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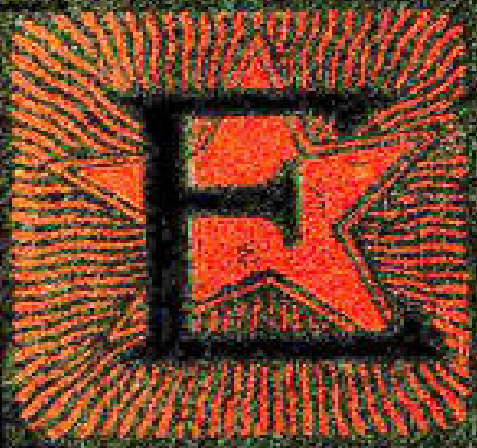

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BY
ROBERT HEBERT QUICK
M. A. TRIN. COLL., CAMBRIDGE
FORMERLY ASSISTANT MASTER AT HARROW, AND LECTURER ON
THE HISTORY OF EDUCATION AT CAMBRIDGE
LATE VICAR OF SEDBERGH

ONLY AUTHORIZED EDITION OF THE WORK
AS REWRITTEN IN 1890

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1896

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To

DR. HENRY BARNARD,

The first United States Commissioner of Education,

WHO IN A LONG LIFE OF

SELF-SACRIFICING LABOUR HAS GIVEN TO THE ENGLISH

LANGUAGE AN EDUCATIONAL LITERATURE,

THIS VOLUME IS DEDICATED,

WITH THE ESTEEM AND ADMIRATION OF

THE AUTHOR.

Οὐ γὰρ ἔστι περὶ ὅτου θειοτέρου ἄνθρωπος ἄν βουλεύσαιτο, ἢ περὶ παιδείας καὶ τῶν αὐτοῦ και τῶν οἰκείων. *Plato in initio Theagis* (p. 122 B).

Socrates saith plainlie, that "no man goeth about a more godlie purpose, than he that is mindfull of the good bringing up both of hys owne and other men's children."—*Ascham's Scholemaster. Preface.*

Fundamentum totius reipublicæ est recta juventutis educatio.

The very foundation of the whole commonwealth is the proper bringing up of the young.—*Cic.*

EDITOR'S PREFACE.

Many years ago I proposed to my friend Mr. Quick to rewrite his Educational Reformers, making some additions (Sturm and Froebel, for example), and allow me to place it in this series of educational works. I had read his essays when they first appeared, and noted their great value as a contribution to the right kind of educational literature. They showed admirable tact in the selection of the materials; the "epoch-making" writers were chosen and the things that had been said and done of permanent value were brought forward. Better than all was the running commentary on these materials by Mr. Quick himself. His style was popular, taking the reader, as it were, into confidential relations with him from the start, and offering now and then a word of criticism in the most judicial spirit, leaning neither to the extreme of destructive radicalism, which seeks revolution rather than reform, nor, on the other hand, to the extreme of blind conservatism, which wishes to preserve the vesture of the past rather than its wisdom.

I have called this book of Mr. Quick the most valuable history of education in our mother-tongue, fit only to be compared with Karl von Raumer's Geschichte der Pädagogik for its presentation of essentials and for the sanity of its verdicts.

I made my proposal that he "rewrite" his book because I knew that he considered his first edition hastily written and, in many respects, not adequate to the ideal he had conceived of the book. I knew, moreover, that years of continued thinking on a theme necessarily modifies one's views. He would wish to make some changes in matter presented, some in judgments rendered, and many more in style of presentation.

Hence it has come about that after this lapse of time Mr. Quick has produced a substantially new book, which, retaining all or nearly all of the admirable features of the first edition, has brought up to their standard of excellence many others.

The history of education is a vast field, and we are accustomed to demand bulky treatises as the only adequate ones. But the obvious disadvantage of such works has led to the clearly defined ideal of a book

like Mr. Quick's, which separates the gold from the dross, and offers it small in bulk but precious in value.

The educational reformers are the men above all others who stimulate us to think about education. Every one of these was an extremist, and erred in his judgment as to the value of the methods which prevailed in his time, and also overestimated the effects of the new education that he proposed in the place of the old. But thought begins with negations, and originality shows itself first not in creating something new, but in removing the fettering limitations of its existing environment. The old is attacked—its good and its bad are condemned alike. It has been imposed on us by authority, and we have not been allowed to summon it before the bar of our reason and ask of it its credentials. It informs us that it presented these credentials ages ago to our ancestors—men older and wiser than we are. Such imposition of authority leaves us no choice but to revolt. We, too, have a right to think as well as our ancestors; we, too, must clear up the ground of our belief and substitute insight for blind faith in tradition.

These educational reformers are prophets of the clearing-up period (*Aufklärung*) of revolution against mere authority.

While we are inspired to think for ourselves, however, we must not neglect that more important matter of thinking the truth. Free-thinking, if it does not reach the truth, is not of great value. It sets itself as puny individual against the might of the race, which preserves its experience in the forms of institutions—the family, the social organism, the state, the Church.

Hence our wiser and more scientific method studies everything that is, or exists, in its history, and endeavors to discover how it came to be what it is. It inquires into its evolution. The essential truth is not the present fact, but the entire process by which the present fact grew to be what it is. For the living force that made the present fact made also the past facts antecedent to the present, and it will go on making subsequent facts. The revelation of the living forces which make the facts of existence is the object of science. It takes all these facts to reveal the living force that is acting and producing them.

Hence the scientific attitude is superior to the attitude of these educational reformers, and we shall in our own minds weigh these men in

our scales, asking first of all: What is their view of the world? How much do they value human institutions? How much do they know of the substantial good that is wrought by those institutions? If they know nothing of these things, if they see only incumbrance in these institutions, if to them the individual is the measure of all things, we can not do reverence to their proposed remedies, but must account their value to us chiefly this, that they have stimulated us to thinking, and helped us to discover what they have not discovered—namely, the positive value of institutions.

All education deals with the boundary between ignorance and knowledge and between bad habits and good ones. The pupil as pupil brings with him the ignorance and the bad habits, and is engaged in acquiring good habits and correct knowledge.

This situation gives us a general recipe for a frequently recurring type of educational reformer. Any would-be reformer may take his stand on the boundary mentioned, and, casting an angry look at the realm of ignorance and bad habit not yet conquered, condemn in wholesale terms the system of education that has not been efficient in removing this mental and moral darkness.

Such a reformer selects an examination paper written by a pupil whose ignorance is not yet vanquished, and parades the same as a product of the work of the school, taking great pains to avoid an accurate and just admeasurement of the actual work done by the school. The reformer critic assumes that there is one factor here, whereas there are three factors—namely, (*a*) the pupil's native and acquired powers of learning, (*b*) his actual knowledge acquired, and (*c*) the instruction given by the school. The school is not responsible for the first and second of these factors, but it is responsible only for what increment has grown under its tutelage. How much and what has the pupil increased his knowledge, and how much his power of acquiring knowledge and of doing?

