats preserved their local autonomy, the use of their language for official purposes, their elected diet and other ancient institutions, but Hungarian control was represented by the ban.

The National Revival.—The Croats acquiesced in their position of inferiority until 1840, when the Magyars endeavoured to introduce Hungarian as the official language. A nationalist or "Illyrist" party was formed under Count Drašković and Bishop J. Strossmayer (*q.v.*) to combat Hungarian influence and promote the union of the "Illyrian" Slavs, *i.e.* the Slovenes, Croats and Serbs. Ljudevit Gaj, the leading Croatian publicist, strongly supported the movement. The elections of 1842 were marked by a series of sanguinary conflicts between Illyrists and Magyarists, but not until 1848 were the Illyrists returned to office. One of their leaders, Baron Josef Jellachich, was appointed ban in 1848. He strongly advocated the union of Croatia with Carinthia, Carniola and Styria, but found his policy thwarted

as much by the apathy of the Slovenes as by the hostility of the Magyars. A Croatian deputation was received at Innsbruck by Ferdinand V., but before its arrival the Hungarians had obtained a royal manifesto hostile to Illyrism. But failure only increased the agitation among the southern Slavs; all attempts at mediation proved unsuccessful, and on the 31st of August the Croats claimed to have convinced the king that justice was on their side. On the 11th of September the advance-guard of their army crossed the Drave under the command of Jellachich. On the 29th they were driven back from Pákozd by the Hungarians, and retired towards Vienna; they subsequently aided the Austrian army against the Hungarian revolutionaries (see JELLACHICH, JOSEF, and HUNGARY: *History*). The constitution of 1849 proclaimed Croatia and Slavonia separated from Hungary and united as a single Austrian crownland, to which was annexed the Croatian littoral, including Fiume. Austrian supremacy lasted until 1867; no ban was appointed, and owing to the suspension of local autonomy from 1850 to 1860 this period is known as "the ten years of reaction." It was ended by the celebrated "October Diploma" of the 20th of October 1860, which promised the restoration of constitutional liberty. But the so-called "Constitution of February" (21st February 1861) placed all practical power in the hands of an executive controlled by the government at Vienna. The newly elected diet was soon dissolved for its advocacy of a great South Slavonic confederation under imperial rule, and no other was elected until 1865.

From 1865 to 1867 Strossmayer and the nationalists endeavoured to secure the formation of a subordinate Austrian kingdom comprising Dalmatia, Croatia-Slavonia and the islands of the Quarnero. The Magyars had, however, resolved to subject Croatia-Slavonia to the crown of St Stephen, and in 1867 had secured control of the finances and electoral machinery. The office of ban was revived, and its holder, Baron Levin Rauch, was an ardent Magyarist. At the elections of December 1867 a majority of Hungarian partisans was easily obtained, and on the 29th of

January the diet passed a resolution in favour of reunion with Hungary. The whole Opposition refused to take any part in the proceedings, as a protest against the alleged illegality of the elections; but by the 25th of June the Croatian commissioners and the Hungarian government had framed a new constitution, which was ratified in September. Besides substituting Hungarian for Austrian sovereignty, it provided that the diet and the ban should control local affairs, subject to the Croatian minister in the Hungarian cabinet, and that Croatia-Slavonia should pay 55% of its revenue to Hungary for mutual and imperial expenses, but should be represented in the Hungarian parliament by thirty-six delegates, and should continue to use Serbo-Croatian as the official language. Hungary guaranteed that the 45% retained by the territorial government should be not less than two and a half million gulden (£250,000). In May 1870 Fiume was annexed to Hungary, but in 1873 the Croats received as compensation an increase of their guaranteed revenue to £350,000, an addition of seven to the number of their representatives at Budapest, and a promise that the military frontier should be incorporated in the existing civil provinces. In 1877 a convention with Hungary regulated the control of public estates in the military frontier, and on the 15th of July 1881 the frontier, including the district of Sichelburg claimed by Carniola, was handed over to the local administration.

Meanwhile the events of 1875-1878 in the Balkans, culminating in the Austrian occupation of Bosnia and Herzegovina, revived the agitation for a "Great Croatia." A party separate from the regular Opposition, and known as the "Party of the Right," was formed to oppose the Magyarists. Its activity resulted in the riots of 1883, which were with difficulty quelled; in 1885 its leader, N. Starčević, was condemned to imprisonment for the violence of his speeches against the ban, Count Khuen-Héderváry. In 1888 the moderate Opposition also lost its leader, Bishop Strossmayer, who was censured by the king on account of his famous Panslavist telegram to the Russian Church (see STROSSMAYER). In 1889 the financial agreement with

Hungary was revised and the contribution of Croatia-Slavonia to the expenses shared with Hungary or common to the whole of the Dual Monarchy was raised by 1%. This added burden combined with bad harvests, a fall in the revenue and a deficit in the budget to heighten popular discontent. Count Khuen-Héderváry was responsible for several administrative improvements, but the prosperity of the country declined from year to year. The government was accused of illegal interference with the elections, with the use of the Hungarian arms and language in official documents, and with undue harshness in the censorship of the press. In May 1903 there were outbreaks of rioting in Agram, Sissek and other towns, besides serious agrarian disturbances directed against the Magyarist landowners; in a debate in the Reichsrath (18th May) an Austrian deputy named Bianchini unsuccessfully attempted to induce the imperial government to intervene. At the end of June Count Khuen-Héderváry was made Hungarian prime minister; Count T. Pejačević succeeded him as ban, and restored quiet by promising freedom of assembly and greater liberty of the press. Since 1898 the financial agreement had only been renewed from year to year. But the estimates for 1904 revealed another heavy deficit; and this was only paid by Hungary on condition that the agreement should be renewed until the 31st of December 1913, and the contribution of 56% maintained.