The educational reformer is always telling us to leave words and take up things. He dissuades from the study of language, and also undervalues the knowledge of manners and customs and laws and usages. He dislikes the study of institutions even. He "loves Nature," as he informs us. Herbert Spencer wants us to study the body, and to be more interested in biology than in formal logic; more interested in natural history than in literature. But

I think he would be indignant if one were to ask him whether he thought the study of the habits and social instincts of bees and ants is less important than the study of insect anatomy and physiology. Anatomy and physiology are, of course, important, but the social organism is more important than the physiological organism, even in bees and ants.

So in man the social organism is transcendent as compared with human physiology, and social hygiene compared with physiological hygiene is supreme.

To suppose that the habits of plants and insects are facts, and that the structure of human languages, the logical structure of the mind itself as revealed in the figures and modes of the syllogism and the manners and customs of social life, the deep ethical principles which govern peoples as revealed in works of literature—to suppose that these and the like of these are not real facts and worthy of study is one of the strangest delusions that has ever prevailed.

But it is a worse delusion to suppose that the study of Nature is more practical than the study of man, though this is often enough claimed by the educational reformers.

The knowledge of most worth is first and foremost the knowledge of how to behave—a knowledge of social customs and usages. Any person totally ignorant in this regard would not escape imprisonment—perhaps I should say decapitation—for one day in any city of the world—say in London, in Pekin, in Timbuctoo, or in a *pueblo* of Arizona. A knowledge of human customs and usages, next a knowledge of human views of Nature and man—these are of primordial necessity to an individual, and are means of direct self-preservation.

The old trivium or threefold course of study at the university taught grammar, logic, and rhetoric—namely, (1) the structure of language, (2) the structure of mind and the art of reasoning, (3) the principles and art of persuasion. These may be seen at once to be lofty subjects and worthy objects of science. They will always remain such, but they are not easy for the child. In the course of mastering them he must learn to master himself and gain great intellectual stature. Pedagogy has wisely graded the road to these heights, and placed much easier studies at the beginning and also made the studies more various. Improvements in methods and in grading—

devices for interesting the pupil—so essential to his self-activity, for these we have to thank the Educational Reformers.

W. T. Harris.

Washington, D. C., 1890.

PREFACE TO EDITION OF 1868.

"*It is clear that in whatever it is our duty to act, those matters also it is our duty to study.*" These words of Dr. Arnold's seem to me incontrovertible. So a sense of duty, as well as fondness for the subject, has led me to devote a period of leisure to the study of *Education*, in the practice of which I have been for some years engaged.

There are countries where it would be considered a truism that a teacher in order to exercise his profession intelligently should know something about the chief authorities in it. Here, however, I suppose such an assertion will seem paradoxical; but there is a good deal to be said in defence of it. De Quincey has pointed out that a man who takes up any pursuit without knowing what advances others have made in it works at a great disadvantage. He does not apply his strength in the right direction, he troubles himself about small matters and neglects great, he falls into errors that have long since been exploded. An educator is, I think, liable to these dangers if he brings to his task no knowledge but that which he learnt for the tripos, and no skill but that which he acquired in the cricket ground or on the river. If his pupils are placed entirely in his hands, his work is one of great difficulty, with heavy penalties attached to all blundering in it; though here, as in the case of the ignorant doctor and the careless architect, the penalties, unfortunately, are paid by his victims. If (as more commonly happens) he has simply to give a class prescribed instruction, his smaller scope of action limits proportionally the mischief that may ensue; but even then it is obviously desirable that his teaching should be as good as possible, and he is not likely to employ the best methods if he invents as he goes along, or simply falls back on his remembrance of how he was taught himself, perhaps in very different circumstances. I venture to think, therefore, that practical men in education, as in most other things, may derive benefit from the knowledge of what has already been said and done by the leading men engaged in it, both past and present.

All study of this kind, however, is very much impeded by want of books. "Good books are in German," says Professor Seeley. I have found that on

the history of Education, not only *good* books but *all* books are in German or some other foreign language.[1] I have, therefore, thought it worth while to publish a few such imperfect sketches as these, with which the reader can hardly be less satisfied than the author. They may, however, prove useful till they give place to a better book.

Several of the following essays are nothing more than compilations. Indeed, a hostile critic might assert that I had used the scissors with the energy of Mr. Timbs and without his discretion. The reader, however, will probably agree with me that I have done wisely in putting before him the opinions of great writers in their own language. Where I am simply acting as reporter, the author's own way of expressing himself is obviously the best; and if, following the example of the gipsies and Sir Fretful Plagiary, I had disfigured other people's offspring to make them pass for my own, success would have been fatal to the purpose I have steadily kept in view. The sources of original ideas in any subject, as the student is well aware, are few, but for irrigation we require troughs as well as water-springs, and these essays are intended to serve in the humbler capacity.

A word about the incomplete handling of my subjects. I have not attempted to treat any subject completely, or even with anything like completeness. In giving a sketch of the opinions of an author one of two methods must be adopted; we may give an epitome of all that he has said, or by confining ourselves to his more valuable and characteristic opinions, may gain space to give these fully. As I detest epitomes, I have adopted the latter method exclusively, but I may sometimes have failed in selecting an author's most characteristic principles; and probably no two readers of a book would entirely agree as to what was most valuable in it: so my account must remain, after all, but a poor substitute for the author himself.

For the part of a critic I have at least one qualification—practical acquaintance with the subject. As boy or master, I have been connected with no less than eleven schools, and my perception of the blunders of other teachers is derived mainly from the remembrance of my own. Some of my mistakes have been brought home to me by reading works on education, even those with which I do not in the main agree. Perhaps there are teachers who on looking through the following pages may meet with a similar experience.

Had the essays been written in the order in which they stand, a good deal of repetition might have been avoided, but this repetition has at least the advantage of bringing out points which seem to me important; and as no one will read the book as carefully as I have done, I hope no one will be so much alive to this and other blemishes in it.

I much regret that in a work which is nothing if it is not practically useful, I have so often neglected to mark the exact place from which quotations are taken. I have myself paid the penalty of this carelessness in the trouble it has cost me to verify passages which seemed inaccurate.

The authority I have had recourse to most frequently is Raumer (*Geschichte der Pädagogik*). In his first two volumes he gives an account of the chief men connected with education, from Dante to Pestalozzi. The third volume contains essays on various parts of education, and the fourth is devoted to German Universities. There is an English translation, published in America, of the fourth volume only. I confess to a great partiality for Raumer—a partiality which is not shared by a Saturday Reviewer and by other competent authorities in this country. But surely a German author who is not profound, and is almost perspicuous, has some claim on the gratitude of English readers, if he gives information which we cannot get in our own language. To Raumer I am indebted for all that I have written about Ratke, and almost all about Basedow. Elsewhere his history has been used, though not to the same extent.

C. A. Schmid's *Encyclopädie des Erziehungs-und-Unterrichtswesens* is a vast mine of information on everything connected with education. The work is still in progress. The part containing *Rousseau* has only just reached me. I should have been glad of it when I was giving an account of the Emile, as Raumer was of little use to me.

Those for whom Schmid is too diffuse and expensive will find Carl Gottlob Hergang's *Pädagogische Realencyclopädie* useful. This is in two thick volumes, and costs, to the best of my memory, about eighteen shillings. It was finished in 1847.

The best sketch I have met with of the general history of education is in the article on *Pädagogik* in *Meyers Conversations-Lexicon*.[2] I wish someone would translate this article; and I should be glad to draw the

attention of the editor of an educational periodical, say the *Museum* or the *Quarterly Journal of Education*, to it.

I have come upon references to many other works on the history of Education, but of these the only ones I have seen are Theodore Fritz's *Esquisse d'un Système complet d'instruction et d'éducation et de leur histoire* (3 vols., Strasburg, 1843), and Carl Schmidt's *Geschichte der Pädagogik* (4 vols.). The first of these gives only the outline of the subject. The second is, I believe, considered a standard work. It does not seem to me so readable as Raumer's history, but it is much more complete, and comes down to quite recent times.

For my account of the Jesuit schools and of Pestalozzi, the authorities will be found elsewhere (pp. 34 and 383). In writing about Comenius I have had much assistance from a life of him prefixed to an English translation of his *School of Infancy*, by Daniel Benham (London, 1858). For almost all the information given about Jacotot, I am indebted to Mr. Payne's papers, which I should not have ventured to extract from so freely if they had been before the public in a more permanent form.

I am sorry I cannot refer to any English works on the history of Education, except the essays of Mr. Parker and Mr. Furnivall, and *Christian Schools and Scholars*, which are mentioned above, but we have a very good treatise on the principles of education in Marcel's *Language as a Means of Mental Culture* (2 vols., London, 1853). Edgeworth's *Practical Education* seems falling into undeserved neglect, and Mr. Spencer's recent work is not universally known even by schoolmasters.

If the following pages attract but few readers, it will be some consolation, though rather a melancholy one, that I share the fate of my betters.

R. H. Q.

Ingatestone, Essex, *May, 1868*.

PREFACE TO EDITION OF 1890.

When I was a young man (*i.e.*, nearly forty years ago), I once did what those who know the ground would declare a very risky, indeed, a fool-hardy thing. I was at the highest point of the Gemmi Pass in Switzerland, above the Rhone Valley; and being in a hurry to get down and overtake my party I ran from the top to the bottom. The path in those days was not so good as it is now, and it is so near the precipice that a few years afterwards a lady in descending lost her head and fell over. No doubt I was in great danger of a drop of a thousand feet or so. But of this I was totally unconscious. I was in a thick mist, and saw the path for a few yards in front of me *and nothing more*. When I think of the way in which this book was written three and twenty years ago I can compare it to nothing but my first descent of the Gemmi. I did a very risky thing without knowing it. My path came into view little by little as I went on. All else was hid from me by a thick mist of ignorance. When I began the book I knew next to nothing of the Reformers, but I studied hard and wrote hard, and I turned out the essays within the year. This feat I now regard with amazement, almost with horror. Since that time I have given more years of work to the subject than I had then given months, and the consequence is I find I can write fast no longer. The mist has in a measure cleared off, and I cannot jog along in comfort as I did when I saw less. At the same time I have no reason to repent of the adventure. Being fortunate in my plan and thoroughly interested by my subject, I succeeded beyond my wildest expectations in getting others to take an interest in it also. The small English edition of 500 copies was, as soon as I reduced the price, sold off immediately, and the book has been, in England, for twenty years "out of print." But no less than three publishing firms in the United States have reprinted it (one quite recently) without my consent, and, except in the edition of Messrs. R. Clarke & Co., Cincinnati, with omissions and additions made without my knowledge. It seems then that the book will live for some years yet, whether I like it or not; and while it lives I wish it to be in a form somewhat less defective than at its first appearance. I have therefore in a great measure re-written it, beside filling in a gap here and there with an additional essay. Perhaps some critics will

call it a new book with an old title. If they do, they will I trust allow that the new book has at least two merits which went far to secure the success of the old, 1st, a good title, and 2nd, a good plan. My plan in both editions has been to select a few people who seemed specially worth knowing about, and to tell concerning them in some detail just that which seemed to me specially worth knowing. So I have given what I thought very valuable or very interesting, and everything I thought not particularly valuable or interesting I have ruthlessly omitted. I have not attempted a *complete* account of anybody or anything; and as for what the examiner may "set," I have not once given his questions a thought.

As the book is likely to have more readers in the country of its adoption than in the country of its birth, I have persuaded my friend Dr. William T. Harris, the United States Commissioner of Education, to put it into "The International Education Series" which he edits. So the only authorized editions of the book are the English edition, and the American edition published by Messrs. D. Appleton & Co.

R. H. Q.

Earlswood Cottage, Redhill, Surrey, England, *28th July, 1890*.

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I

EFFECTS OF THE RENASCENCE.

§ 1. The history of education, much as it has been hitherto neglected, especially in England, must have a great future before it. If we ignore the Past we cannot understand the Present, or forecast the Future. In this book I am going to speak of Reformers or Innovators who aimed at changing what was handed down to them; but the Radical can no more escape from the Past, than the Conservative can stereotype it. It acts not by attraction only, but no less by repulsion. There have been thinkers in latter times who have announced themselves as the executioners of the Past and laboured to destroy all it has bequeathed to us. They have raised the ferocious cry, "*Vive la destruction! Vive la mort! Place à l'avenir!* Hurrah for destruction! Hurrah for death! Make room for the world that is to be!" But their very hatred of the Past has brought them under the influence of it. "Do just the opposite of what has been done and you will do right," said Rousseau; and this rule of negation would make the Past regulate the Present and the Future no less than its opposite, "Do always what is usual."

If we cannot get free from the Past in the domain of thought, still less can we in action. Custom is to all our activities what the mainspring is to the watch. We may bring forces into play to make the watch go faster or slower, but if we took out the mainspring it would not go at all. For *our* mainspring we are indebted to the Past.

§ 2. In studying the Past we must give our special attention to those periods in which the course of ideas takes, as the French say, a new bend.[3] Such a period was the Renascence. Then it was that the latest bend was given to the educational ideal of the civilized world; and though we seem now again to have arrived at a period of change, we are still, perhaps far more than we are aware, affected by the ideas of the great scholars who guided the intellect of Europe in the Revival of Learning.

§ 3. From the beginning to the end of the fifteenth century the balance was trembling between two kinds of culture, and the fate of the schoolboy

depended on the result. In this century men first got a correct conception of the globe they were inhabiting. Hitherto they had not even professed to have any knowledge of geography; there is no mention of it in the Trivium and Quadrivium which were then supposed to form the cycle of things known, if not of things knowable. But Columbus and Vasco da Gama were grand teachers of geography, and their lessons were learnt as far as civilization extended.

The impetus thus given to the study of the earth might, at the beginning of the sixteenth century, have engrossed the mind of Europe with the material world, had not the leaning to physical science been encountered and overcome by an impulse derived from another discovery. About the time of the discovery of America there also came to light the literatures of Greece and Rome.