The constitutional crisis of 1905 in Hungary stimulated the nationalist agitation. A congress of Croatian and Dalmatian deputies met at Spalato to advocate Serbo-Croatian unity, and in 1906 the municipality of Agram endeavoured to petition the king in favour of union with Bosnia and Herzegovina. This propaganda was severely discouraged. Baron Rauch, appointed ban in 1908, refused to summon the diet, in which he could not command a single vote, and much excitement was caused in 1909 by the trial of 57 nationalist leaders for high treason. The policy of the nationalists, who now aimed at the political union, under the king-emperor, of all Serbo-

Croats in Austria-Hungary—upwards of 4,500,000—was less visionary than the older Illyrism, and less aggressively Panslavist. It no longer sought to include Carinthia, Carniola and Styria in the proposed "Great Croatia." It was opposed by Austria as tending to create a new and formidable Slavonic nation within the Dual Monarchy, and by Hungary as a menace to Magyar predominance in Transleithania.

Language and Literature.

For the place of the Croatian dialects among Slavonic languages generally, see SLAVS. The Croatian dialects, like the Servian, have gradually developed from the Old Slavonic, which survives in medieval liturgies and biblical or apocryphal writings. The course of this development was similar in both cases, except that the Croats, owing to their dependence on Austria-Hungary, were not so deeply influenced as the Serbs by Byzantine culture in the middle ages, and by Russian linguistic forms and Russian ideas in modern times. The Orthodox Serbs, moreover, use a modified form of the Cyrillic alphabet, while the Roman Catholic Croats use Latin characters, except in a few liturgical books which are written in the ancient Glagolitic script. As the literary language of both nations is now practically the same, and is, indeed, commonly known as "Serbo-Croatian," the reader may be referred to the article SERVIA: *Language and Literature*, for an account of its history, of its chief literary monuments up to the 19th century and inclusive of Dalmatian literature, and of the principal differences between the dialects spoken in Servia and Croatia-Slavonia.

The three most important Croatian dialects are known as the *Čakavci*, *Čakavština* or, in Servian, *Chakavski*, spoken along the Adriatic littoral; the *Štokavci* (*Štokavština*, *Shtokavski*), spoken in Servia and elsewhere in the north-west of the Balkan Peninsula; and the *Kajkavci* (*Kajkavština*,

Kaykavski), spoken by the partly Slovene population of the districts of Agram, Warasdin and Kreuz. This classification is based on the form, varying in different localities, of the pronoun *ča*, *što*, or *kaj*, meaning "what."

The Cakavci literature includes most of the works of the Dalmatian writers of the 15th and 16th centuries—the golden age of Serbo-Croatian literature. Its history is indissolubly interwoven with that of the Štokavci, which ultimately superseded it, and became the literary language of all the Serbo-Croats, as it had long been the language of the best national ballads and legends.

Kajkavci had from about 1550 to 1830 a distinctive literature, consisting of chronicles and histories, poems of a religious or educational character, fables and moral tales. These writings possess more philological interest than literary merit, and are hardly known outside Croatia-Slavonia and the Slovene districts of Austria.

Apart from the Kajkavci dialect, the whole body of Serbo-Croatian literature up to the 19th century may justly be regarded as the common heritage of Serbs and Croats. The linguistic and literary reforms which Dossitey Obradovich and Vuk Stefanovich Karajich carried out in Servia about the close of this period helped to stimulate among the Croats a new interest in their national history, their traditions, folk-songs and folk-tales. One result of this nationalist revival was the unsuccessful attempt made between 1814 and 1830 to raise the Čakavci dialect to the rank of a distinctive literary language for Croatia-Slavonia; but the Illyrist movement of 1840 led to the adoption of the Štokavci, which was already the vernacular of the majority of Serbo-Croats. Ljudevit Gaj (1809-1872), though he failed to create an artificial literary language by the fusion of the principal dialects spoken by Serbs, Croats and Slovenes, was by his championship of Illyrism instrumental in securing the triumph of the

Štokavci. Gaj was a poet of considerable talent, and one of the founders of Croatian journalism. Among other writers of the first half of the 19th century may be mentioned Ivan Mažuranić (1813-1890), whose first poems were published in the *Danica ilirska* ("Illyrian Dawnstar"), a journal founded and for a time edited by Gaj. In 1846 Mažuranić published his *Smrt Smail Aga Čengića* ("Death of Ismail Aga Čengić"), called by Serbo-Croats the "Epos of Hate." This remarkable poem, written in the metre of the old Servian ballads, gives a vivid description of life in Bosnia under Turkish rule, and of the hereditary border feuds between Christians and Moslems. In later life Mažuranić distinguished himself as a statesman, and became ban of Croatia from 1873 to 1880. Other writers representative of Croatian literature before 1867 were the lyric poet Stanko Vraz (1810-1851) and Dragutin Rakovac (1813-1854), the author of many patriotic songs.

With the foundation of the South Slavonic Academy at Agram, in 1867, the study of science and history received a new impetus. Under the presidency of Franko Rački (1825-1894) the academy, with its journal the *Rad jugoskovenske Akademije*, became the headquarters of an active group of savants, among whom may be mentioned Vastroslav Jagić (b. 1838), sometime editor of the *Archiv für slavische Philologie*; the historians Šime Ljubić (1822-1896) and Vjekoslav Klaić, author of several standard works on Croatia and the Croats; the lexicographer Bogoslav Šulek (1816-1895); the ethnographer and philologist Franko Karelac (1811-1874). In Dalmatia, where the Ragusan journal *Slovinac* has served, like the Agram *Rad*, as a focus of literary activity, there have been numerous poets and prose writers, associated, in many cases, with the Illyrist or the nationalist propaganda. Among these may be mentioned Count Medo Pučić (1821-1882), and the dramatist Matija Ban (1818-1903), whose tragedy *Meyrimah* is considered by many the finest dramatic poem in the Serbo-Croatian language.