§ 4. When I speak of the discovery of the ancient literatures as rivalling that of America, this use of the word "discovery" may be disputed. It may be urged that though the Greek language and literature were unknown in the West of Europe till they were brought there by the fugitives after the fall of Constantinople in 1453, yet the works of the great Latin writers had always been known in Italy, and Dante declares himself the disciple of Virgil. And yet I cannot give up the word "discovery." In the life of an individual it sometimes happens that he suddenly acquires as it were a new sense. The world around him remains the same as before, but it is not the same to him. A film passes from his eyes, and what has been ordinary and unmeaning suddenly becomes a source of wonder and delight to him. Something similar happens at times in the history of the general mind; indeed our own century has seen a remarkable instance of it. In reading the thoughts of great writers of earlier times, we cannot but be struck, not only with their ignorance of the material world, but also with their ignorance of their ignorance. Little as they know, they often speak as if they knew everything. Newton could see that he was like a child discovering a few shells while the unexplored ocean lay before him; but in those days it required the intellect of a Newton to understand this. To the other children the ocean seemed to conceal nothing, and they innocently thought that all the shells, or nearly all, had been picked up. It was reserved for the people of our own century to become aware of the marvels which lie around us in the material world, and to be fascinated by the discovery. If the human race could live through

several civilizations without opening its eyes to the wonders of the earth it inhabits, and then could suddenly become aware of them, we may well understand its retaining unheeded the literatures of Greece and Rome for centuries, and at length as it were discovering them, and turning to them with unbounded enthusiasm and delight.

As students of education we can hardly attach too much importance to this great revolution. For nearly three centuries the curriculum in the public schools of Europe remained what the Renascence had made it. We have again entered on an age of change, but we are still much influenced by the ideas of the Renascence, and the best way to understand the forces now at work is to trace them where possible to their origin. Let us then consider what the Renascence was, and how it affected the educational system.

§ 5. In endeavouring to understand the Renascence, we cannot do better than listen to what Mark Pattison says of it in his "Life of Casaubon":—"In the fifteenth century was revealed to a world which had hitherto been trained to logical analysis, the beauty of literary form. The conception of style or finished expression had died out with the pagan schools of rhetoric. It was not the despotic act of Justinian in closing the schools of Athens which had suppressed it. The sense of art in language decayed from the same general causes which had been fatal to all artistic perception. Banished from the Roman Empire in the sixth century or earlier, the classical conception of beauty of form re-entered the circle of ideas after near a thousand years of oblivion and abeyance. Cicero and Virgil, Livius and Ovid, had been there all along, but the idea of composite harmony on which their works were constructed was wanting. The restored conception, as if to recoup itself for its long suppression, took entire possession of the mind of Europe. The first period of the Renascence passed in adoration of the awakened beauty, and in efforts to copy and multiply it."

§ 6. Here Mark Pattison speaks as if the conception of beauty of form belonged exclusively to the ancients and those who learnt of them. This seems to require some abatement. There are points in which mediæval art far excelled the art of the Renascence. The thirteenth century, as Archbishop Trench has said, was "rich in glorious creations of almost every kind;" and in that century our great English architect, Street, found the root of all that is best in modern art. (See "Dublin Afternoon Lectures," 1868.)

But there are expressions of beauty to which the Greeks, and those who caught their spirit, were keenly alive, and to which the people of the Middle Age seem to have been blind. The first is beauty in the human form; the second is beauty in literature.

The old delight in beauty in the human form has never come back to us. Mr. Ruskin tells us we are an ugly race, with ill-shapen limbs, and well pleased with our ugliness and deformity, and in reply we only mutter something about the necessity of clothing both for warmth and decency. But as to the other expression of beauty, beauty in literature, the mind of Europe again became conscious of it in the fifteenth and sixteenth centuries. The re-awakening of this sense of beauty we call the Renascence.

§ 7. Before we consider the effect of this intellectual revolution on education, let us be sure that we are not "paying ourselves with words," and that we know exactly what we mean by "literature."

When the conceptions of an individual mind are expressed in a permanent form of words, we get literature. The sum total of all the permanent forms of expression in one language make up the literature of that language; and if no one has given his conceptions a form which has been preserved, the language is without a literature. There are then two things essential to a literary work: first, the conceptions of an individual mind; second, a permanent form of expression. Hence it follows that the domain of literature is distinct from the domain of natural or mathematical science. Science does not give us the conceptions of an individual mind, but it tells us what every rational person who studies the subject must think. And science is entirely independent of any form of words: a proposition of Euclid is science; a sonnet of Wordsworth's is literature. We learn from Euclid certain truths which we should have learnt from some one else if Euclid had never existed, and the propositions may be conveyed equally well in different forms of words and in any language. But a sonnet of Wordsworth's conveys thought and feeling peculiar to the poet; and even if the same thought and feeling were conveyed to us in other words, we should lose at least half of what he has given us. Poetry is indeed only one kind of literature, but it is the highest kind; and what is true of literary works in verse, is true also in a measure of literary works in prose. So great is the difference between science and literature, that in literature, as the first

Lord Lytton said, the best books are generally the oldest; in science they are the newest.

§ 8. At present we are concerned with literature only. There are two ways in which a work of literature may excite our admiration and affect our minds. These are, first, by the beauty of the conceptions it conveys to us; and second, by the beauty of the language in which it conveys them. In the greatest works the two excellences will be combined.[4]

Now the literary taste proper fastens especially on the second of the two, *i.e.*, on beauty of expression; and the Renascence was the revival of literary taste. "It was," as Mark Pattison says, "the conception of style or finished expression which had died out with the pagan schools of rhetoric, and which re-entered the circle of ideas after a thousand years of oblivion and abeyance." If we lose sight of this, we shall be perplexed by the unbounded enthusiasm which we find in the sixteenth century for the old classics. What great evangel, we may ask, had Cicero and Virgil and Ovid, or even Plato and the Greek dramatists, for men who lived when Europe had experienced a thousand years of Christianity? The answer is simple. They had none whatever. Their thoughts and conceptions were not adapted to the wants of the new world. The civilization of the Christian nations of the sixteenth century was a very different thing from the civilization of Greece and Rome. It had its own thoughts, its own problems, its own wants. The old-world thoughts could not be thought over again by it. This indeed was felt though not admitted by the Renascence scholars themselves. Had it been the thoughts of the ancients which seemed to them so valuable they would have made some effort to diffuse those thoughts in the languages of the modern world. Much as a great literary work loses by translation, there may still be enough left of it to be a source of instruction and delight. The thoughts of Aristotle, conveyed in a Latin translation of an Arabic translation, profoundly affected the mind of Europe in the Middle Ages. The Bible, or Book *par excellence*, is known to few indeed in its original form. Some great writers—Cervantes, and Shakespeare, and the author of the "Arabian Nights"—please and instruct nations who know not the sound of the languages wherein their works are composed. If then the great writers of Greece and Rome had been valued for their matter, their works would have been translated by the Renascence scholars as the Bible was translated by the Reformers, and the history of modern education would have taken a

very different turn from that which awaited it. But it was not so. The Renascence scholars did all they could to discourage translations. For the grand discovery which we call the Revival of Learning was, not that the ancients had something to say, but that whatever they had to say they knew how to say it.