AUTHORITIES.—For the topography, products, inhabitants and modern condition of Croatia-Slavonia, see *Bau und Bild Österreichs*, by C. Diener, F. E. Suess, R. Hoernes and V. Uhlig (Leipzig, 1903); *Die österreich-ungarische Monarchie in Wort und Bild*, vol. xxiv., edited by J. von Weilen (Vienna, 1902); *Führer durch Ungarn, Kroatien und Slawonien*, by B. Alföldi (Vienna, 1900); *Reiseführer durch Kroatien und Slawonien*, by A. Lukšić (Agram, 1893); *Vegetationsverhältnisse von Kroatien*, by A. Neilreich (Vienna, 1868); "Die Slowenen," by J. Šuman, and "Die Kroaten," by F. Staré, in vol. x. of *Die Völker Österreich-Ungarns* (Vienna, 1881-1882); *Die Serbokroaten der adriatischen Küstenländer*, by A. Weisbach (Berlin, 1884); and the map *Zemljovid Hrvatske i Slavonije*, by M. Katzenschläger (Vienna, 1895). The only detailed history is one in Serbo-Croatian, written by a succession of the highest native authorities, and published by the South Slavonic Academy (Agram, from 1861). It is largely based on the following works: *Vetera monumenta historica Hungariam sacram illustrantia*, containing documents from the Vatican library edited by A. Theiner (Rome, 1860); *Vetera monumenta historiam Slavorum meridionalium illustrantia*, published by the South Slavonic Academy (Agram, 1863, &c.); *Jura regni Croatiae, Dalmatiae, et Slavoniae cum privilegiis*, by J. Kukuljević (Agram, 1861-1862); *Monumenta historica Slavorum meridionalium*, by V. Makushev, in Latin and Italian, with notes in Slavonic (Belgrade, 1885); *De regno Dalmatiae et Croatiae*, by G. Lucio (Amsterdam, 1666; see DALMATIA, under bibliography); *Regno degli Slavi*, by M. Orbini (Pesaro, 1601); and, for ecclesiastical history, *Illyricum sacrum*, by D. Farlatus and others (Venice, 1751-1819). See also *Hrvatska i Hrvati*, by V. Klaić (Agram, 1890, &c.); and *Slawonien vom 10. bis zum 13. Jahrhundert*, translated from the Serbo-Croatian of Klaić by J. von Vojničić (Agram, 1882).

(K. G. J.)

1 Also written *Sirmia* and *Sirmium*; Serbo-Croatian *Sriem*; Hungarian *Szerém*.

2 It is impossible to exclude Fiume from any survey of Croatian trade, although Fiume belongs politically to Hungary proper, and is the main outlet for Hungarian emigration and maritime commerce.

3 It is important to notice the value of the following letters and signs, which recur frequently:—*c* = *ts*; *č* = *ch* (hard); *ć* = *ch* (soft); *j* = y, or j in German; *š* = *sh*; *ž* = *zh*, or *j* in French.

CROCIDOLITE, a mineral described in 1815 by M. H. Klaproth under the name *Blaueisenstein* (blue ironstone), and in 1831 by J. F. Hausmann, who gave it its present name on account of its nap-like appearance (Gr. κροκύς, nap of cloth). It is a blue fibrous mineral belonging to the amphibole group and closely related to riebeckite; chemically it is an iron sodium silicate. Its resemblance to asbestos has gained for it the name Cape Asbestos, the chief occurrence being in Cape Colony. The mineral suffers alteration by removal of alkali and peroxidation of the ferrous iron, and further by deposition of silica between the fibres, or by their replacement by silica; a hard siliceous mineral is thus formed which when polished shows, in consequence of its fibrous structure, a beautiful chatoyance or silky lustre. This is the ornamental stone which is known when blue as “hawk’s-eye,” and when of rich golden brown colour as “tiger-eye.” The latter, which represents the final alteration of the crocidolite, has become very fashionable as “South African cat’s eye,” and is often termed “crocidolite,” though practically only a mixture of quartz with brown oxide of iron. The following are analyses by A. Renard and C. Klement of the unaltered crocidolite and of the blue and brown products of alteration:—

	Crocidolite.	Hawk's-eye.	Tiger-eye.
Silica	51.89	93.45	93.05
Ferric oxide	19.22	2.41	4.94
Alumina	· ·	0.23	0.66
Ferrous oxide	17.53	1.43	· ·
Magnesia	2.43	0.22	0.26
Lime	0.40	0.13	0.44
Soda	7.71	· ·	· ·
Potash	0.15	· ·	· ·
Water	2.36	0.82	0.76
Total	101.69	98.69	100.11

Another alteration product of the crocidolite, consisting of silica and ferric hydrate, has been called griqualandite. Crocidolite and the minerals resulting from its alteration occur in seams, associated with magnetite and other iron-ores, in the jasper-slates of the Asbestos Mountains in Griqualand West, Cape Colony. It is known also from a few other localities, but only in subordinate quantity. (See CAT'S-EYE.)

CROCKET (Ital. *uncinetti*, Fr. *crochet*, *crosse*, Ger. *Häklein*, *Knollen*), in architecture, an ornament running up the sides of gablets, hood-moulds, pinnacles, spires; generally a winding stem like a creeping plant, with flowers or leaves projecting at intervals, and terminating in a finial.

CROCKETT, DAVID (1786-1836), American frontiersman, was born in Greene county, Tennessee, on the 17th of August 1786. His education was obtained chiefly in the rough school of experience in the Tennessee backwoods, where he acquired a wide reputation as a hunter, trapper and marksman. In 1813-1814 he served in the Creek War under Andrew Jackson, and subsequently became a colonel in the Tennessee militia. In 1821-1824 he was a member of the state legislature, having won his election not by political speeches but by telling stories. In 1827 he was elected to the national House of Representatives as a Jackson Democrat, and was re-elected in 1829. At Washington his shrewdness, eccentric manners and peculiar wit made him a conspicuous figure, but he was too independent to be a supporter of all Jackson's measures, and his opposition to the president's Indian policy led to administration influences being turned against him with the result that he was defeated for re-election in 1831. He was again elected in 1833, but in 1835 lost his seat a second time, being then a vigorous opponent of many distinctively Jacksonian measures. Discouraged and disgusted, he left his native state, and emigrated to Texas, then engaged in its struggle for independence. There he lost his life as one of the defenders of the Alamo at San Antonio on the 6th of March 1836.

A so-called "autobiography," which he very probably dictated or at least authorized, was published in Philadelphia in 1834; a work purporting to be a continuation of this autobiography and entitled *Colonel Crockett's Exploits and Adventures in Texas* (Philadelphia, 1836) is undoubtedly spurious. These two works were subsequently combined in a single volume, of which there have been several editions. Numerous popular biographies have been written, the best by E. S. Ellis (Philadelphia, 1884).

CROCKETT, SAMUEL RUTHERFORD (1860-), Scottish novelist, was born at Duchrae, Galloway, on the 24th of September 1860, the son of a Galloway farmer. He was brought up on a Galloway farm, and graduated from Edinburgh University in 1879. After some years of travel he became in 1886 minister of Penicuik, but eventually abandoned the Free Church ministry for novel-writing. The success of Mr J. M. Barrie had created a demand for stories in the Scottish dialect when Mr Crockett published his successful story of *The Stickit Minister* in 1893. It was followed by a rapidly produced series of popular novels dealing often with the past history of Scotland, or with his native Galloway. Such are *The Raiders*, *The Lilac Sun-bonnet* and *Mad Sir Uchtred* in 1894; *The Men of the Moss Hags* in 1895; *Cleg Kelly* and *The Grey Man* in 1896; *The Surprising Adventures of Sir Toady Lion* (1897); *The Red Axe* (1898); *Kit Kennedy* (1899); *Joan of the Sword Hand* and *Little Anna Mark* in 1900; *Flower o' the Corn* (1902); *Red Cap Tales* (1904), &c.

CROCKFORD, WILLIAM (1775-1844), proprietor of Crockford's Club, was born in London in 1775, the son of a fishmonger, and for some time himself carried on that business. After winning a large sum of money —according to one story £100,000—either at cards or by running a gambling establishment, he built, in 1827, a luxurious gambling house at 50 St James's Street, which, to ensure exclusiveness, he organized as a club. Crockford's quickly became the rage; every English social celebrity and every distinguished foreigner visiting London hastened to become a member. Even the duke of Wellington joined, though, it is averred, only in

order to be able to blackball his son, Lord Douro, should he seek election. Hazard was the favourite game, and very large sums changed hands. Crockford retired in 1840, when, in the expressive language of Captain R. H. Gronow, he had "won the whole of the ready money of the then existing generation." He took, indeed, about £1,200,000 out of the club, but subsequently lost most of it in unlucky speculations. Crockford died on the 24th of May 1844.

See John Timbs, *Club Life of London* (London, 1866); Gronow, *Celebrities of London and Paris*, 3rd series (London, 1865).

CROCODILE, a name for certain reptiles, taken from ancient Gr. κορδύλος, signifying lizard and newt; with reduplication κορκορδύλος, and by metathesis ultimately κροκόδειλος. Herodotus makes mention of them, and tells us that the Egyptian name was *champsa*. The Arabic term is *ledschun*. The same root *kar* leads through something like *kar-kar-ta*, *glakarta* (*glazard* in Breton), to *lacerta* and to "lizard." Lacerta in turn has become, in Spanish, *lagarto*, which, with the article, *el lagarto*, is the origin of the term "alligator." This word is, however, artificial, although now widely used; Spanish and Portuguese-speaking people in America universally call the crocodile and the alligator simply *lagarto*, which is never intended for lizard.

The Crocodilia form a separate order of reptiles with many peculiarities. The premaxillae are short and always enclose the nostrils. The posterior nares or choanae open far behind in the roof of the mouth, in recent forms

within the pterygoids. The under jaws are hinged on to the quadrate bones, which extend obliquely backwards, and are immovably wedged in between the squamosal and the lateral occipital wings. The teeth form a complete series in the under jaw, and in the upper jaw on the premaxillary and maxillary bones. They are conical and deeply implanted in separate sockets. They are often shed throughout life, the successors lying on the inner side, and with their caps partly fitting into the wide open roots of the older teeth. Especially in alligators the upper teeth overlap laterally those of the lower jaw, whilst in most crocodiles the overlapping is less marked and the teeth mostly interlock, a feature which increases with the slenderness of the snout. In old specimens some of the longer, lower teeth work their tips into deep pits, and ultimately even perforate the corresponding parts of the upper jaw. The first and second vertebrae each have a pair of long, movable ribs. There is a compound abdominal sternum. The so-called pubic bones are large and movable. There are five fingers and four toes, provided with claws, excepting the outer digits.