§ 9. And thus it happens that in the period of change, when Europe was re-arranging its institutions, developing new ideas and settling into new grooves of habit, we find the men most influential in education entirely fascinated by beauty of expression, and this in two ancient languages, so that the one thing needful for the young seemed to them an introduction to the study of ancient writings. The inevitable consequence was this: education became a mere synonym for instruction in Latin and Greek. The only ideal set up for the "educated" was the classical scholar.

§ 10. Perhaps the absurdity of taking this ideal, an ideal which is obviously fitted for a small class of men only, and proposing it for general adoption, was partly concealed from the Renascence scholars by the peculiar circumstances of their age. No doubt they thought literature would in the future be a force capable of much wider application than it had ever been before. True, literature had till then affected a small class only. Literature meant books, books meant MSS., and MSS. were rare and costly. Literature, the embodiment of grand thoughts in grand words, had existed before letters, or at least without letters. The Homeric poems, for example, had been known to thousands who could not read or write. But beauty of expression naturally got associated and indeed confounded with the art by which it was preserved; so the creations of the mind, when embodied in particular combinations of words, acquired the name of literature or letters, and became almost exclusively the affair of those who had opportunities of study, opportunities afforded only to the few. During the Middle Ages every one who could read was allowed his "privilege of clergy;" that is, he was assumed to be a clergyman. Literature then was not thought of as a means of instruction. But at the very time that the beauty of the ancient writings dawned on the mind of Europe, a mechanical invention seemed to remove all hindrances to the spread of literature. The scholars seized on the printing press and thought by means of it to give all "the educated" a knowledge of classics.

§ 11. We cannot help speculating what would have been the effect of the discovery of printing if it had been made at another time. As there may be literature without books, so there may be books without literature. If at the time of the invention of printing there had been no literature, no creations of individual minds embodied in permanent forms of speech, books might have been used as apparatus in a mental gymnasium, or they might have been made the means of conveying information. But just then the intellect of Europe was tired of mental gymnastics. It had taken exercise in the Trivium like a squirrel in its revolving cage, and was vexed to find it made no progress.[5] As for information there was little to be had. The age of observation and of physical science was not yet. So the printing press was entirely at the service of the new passion for literature and the scholars dreamed of the general diffusion of literary culture by means of printed books.

§ 12. For some two centuries the literary spirit had supreme control over the intellect of Europe, and the literary spirit could then find satisfaction nowhere but in the study of the ancient classics. The natural consequence was that throughout this period the "educated man" was supposed to be identified with the classical scholar. The great rival of the literary spirit, the scientific spirit which cares for nothing but sequences independent of the human mind, began to show itself early in the seventeenth century: its first great champion was Francis Bacon. But by this time the school course of study had been settled, and two centuries had to elapse before the scientific spirit could unsettle it again. Even now when we speak of a man as "well-educated" we are commonly understood to mean that in his youth he was taught the two classical languages.

§ 13. The taking of the classical scholar as the only ideal of the educated man has been a fruitful source of evil in the history of education.

I. This ideal exalted the learner above the doer. As far back as Xenophon, we find a contest between the passive ideal and the active, between the excellence which depends on a knowledge of what others have thought and done and the excellence which comes of thinking and doing. But the excellence derived from learning had never been highly esteemed. To be able to repeat Homer's poetry was regarded in Greece as we now regard a pleasing accomplishment; but the dignity of the learned man as such was not within the range of Greek ideas. Many of the Romans after they began

to study Greek literature certainly piqued themselves on being good Greek scholars, and Cicero occasionally quotes with all the airs of a pedant; but so thoroughly was the contrary ideal, the ideal of the *doer*, established at Rome, that nobody ever dreamt of placing its rival above it. In the decline of the Empire, especially at Alexandria, we find for the first time honours paid to the learned man; but he was soon lost sight of again. At the Renascence he burst into sudden blaze, and it was then discovered that he was what every man would wish to be. Thus the Renascence scholars, notwithstanding their admiration of the great nations of antiquity, set up an ideal which those nations would heartily have despised. The schoolmaster very readily adopted this ideal; and schools have been places of learning, not training, ever since.

§ 14. II. The next defect I observe in the Renascence ideal is this: it attributes to literature more direct power over common life than literature has ever had, or is ever likely to have.

I say *direct* power, for indirectly literature is one of the grand forces which act on all of us; but it acts on us through others, its most important function being to affect great intellects, the minds of those who think out and act out important changes. Its direct action on the mass of mankind is after all but insignificant. We have seen that literature consists in permanent forms of words, expressing the conceptions of individual minds; and these forms will be studied only by those who are interested in the conceptions or find pleasure in the mode in which they are expressed. Now the vast majority of ordinary people are without these inducements to literary study. They take a keen interest in everything connected with their relations and intimate friends, and a weaker interest in the thinkings and sayings and doings of every one else who is personally known to them; but as to the mental conceptions of those who lived in other times, or if now alive are not known even by sight, the ordinary person is profoundly indifferent to them; and of course delight in expression, as such, is out of the question. The natural consequence is that the habit of reading books is by no means common. Mark Pattison observes that there are few books to be found in most English middle-class homes, and he says: “The dearth of books is only the outward and visible sign of the mental torpor which reigns in those destitute regions” (see “Fortnightly Review,” November, 1877). I much doubt if he would have found more books in the middle-class homes of the

Continent. There is only one kind of reading that is nearly universal—the reading of newspapers; and the newspaper lacks the element of permanence, and belongs to the domain of talk rather than of literature.

Even when we get among the so-called "educated," we find that those who care for literature form a very small minority. The rest *have* of course read Shakespeare and Milton and Walter Scott and Tennyson, but *they do not read them*. The lion's share of our time and thoughts and interests must be given to our business or profession, whatever that may be; and in few instances is this connected with literature. For the rest, whatever time or thought a man can spare from his calling is mostly given to his family, or to society, or to some hobby which is not literature.

And love of literature is not shown in such reading as is common. The literary spirit shows itself, as I said, in appreciating beauty of expression, and how far beauty of expression is cared for we may estimate from the fact that few people think of reading anything a second time. The ordinary reader is profoundly indifferent about style, and will not take the trouble to understand ideas. He keeps to periodicals or light fiction, which enables the mind to loll in its easy chair (so to speak) and see pass before it a series of pleasing images. An idea, as Mark Pattison says, "is an excitant, comes from mind and calls forth mind; an image is a sedative;" and most people when they take up a book are seeking a sedative.

So literature is after all a very small force in the lives of most men, and perhaps even less in the lives of most women. Why then are the employments of the school-room arranged on the supposition that it is the grand force of all? The reason is, that we have inherited from the Renascence a false notion of the function of literature.

§ 15. III. I must now point out a fault in the Renascence ideal which is perhaps the most remarkable of all. Those by whom this ideal was set up were entirely possessed by an enthusiasm for literature, and they made the mistake of attributing to literature a share in general culture which literature seems incapable of taking. After this we could little have expected that the new ideal would exclude literature from the schoolroom, and yet so it has actually turned out.