The tongue is flat and thick, attached by its whole under surface; its hinder margin is raised into a transverse fold, which, by meeting a similar fold from the palate, can shut off the mouth completely from the wide cavity of the throat. Dorsally the posterior nares open into this cavity. Consequently the beast can lie submerged in the water, with only the nostrils exposed, and with the mouth open, and breathe without water entering the windpipe. Within the glottis is a pair of membranous folds which serve as vocal cords; all the Crocodilia are possessed of a loud, bellowing voice.

The stomach is globular, rather muscular, with a pair of tendinous centres like those of birds; its size is comparatively small, but the digestion is so rapid and powerful that every bone of the creature’s prey is dissolved whilst still being stowed away in the wide and long gullet. The anal opening forms

a longitudinal slit; within it, arising from its anterior corner, is the unpaired copulatory organ. The vascular system has attained the highest state of development of all reptiles. The heart is practically quadrilocular, the right and left halves being completely partitioned, except for a small communication, the *foramen Panizzae*, between the right and left aortae where these cross each other on leaving their respective ventricles. The outer ear lies in a recess which can be closed tightly by a dorsal flap of skin. The power of hearing is acute, and so is the sight, the eyes being protected by upper and lower lids and by a nictitating membrane. The skin of the whole body is scaly, with a hard, horny, waterproof covering of the epidermis, but between these mostly flat scales the skin is soft. The scutes or dermal portions of the scales are more or less ossified, especially on the back, and form the characteristic dermal armour. The skins or "hides" of commerce consist entirely of the tanned cutis minus, the epidermis and the horny coverings of the scutes. All the Crocodilia possess two pairs of musk-glands in the skin; one is situated on the inner side of the lower jaw. The opening of the glands is slit-like and leads into a pocket, which is filled with a smeary, strongly scented matter. The other pair lies just within the lips of the cloacal opening.

Propagation takes place by eggs, which are oval, quite white, with a very hard and strong shell. Their size varies from 2 to 4 in. in length, according to the size of the species and the age of the female. She lays several dozen eggs in a carefully prepared nest. The Nile crocodile makes a hole in white sand, which is then filled up and smoothed over; the mother sleeps upon the nest, and keeps watch over her eggs, and when these are near hatching—after about twelve weeks—she removes the 18 in. or 2 ft. of sand. Other species, especially the alligators, make a very large nest of leaves, twigs and humus, scraping together a mound about a yard high and two or more yards in diameter. The eggs, in several layers, are laid near the top. The adults frequently dig long subterranean passages into the banks of streams, and,

during dry seasons, they have been found deep in the hardened mud, whence they emerge with the beginning of the rains. They spend most of their time in the water, but are also very fond of basking in the hot sun on the banks of rivers or in marshes, usually with the head turned towards the water, to which they take on the slightest alarm. They can walk perfectly well, and they do so deliberately with the whole body raised a little above the ground. When their pools dry up, or when in search of new hunting-grounds, they sometimes undertake long wanderings over land. But the water is their true element. They swim rapidly, propelled by the powerful tail and by the mostly webbed limbs, or they submerge themselves, with only the tip of the nose and the eyes showing, or sometimes also the back. They then look like floating logs; and thus they float or gently approach their prey, which consists of anything they can overpower. Many a large mammal coming to drink at its accustomed place is dragged into the water by the lurking monster. Certainly there are occasional man-eaters amongst them, and in some countries they are much feared. As a rule, however, they are so wary and suspicious that they are very difficult to approach, and their haunts are so well stocked with fish and other game that they make off and hide rather than attack a man swimming in their waters. But if a dog is sent in there will be a sudden yelp, the splash from a big tail, and a widening eddy.

Crocodile stories, not all fabulous, are plentiful, and begin with one of the oldest writings in the world, the book of Job. “Canst thou draw leviathan with a hook? or his tongue with a cord which thou lettest down?... Lay thine hand upon him, remember the battle, do no more.” This is a very interesting passage, since it can apply only to a large-sized crocodile. Now nothing is known of the occurrence of such in Arabia, but a few specimens of rather small size seem still to exist in Syria, in the Wadi Zerka, an eastern tributary of the Jordan.

Crocodiles are caught in various ways,—for instance, with two pointed sticks, which are fastened crosswise within the bait, an animal's entrails, to which is attached a rope. When the creature has swallowed the spiked bait it keeps its jaws so firmly closed that it can be dragged out of the water. A kind of plover, *Pluvianus aegyptius*, often sits upon basking crocodiles, and, since the latter often rest with gaping mouth, it is possible that these agile birds do pick the reptiles' teeth in search of parasites. Being a very watchful bird, its cry of warning, when it flies off on the approach of danger, is probably appreciated by the crocodile. But the story of the ichneumon or mongoose is a fable. Although an inveterate destroyer of eggs, this little creature prefers those of birds and the soft-shelled eggs of lizards to the very hard and strong-shelled eggs which are deeply buried in the crocodile's nest.

Considering the interest which is taken in crocodiles and their allies, on account of their size, their dangerous nature and the sporting trophies which they yield, the following "key," based upon easily ascertained characters of the skull, is given.

I. Snout very long and slender. The mandibular symphysis extends backwards at least to the fifteenth tooth.

(a) Nasal bones very small, and widely separated from the premaxilla (which encloses the nostrils) by the maxillaries which join each other for a long distance along the dorsal mid-line.... *Gavialis gangeticus* of India, the "gharial" or fish-eater.

(b) Nasal bones long, so as to be in contact with the premaxilla at the hinder corner of the nostril groove.... *Tomistoma schlegeli* of Borneo, Malacca and Sumatra.

II. Snout mostly triangular or rounded off. The mandibular symphysis does not reach beyond the eighth tooth.

(a), The fourth mandibular tooth fits into a notch in the upper jaw. Crocodiles.

1. Without a bon nasal septum between the nostrils.... Crocodiles.

2. The nasal bones project through the nasal groove, forming a bony septum. *Osteolaemus frontatus s. tetraspis* of West rica.