As a literary creation contains the conceptions of an individual mind expressed in a permanent form of words, it exists only for those who can

understand the words or at least the conceptions.

From this it follows that literature for the young must have its expression in the vernacular. The instances are rare indeed in which any one below the age of fifteen or sixteen (perhaps I might put the limit a year or two higher) understands any but the mother tongue. In the mother tongue indeed some forms of literature exercise a great influence over young minds. Ballad literature seems especially to belong to youth, the youth of nations and of individuals. Aristotle educated Alexander with Homer; and we can easily imagine the effect which the *Iliad* must have had on the young Greeks. Although in the days of Plato instruction was not confined to literature, he gives this account of part of the training in the Athenian schools: "Placing the pupils on benches, the instructors make them read and learn by heart the poems of good poets in which are many moral lessons, many tales and eulogies and lays of the brave men of old; that the boys may imitate them with emulation and strive to become such themselves." Here we see a very important function attributed to literature in the bringing up of the young; but the literature so used must obviously be in the language of the learners.

The influence of a literary work may, however, extend itself far beyond the limits of its own language. When our minds can receive and take pleasure in the conceptions of a great writer, he may speak to us by an interpreter. At the Renascence there were books in the world which might have affected the minds of the young—Plutarch, Herodotus, and above all Homer. But, as I have already said, it was not the conceptions, but the literary form of the ancients, which seemed to the Renascence scholars of such inestimable value, so they refused to give the conceptions in any but the original words. "Studying the ancients in translations," says Melancthon, "is merely looking at the shadow." He could not have made a greater mistake. As far as the young are concerned the truth is exactly the reverse. The translation would give the substance: the original can give nothing but the shadow. Let us take the experience of Mr. Kinglake, the author of "Eothen." This distinguished Eton man, fired by his remembrances of Homer, visited the Troad. He had, as he tells us, "clasped the *Iliad* line by line to his brain with reverence as well as love." Well done, Eton! we are tempted to exclaim when we read this passage: here at least is proof that some *literature* was taught in those days of the dominion of the classics. But stop! It seems that this clasping did not take place at Eton, but

in happy days before Eton, when Kinglake knew no Greek and read translations. “Heroic days are these,” he writes, “but the Dark Ages of schoolboy life come closing over them. I suppose it’s all right in the end: yet, by Jove! at first sight it does seem a sad intellectual fall.... The dismal change is ordained and thin meagre Latin (the same for everybody) with small shreds and patches of Greek, is thrown like a pauper’s pall over all your early lore; instead of sweet knowledge, vile monkish doggrel, grammars and graduses, dictionaries and lexicons, horrible odds and ends of dead languages are given you for your portion, and down you fall from Roman story to a three-inch scrap of ‘Scriptores Romani’—from Greek poetry down, down, to the cold rations of ‘Poetæ Græci,’ cut up by commentators and served out by schoolmasters!” (“Eothen,” the Troad.)

We see from this how the Renascence ideal had the extraordinary effect of banishing literature from the school-room. Literature has indeed not ceased to influence the young; it still counts for much more in their lives than in the lives of their seniors; but we all know who are the writers who affected our own minds in childhood and youth, and who affect the minds of our pupils now—not Eutropius or Xenophon, or Cæsar or Cicero, but Defoe and Swift and Marryatt and Walter Scott. The ancient writings which were literature to Melancthon and Erasmus, as they are still to many in our universities and elsewhere, can never be literature to the young. Most of the classical authors read in the schoolroom could not be made literature to young people even by means of translations, for they were men who wrote for men and women only. We see that it would be absurd to make an ordinary boy of twelve or fourteen study Burke or Pope. And if we do not make him read Burke, whose language he understands, why do we make him read Cicero whose language he does not understand? If he cannot appreciate Pope, why do we teach him Horace? The Renascence gives us the explanation of this singular anomaly. The scholars of that age were so delighted with the “composite harmony” of the ancient classics that the study of these classics seemed to them the one thing worth living for. The main, if not the only object they kept in view in bringing up the young was to gain for them admission to the treasure house; and though young people could not understand the ancient writings as literature, they might at least study them as language and thus be ready to enjoy them as literature in after-life. Thus the subject of instruction in the schoolroom came to be, not the classics but, the classical languages. The classics were used as school

books, but the only meaning thought of was the meaning of the detached word or at best of the detached sentence. You ask a child learning to read if he understands what he is reading about, and he says, “I can’t think of the meaning because I am thinking of the words.” The same thing happened in the schoolboy’s study of the classics, and so it has come to pass that to this day the great writers of antiquity discharge a humble function which they certainly never contemplated.

> “Great Cæsar’s body dead and turned to clay
> May stop a hole to keep the wind away.”

And great Cæsar’s mind has been turned to uses almost as paltry. He has in fact written for the schoolroom not a commentary on the Wars of Gaul—nothing of the kind—but simply a book of exercises in Latin construing; and an excellent book it would be if he had only graduated the difficulties better.

§ 16. IV. There is yet another weakness about the Renascence ideal—a weakness from which most ideals are free.

Most ideals have this merit at least, that he who makes even a feeble and abortive attempt to reach them is benefited in proportion to his advance, however small that advance may be. If he fails to seize the coat of gold, he carries away, as the proverb tells us, at least one of the sleeves; or, to use George Herbert’s metaphor—

> “ ... Who aimeth at the sky,
> Shoots higher far than he who means a tree.”

But the learned ideal has not even this advantage. The first stage, the study of the ancient languages, is so totally different from the study of the ancient literatures to which it is the preliminary, that the student who never goes beyond this first stage either gets no benefit at all, or a benefit which is not of the kind intended. Suppose I am within a walk, though a long one, of the British Museum, and hearing of some valuable books in the library, which I can see nowhere else, I set off to consult them. In this case it makes no difference to me how valuable the books are if I do not get as far as the Museum.[6] My friends may comfort me with the assurance that the walk must have done me good. Perhaps so; but I left home to get a knowledge of certain books, not to exercise my legs. Had exercise been my object I should probably have chosen another direction.

Now schoolmasters, since the Renascence, have been in the habit of leading all their pupils through the back slums of the Seven Dials and Soho in the direction of the British Museum, with the avowed purpose of taking them to the library, although they knew full well that not one pupil in ten,

not one in fifty, would ever reach the door. To produce a few scholars able to appreciate the classics of Greece and Rome they have sacrificed everybody else; and according to their own showing they have condemned a large portion of the upper classes, nearly all the middle classes, and quite all the poorer classes to remain "uneducated." And, according to the theory of the schoolroom, one-half of the human race—the women—have not been supposed to need education. For them "accomplishments" have been held sufficient.