(b) Fourth mandibular tooth fitting into a pit in the upper jaw. Alligators.

1. Without a bony nasal septum.... *Caiman*, Central and South America.

2. Nasal bones dividing the nasal groove.... *Alligator*, America and China.

The genus *Cracodilus* contains seven species. *C. vulgaris* or *niloticus* of most of Africa, is found from the Senegal to Egypt and to Madagascar, reaching a length of 15 ft. It has eighteen or nineteen upper and fifteen lower teeth on each side. *C. palustris*, the “mugger” or “marsh crocodile” of India and Ceylon, extends westwards into Baluchistan, eastwards into the Malay islands. It has nineteen upper and lower teeth on either side. The scutes on the neck, six in number, are packed closely together, the four biggest forming a square. The length of 12 ft. is a fair size for a large specimen. *C. porosus* or *biporcatus* is easily recognised by the prominent longitudinal ridge which extends in front of each eye. Specimens of more than 20 ft. in length are not uncommon, and a monster of 33 ft. is on record. It is essentially an inhabitant of tidal waters and estuaries, and often goes

out to sea; hence its wide distribution, from the whole coast of Bengal to southern China, to the northern coasts of Australia and even to the Fiji islands. Australians are in the habit of calling their crocodiles alligators. *C. cataphractus* is the common crocodile of West Africa, easily recognised by the slender snout which resembles that of the gavial, but the mandibular symphysis does not reach beyond the eighth tooth. *C. johnstoni* of northern Australia and Queensland is allied to the last species mentioned, with which it agrees by the slender snout. Lastly there are two species of true crocodiles in America, *C. intermedius* of the Orinoco, allied to the former, and *C. americanus* or *acutus* of the West Indies, Mexico, Central America to Venezuela and Ecuador; its characteristic feature is a median ridge or swelling on the snout, which is rather slender.

The above list shows that the usual statement that crocodiles inhabit the Old World and alligators the New World is not strictly true. In the Tertiary epoch alligators, crocodiles and long-snouted gavials existed in Europe.

(H. F. G.)

*** END OF THE PROJECT GUTENBERG EBOOK ENCYCLOPAEDIA BRITANNICA, 11TH EDITION, "COUCY-LE-CHÂTEAU" TO "CROCODILE" ***

Updated editions will replace the previous one—the old editions will be renamed.

Creating the works from print editions not protected by U.S. copyright law means that no one owns a United States copyright in these works, so the Foundation (and you!) can copy and distribute it in the United States without permission and without paying copyright royalties. Special rules, set forth in the General Terms of Use part of this license, apply to copying and distributing Project Gutenberg™ electronic works to protect the PROJECT GUTENBERG™ concept and trademark. Project Gutenberg is a registered trademark, and may not be used if you charge for an eBook, except by following the terms of the trademark license, including paying royalties for use of the Project Gutenberg trademark. If you do not charge anything for copies of this eBook, complying with the trademark license is very easy. You may use this eBook for nearly any purpose such as creation of derivative works, reports, performances and research. Project Gutenberg eBooks may be modified and printed and given away—you may do practically ANYTHING in the United States with eBooks not protected by U.S. copyright law. Redistribution is subject to the trademark license, especially commercial redistribution.

START: FULL LICENSE

THE FULL PROJECT GUTENBERG™ LICENSE

PLEASE READ THIS BEFORE YOU DISTRIBUTE OR USE THIS WORK

To protect the Project Gutenberg™ mission of promoting the free distribution of electronic works, by using or distributing this work (or any other work associated in any way with the phrase “Project Gutenberg”), you agree to comply with all the terms of the Full Project Gutenberg License available with this file or online at www.gutenberg.org/license.

Section 1. General Terms of Use and Redistributing Project Gutenberg electronic works

1.A. By reading or using any part of this Project Gutenberg electronic work, you indicate that you have read, understand, agree to and accept all the terms of this license and intellectual property (trademark/copyright) agreement. If you do not agree to abide by all the terms of this agreement, you must cease using and return or destroy all copies of Project Gutenberg electronic works in your possession. If you paid a fee for obtaining a copy of or access to a Project Gutenberg electronic work and you do not agree to be bound by the terms of this agreement, you may obtain a refund from the person or entity to whom you paid the fee as set forth in paragraph 1.E.8.

1.B. “Project Gutenberg” is a registered trademark. It may only be used on or associated in any way with an electronic work by people who agree to be bound by the terms of this agreement. There are a few things that you can do with most Project Gutenberg electronic works even without complying with the full terms of this agreement. See paragraph 1.C below. There are a lot of things you can do with Project Gutenberg electronic works if you follow the terms of this agreement and help preserve free future access to Project Gutenberg electronic works. See paragraph 1.E below.

1.C. The Project Gutenberg Literary Archive Foundation (“the Foundation” or PGLAF), owns a compilation copyright in the collection of Project Gutenberg electronic works. Nearly all the individual works in the collection are in the public domain in the United States. If an individual work is unprotected by copyright law in the United States and you are located in the United States, we do not claim a right to prevent you from copying, distributing, performing, displaying or creating derivative works

based on the work as long as all references to Project Gutenberg are removed. Of course, we hope that you will support the Project Gutenberg mission of promoting free access to electronic works by freely sharing Project Gutenberg works in compliance with the terms of this agreement for keeping the Project Gutenberg name associated with the work. You can easily comply with the terms of this agreement by keeping this work in the same format with its attached full Project Gutenberg License when you share it without charge with others.