§ 17. V. In conclusion I must point out one effect of the Renascence ideal which seems to me no less mischievous than those I have already mentioned. This ideal led the schoolmasters to attach little importance to the education of *children*. Directly their pupils were old enough for Latin Grammar the schoolmasters were quite at home; but till then the children's time seemed to them of small value, and they neither knew nor cared to know how to employ it. If the little ones could learn by heart forms of words which would afterwards "come in useful," the schoolmasters were ready to assist such learning by unsparing application of the rod, but no other learning seemed worthy even of a caning. Absorbed in the world of books they overlooked the world of nature. Galileo complains that he could not induce them to look through his telescope, for they held that truth could be arrived at only by comparison of MSS. No wonder then that they had so little sympathy with children, and did not know how to teach them. It is by slow degrees that we are breaking away from the bad tradition then established, are getting to understand children, and with such leaders as Rousseau, Pestalozzi, and Froebel, are investigating the best education for them. We no longer think of them as immature men and women, but see that each stage has its own completeness, and that there is a perfection in childhood which must precede the perfection of manhood just as truly as the flower goes before the fruit. "Childhood," says Rousseau, "has its own ways of seeing, feeling, thinking;" and it is by studying these that we find out how children should be educated. Our connexion with the world of nature seems much closer in our early years than ever afterwards. The child's mind seems drawn out to its surroundings. He is intensely interested in the new world in which he finds himself, and whilst so many of us grown people need a flapper, like the sages of Laputa, to call our attention from our own thoughts to anything that meets the eye or ear, the child sees and hears everything, and everything seen or heard becomes associated in his

mind not so much with thought as with feeling. Hence it is that we most of us look back wistfully to our early days, and confess sorrowfully that though years may have brought “the philosophic mind,”

> “ ... Nothing can bring back the hour
> Of splendour in the grass, of glory in the flower.”

The material world then seems to supply just those objects, whether birds, beasts, or flowers, by which the child is attracted, and on which his faculties will therefore be most naturally and healthily employed. But the Renascence schoolmasters had little notion of this. If you think that the greatest scholar is the greatest man, you will, as a matter of course, place at the other end of the scale those who are not scholars at all. An English inspector, who seems to have thought children had been created with due regard to the Revised Code of the Privy Council, spoke of the infants who could not be classed by their performances in “the three R’s” as “the fag end of the school;” and no doubt the Renascence schoolmasters considered the children the fag end of humanity. The great scholars were indeed far above the race of pedants; but the schoolmasters who adopted their ideal were not. And what is a pedant? “A man who has got rid of his brains to make room for his learning.”[7] The pedantic schoolmasters of the Renascence wished the mind of the pupil to be cleared of everything else, that it might have room for the languages of Greece and Rome. But what if the mind failed to take in its destined freight? In that case the schoolmasters had nothing else for it, and were content that it should go empty.

II.

RENASCENCE TENDENCIES.

§ 1. In considering and comparing the two great epochs of intellectual activity and change in modern times, viz., the sixteenth century and the nineteenth, we cannot but be struck with one fundamental difference between them.

§ 2. It will affect all our thoughts, as Sir Henry Maine has said, whether we place the Golden Age in the Past or in the Future. In the nineteenth century the "good time" is supposed to be "coming," but in the sixteenth century all thinkers looked backwards. The great Italian scholars gazed with admiration and envy on the works of ancient Greece and Rome, and longed to restore the old languages, and as much as possible the old world, so that such works might be produced again. Many were suspected, not altogether perhaps without reason, of wishing to uproot Christianity itself,[8] that they might bring back the Golden Age of Pericles.

§ 3. At the same time another movement was going on, principally in Germany. Here too, men were endeavouring to throw off the immediate past in order to revive the remote past. The religious reformers, like the scholars, wished to restore a golden age, only a different age, not the age of the Antigone, but the age of the Apostles' Creed. Thus it happened that the scholars and the reformers joined in attaching the very highest importance to the ancient languages. Through these languages, and, as they thought, through them alone, was it possible to get a glimpse into the bygone world in which their soul delighted.

§ 4. But though all joined in extolling the ancient writings, we find at the Renascence great differences in the way of regarding these writings and in the objects for which they were employed. A consideration of these differences will help us to understand the course of education when the Renascence was a force no longer.

§ 5. Very powerful in education were the great scholars, of whom Erasmus was perhaps the greatest, certainly the most celebrated. In

devoting their lives to the study of the ancients their object was not merely to appreciate literary style, though this was a source of boundless delight to them, but also to *understand* the classical writings and the ancient world through them. These men, whom we may call *par excellence* the Scholars, cared indeed before all things for literature; but with all their delight in the form they never lost sight of the substance. They knew the truth that Milton afterwards expressed in these memorable words: "Though a linguist should pride himself to have all the tongues that Babel cleft the world into, yet if he have not studied the solid things in them as well as the words and lexicons, he were nothing so much to be esteemed a learned man as any yeoman or tradesman competently wise in his mother dialect only." (Tractate to Hartlib, § 4).

So Erasmus and the scholars would have all the educated *understand* the classical authors. But to understand words you must know the things to which the words refer. Thus the Scholars were led to advocate a partial study of things a kind of realism. But we must carefully observe a peculiarity of this scholastic realism which distinguished it from the realism of a later date—the realism of Bacon. The study of things was undertaken not for its own sake, but simply in order to understand books. Perhaps some of us are conscious that this kind of literary realism has not wholly passed away. We may have observed wild flowers, or the changes in tree or cloud, because we find that the best way to understand some favourite author, as Wordsworth or Tennyson. This will help us to understand the realism of the sixteenth century. The writings of great authors have been compared to the plaster globes ("celestial globes" as we call them), which assist us in understanding the configuration of the stars (*Guesses at Truth*, j. 47). Adopting this simile we may say that the Scholars loved to study the globe for its own sake, and when they looked at stars they did so with the object of understanding the globe. Thus we read of doctors who recommended their pupils to look at actual cases of disease as the best commentary on the works of Hippocrates and Galen. This kind of realism was good as far as it went, but it did not go far. Of course the end in view limited the study, and the Scholars took no interest in things except those which were mentioned in the classics. They had no desire to investigate the material universe and make discoveries for themselves. This is why Galileo could not induce them to look through his telescope; for the ancients had no telescopes, and the

Scholars wished to see nothing that had not been seen by their favourite authors. First then we have the Scholars, headed by Erasmus.

§ 6. Next we find a party less numerous and for a time less influential, who did care about things for the sake of the things themselves; but carried away by the literary current of their age, they sought to learn about them not directly, but only by reading. Here again we have a kind of realism which is not yet extinct. Some years ago I was assured by a Graduate of the University of London who had passed in chemistry, that, as far as he knew, he had never seen a chemical in his life: he had got all his knowledge from books. While such a thing is possible among us, we need not wonder if those who in the sixteenth century prized the knowledge of things, allowed books to come between the learner and the object of his study, if they regarded Nature as a far-off country of which we could know nothing but what great authors reported to us.

As this party, unlike the Scholars, did not delight in literature as such, but simply as a means of acquiring knowledge, literary form was not valued by them, and they preferred Euclid to Sophocles, Columella to Virgil. Seeking to learn about things, not immediately, but through words, they have received from Raumer a name they are likely to keep—Verbal Realists. In the sixteenth century the greatest of the Verbal Realists also gave a hint of Realism proper; for he was no less a man than Rabelais.