1.D. The copyright laws of the place where you are located also govern what you can do with this work. Copyright laws in most countries are in a constant state of change. If you are outside the United States, check the laws of your country in addition to the terms of this agreement before downloading, copying, displaying, performing, distributing or creating derivative works based on this work or any other Project Gutenberg work. The Foundation makes no representations concerning the copyright status of any work in any country other than the United States.

1.E. Unless you have removed all references to Project Gutenberg:

1.E.1. The following sentence, with active links to, or other immediate access to, the full Project Gutenberg License must appear prominently whenever any copy of a Project Gutenberg work (any work on which the phrase “Project Gutenberg” appears, or with which the phrase “Project Gutenberg” is associated) is accessed, displayed, performed, viewed, copied or distributed:

> This eBook is for the use of anyone anywhere in the United States and most other parts of the world at no cost and with almost no restrictions whatsoever. You may copy it, give it away or re-use it under the terms of the Project Gutenberg™ License included with this eBook or online at www.gutenberg.org. If you are not located in the United States, you will have to check the laws of the country where you are located before using this eBook.

1.E.2. If an individual Project Gutenberg electronic work is derived from texts not protected by U.S. copyright law (does not contain a notice indicating that it is posted with permission of the copyright holder), the

work can be copied and distributed to anyone in the United States without paying any fees or charges. If you are redistributing or providing access to a work with the phrase “Project Gutenberg” associated with or appearing on the work, you must comply either with the requirements of paragraphs 1.E.1 through 1.E.7 or obtain permission for the use of the work and the Project Gutenberg trademark as set forth in paragraphs 1.E.8 or 1.E.9.

1.E.3. If an individual Project Gutenberg electronic work is posted with the permission of the copyright holder, your use and distribution must comply with both paragraphs 1.E.1 through 1.E.7 and any additional terms imposed by the copyright holder. Additional terms will be linked to the Project Gutenberg License for all works posted with the permission of the copyright holder found at the beginning of this work.

1.E.4. Do not unlink or detach or remove the full Project Gutenberg License terms from this work, or any files containing a part of this work or any other work associated with Project Gutenberg.

1.E.5. Do not copy, display, perform, distribute or redistribute this electronic work, or any part of this electronic work, without prominently displaying the sentence set forth in paragraph 1.E.1 with active links or immediate access to the full terms of the Project Gutenberg License.

1.E.6. You may convert to and distribute this work in any binary, compressed, marked up, nonproprietary or proprietary form, including any word processing or hypertext form. However, if you provide access to or distribute copies of a Project Gutenberg work in a format other than “Plain Vanilla ASCII” or other format used in the official version posted on the official Project Gutenberg website (www.gutenberg.org), you must, at no additional cost, fee or expense to the user, provide a copy, a means of exporting a copy, or a means of obtaining a copy upon request, of the work in its original “Plain Vanilla ASCII” or other form. Any alternate format must include the full Project Gutenberg License as specified in paragraph 1.E.1.

1.E.7. Do not charge a fee for access to, viewing, displaying, performing, copying or distributing any Project Gutenberg works unless you comply with paragraph 1.E.8 or 1.E.9.

1.E.8. You may charge a reasonable fee for copies of or providing access to or distributing Project Gutenberg electronic works provided that:

- You pay a royalty fee of 20% of the gross profits you derive from the use of Project Gutenberg works calculated using the method you already use to calculate your applicable taxes. The fee is owed to the owner of the Project Gutenberg trademark, but he has agreed to donate royalties under this paragraph to the Project Gutenberg Literary Archive Foundation. Royalty payments must be paid within 60 days following each date on which you prepare (or are legally required to prepare) your periodic tax returns. Royalty payments should be clearly marked as such and sent to the Project Gutenberg Literary Archive Foundation at the address specified in Section 4, “Information about donations to the Project Gutenberg Literary Archive Foundation.”

- You provide a full refund of any money paid by a user who notifies you in writing (or by e-mail) within 30 days of receipt that s/he does not agree to the terms of the full Project Gutenberg™ License. You must require such a user to return or destroy all copies of the works possessed in a physical medium and discontinue all use of and all access to other copies of Project Gutenberg™ works.

- You provide, in accordance with paragraph 1.F.3, a full refund of any money paid for a work or a replacement copy, if a defect in the electronic work is discovered and reported to you within 90 days of receipt of the work.

- You comply with all other terms of this agreement for free distribution of Project Gutenberg™ works.

1.E.9. If you wish to charge a fee or distribute a Project Gutenberg™ electronic work or group of works on different terms than are set forth in this agreement, you must obtain permission in writing from the Project Gutenberg Literary Archive Foundation, the manager of the Project Gutenberg™ trademark. Contact the Foundation as set forth in Section 3 below.

1.F.

1.F.1. Project Gutenberg volunteers and employees expend considerable effort to identify, do copyright research on, transcribe and proofread works not protected by U.S. copyright law in creating the Project Gutenberg™ collection. Despite these efforts, Project Gutenberg™ electronic works, and the medium on which they may be stored, may contain "Defects," such as, but not limited to, incomplete, inaccurate or corrupt data, transcription errors, a copyright or other intellectual property infringement, a defective or damaged disk or other medium, a computer virus, or computer codes that damage or cannot be read by your equipment.

1.F.2. LIMITED WARRANTY, DISCLAIMER OF DAMAGES - Except for the "Right of Replacement or Refund" described in paragraph 1.F.3, the Project Gutenberg Literary Archive Foundation, the owner of the Project Gutenberg™ trademark, and any other party distributing a Project Gutenberg™ electronic work under this agreement, disclaim all liability to you for damages, costs and expenses, including legal fees. YOU AGREE THAT YOU HAVE NO REMEDIES FOR NEGLIGENCE, STRICT LIABILITY, BREACH OF WARRANTY OR BREACH OF CONTRACT EXCEPT THOSE PROVIDED IN PARAGRAPH 1.F.3. YOU AGREE THAT THE FOUNDATION, THE TRADEMARK OWNER, AND ANY DISTRIBUTOR UNDER THIS AGREEMENT WILL NOT BE LIABLE TO YOU FOR ACTUAL, DIRECT, INDIRECT, CONSEQUENTIAL, PUNITIVE OR INCIDENTAL DAMAGES EVEN IF YOU GIVE NOTICE OF THE POSSIBILITY OF SUCH DAMAGE.

1.F.3. LIMITED RIGHT OF REPLACEMENT OR REFUND - If you discover a defect in this electronic work within 90 days of receiving it, you can receive a refund of the money (if any) you paid for it by sending a written explanation to the person you received the work from. If you received the work on a physical medium, you must return the medium with your written explanation. The person or entity that provided you with the defective work may elect to provide a replacement copy in lieu of a refund. If you received the work electronically, the person or entity providing it to you may choose to give you a second opportunity to receive the work electronically in lieu of a refund. If the second copy is also defective, you may demand a refund in writing without further opportunities to fix the problem.

1.F.4. Except for the limited right of replacement or refund set forth in paragraph 1.F.3, this work is provided to you ‘AS-IS’, WITH NO OTHER WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PURPOSE.

1.F.5. Some states do not allow disclaimers of certain implied warranties or the exclusion or limitation of certain types of damages. If any disclaimer or limitation set forth in this agreement violates the law of the state applicable to this agreement, the agreement shall be interpreted to make the maximum disclaimer or limitation permitted by the applicable state law. The invalidity or unenforceability of any provision of this agreement shall not void the remaining provisions.

1.F.6. INDEMNITY - You agree to indemnify and hold the Foundation, the trademark owner, any agent or employee of the Foundation, anyone providing copies of Project Gutenberg™ electronic works in accordance with this agreement, and any volunteers associated with the production, promotion and distribution of Project Gutenberg™ electronic works, harmless from all liability, costs and expenses, including legal fees, that arise directly or indirectly from any of the following which you do or cause to occur: (a) distribution of this or any Project Gutenberg work, (b) alteration, modification, or additions or deletions to any Project Gutenberg work, and (c) any Defect you cause.

Section 2. Information about the Mission of Project Gutenberg

Project Gutenberg is synonymous with the free distribution of electronic works in formats readable by the widest variety of computers including obsolete, old, middle-aged and new computers. It exists because of the efforts of hundreds of volunteers and donations from people in all walks of life.

Volunteers and financial support to provide volunteers with the assistance they need are critical to reaching Project Gutenberg’s goals and ensuring that the Project Gutenberg collection will remain freely available for

generations to come. In 2001, the Project Gutenberg Literary Archive Foundation was created to provide a secure and permanent future for Project Gutenberg and future generations. To learn more about the Project Gutenberg Literary Archive Foundation and how your efforts and donations can help, see Sections 3 and 4 and the Foundation information page at www.gutenberg.org.

Section 3. Information about the Project Gutenberg Literary Archive Foundation

The Project Gutenberg Literary Archive Foundation is a non-profit 501(c)(3) educational corporation organized under the laws of the state of Mississippi and granted tax exempt status by the Internal Revenue Service. The Foundation's EIN or federal tax identification number is 64-6221541. Contributions to the Project Gutenberg Literary Archive Foundation are tax deductible to the full extent permitted by U.S. federal laws and your state's laws.

The Foundation's business office is located at 41 Watchung Plaza #516, Montclair NJ 07042, USA, +1 (862) 621-9288. Email contact links and up to date contact information can be found at the Foundation's website and official page at www.gutenberg.org/contact

Section 4. Information about Donations to the Project Gutenberg Literary Archive Foundation

Project Gutenberg™ depends upon and cannot survive without widespread public support and donations to carry out its mission of increasing the number of public domain and licensed works that can be freely distributed in machine-readable form accessible by the widest array of equipment including outdated equipment. Many small donations ($1 to $5,000) are particularly important to maintaining tax exempt status with the IRS.

The Foundation is committed to complying with the laws regulating charities and charitable donations in all 50 states of the United States. Compliance requirements are not uniform and it takes a considerable effort, much paperwork and many fees to meet and keep up with these

requirements. We do not solicit donations in locations where we have not received written confirmation of compliance. To SEND DONATIONS or determine the status of compliance for any particular state visit www.gutenberg.org/donate.

While we cannot and do not solicit contributions from states where we have not met the solicitation requirements, we know of no prohibition against accepting unsolicited donations from donors in such states who approach us with offers to donate.

International donations are gratefully accepted, but we cannot make any statements concerning tax treatment of donations received from outside the United States. U.S. laws alone swamp our small staff.

Please check the Project Gutenberg web pages for current donation methods and addresses. Donations are accepted in a number of other ways including checks, online payments and credit card donations. To donate, please visit: www.gutenberg.org/donate.

Section 5. General Information About Project Gutenberg electronic works

Professor Michael S. Hart was the originator of the Project Gutenberg concept of a library of electronic works that could be freely shared with anyone. For forty years, he produced and distributed Project Gutenberg eBooks with only a loose network of volunteer support.

Project Gutenberg eBooks are often created from several printed editions, all of which are confirmed as not protected by copyright in the U.S. unless a copyright notice is included. Thus, we do not necessarily keep eBooks in compliance with any particular paper edition.

Most people start at our website which has the main PG search facility: www.gutenberg.org.

This website includes information about Project Gutenberg, including how to make donations to the Project Gutenberg Literary Archive Foundation,

how to help produce our new eBooks, and how to subscribe to our email newsletter to hear about new eBooks.