§ 7. Lastly we come to those who, as it turned out, were to have more influence in the schoolroom than the Scholars and the Verbal Realists combined. I do not know that these have had any name given them, but for distinction sake we may call them *Stylists*. In studying literature the Scholars cared both for form and substance, the Verbal Realists for substance only, and the Stylists for form only. The Stylists gave up their lives, not, like the scholars, to gain a thorough understanding of the ancient writings and of the old world, but to an attempted reproduction of the ancient languages and of the classical literary form.

§ 8. In marking these tendencies at the Renascence, we must remember that though distinguished by their tendencies, these Scholars, Verbal Realists, and Stylists, were not divided into clearly defined parties. Categories like these no doubt assist us in gaining precision of thought, but we must not gain precision at the expense of accuracy. The tendencies we

have been considering did not act in precisely opposite directions, and all were to some extent affected by them. But one tendency was predominant in one man and another in another; and this justifies us in calling Sturm a Stylist, Erasmus a Scholar, and Rabelais a Verbal Realist.

§ 9. In one respect they were all agreed. The world was to be regenerated by means of books. Nothing pleased them more than to think of their age as the Revival of Learning.

III.

STURMIUS.

1507-1589.

§ 1. The curriculum bequeathed by the Renascence and stereotyped in the School Codes of Germany, in the *Ratio* of the Jesuits, and in the English public school system, was greatly influenced by the most famous schoolmaster of the fifteen hundreds, John Sturm, who was for over forty years Rector of the Strassburg Gymnasium.

§ 2. Sturm was a fine specimen of the successful man: he knew what his contemporaries wanted, and that was just what he wanted. “He was a blessed fellow,” as Prince Hal says of Poins, “to think as every man thought,” and he not only “kept the roadway” himself, but he also “personally conducted” great bands of pupils over it, at one time “200 noblemen, 24 counts and barons, and 3 princes.” What could schoolmaster desire more?

§ 3. But I frankly own that Sturm is no favourite of mine, and that I think that he did much harm to education. However, his influence in the schoolroom was so great that I must not leave him unnoticed; and I give some information, taken mainly from Raumer’s account of him, which is translated in Henry Barnard’s “German Teachers and Educators.” I have also looked at the exhaustive article by Dr. Bossier in K. A. Schmid’s *Encyklopädie* (*sub v.*)

§ 4. John Sturm, born at Schleiden in the Eifel, not far from Cologne, in 1507, was one of 15 children, and would not have had much teaching had not his father been steward to a nobleman, with whose sons he was brought up. He always spoke with reverence and affection of his early teachers, and from them no doubt he acquired his thirst for learning. With the nobleman’s sons and under the guidance of a tutor he was sent to Liège, and there he attended a school of the “Brethren of the Life in Common,” *alias* Hieronymites. Many of the arrangements of this school he afterwards

reproduced in the Strassburg Gymnasium, and in this way the good Brethren gained an influence over classical education throughout the world.

§ 5. Between the age of 15 and 20 Sturm was at Lyons, and before the end of this period he was forced into teaching for a maintenance. He then, like many other learned men of the time, turned printer. We next find him at the University of Paris, where he thought of becoming a doctor of medicine, but was finally carried away from natural science by the Renascence devotion to literature, and he became a popular lecturer on the classics. From Paris he was called to Strassburg (then, as now, in Germany) in 1537. In 1538 he published his plan of a Gymnasium or Grammar School, with the title, "The right way of opening schools of literature (*De Literarum Ludis recte aperiendis*)," and some years afterwards (1565) he published his Letters (*Classicæ Epistolæ*) to the different form-masters in his school.

§ 6. The object of teaching is three-fold, says Sturm, "piety, knowledge, and the art of expression." The student should be distinguished by reasonable and neat speech (*ratione et oratione*). To attain this the boys in his school had to give seven years to the acquirement of a pure Latin style; then two years more were devoted to elegance; then five years of collegiate life were to be given to the art of Latin speech. This course is for ten years carefully mapped out by Sturm in his Letters to the masters. The foundation is to be laid in the tenth class, which the child enters at seven years old, and in which he learns to read, and is turned on to the declensions and conjugations. We have for all classes the exact "pensum," and also specimens of the questions put in examination by the *top boy of the next class above*, a hint which was not thrown away upon the Jesuits.

§ 7. Sturm cries over the superior advantages of the Roman children. "Cicero was but twenty when he delivered his speeches in behalf of Quintius and Roscius; but in these days where is there the man even of eighty, who could make such speeches? Yet there are books enough and intellect enough. What need we further? We need the Latin language and a correct method of teaching. Both these we must have before we can arrive at the summit of eloquence."

§ 8. Sturm did not, like Rabelais, put Greek on a level with Latin or above it. The reading of Greek words is begun in the sixth class. Hebrew, Sturm did not himself learn till he was nearly sixty.

§ 9. With a thousand boys in his school, and carrying on correspondence with the leading sovereigns of his age, Sturm was a model of the successful man. But in the end "the religious difficulty" was too much even for him, and he was dismissed from his post by his opponents "for old age and other causes." Surely the "other causes" need not have been mentioned. Sturm was then eighty years old.

§ 10. The successful man in every age is the man who chooses a popular and attainable object, and shows tremendous energy in pursuit of it. Most people don't know precisely what they want; and among the few who do, nine-tenths or more fail through lack of energy. But Sturm was quite clear in his aim, and having settled the means, he showed immense energy and strength of will in going through with them. He wanted to restore the language of Cicero and Ovid and to give his pupils great power of elegant expression in that language. Like all schoolmasters he professed that piety and knowledge (which in more modern phrase would be wisdom and knowledge) should come first, but like most schoolmasters he troubled himself mainly, if not exclusively, about the art of expression. As an abstract proposition the schoolmaster admits that to have in your head something worth saying is more important than to have the power of expression ready in case anything worth saying should "come along." But the schoolmaster's art always has taken, and I suppose, in the main, always will take for its material the means of expression; and by preference it chooses a tongue not vulgar or "understanded of the people." Thus the schoolmasters with Sturm at their head set themselves to teach *words*—foreign words, and allowed their pupils to study nothing else, not even the mother tongue. The satirist who wrote Hudibras has stated for us the result —

> "No sooner are the organs of the brain
> Quick to receive and stedfast to retain
> Best knowledges, but all's laid out upon
> Retrieving of the curse of Babylon.
> ...
> And he that is but able to express
> No sense in several languages
> Will pass for learneder than he that's known
> To speak the strongest reason in his own."[9]

§ 11. One of the scholars of the Renascence, Hieronymus Wolf, was wise enough to see that there might be no small merit in a boy's silence: "Nec minima pueri virtus est tacere cum recte loqui nesciat" (Quoted by Parker). But this virtue of silence was not encouraged by Sturm, and he determined that by the age of sixteen his pupils should have a fair command of expression in Latin and some knowledge of Greek.[10] Latin indeed was to supplant the mother tongue, and boys were to be severely punished for using their own language. By this we may judge of the pernicious effects of following Sturm. And it is a mistake to suppose that the unwisdom of tilting at the vernacular was not so much Sturm's, as of the age in which he lived. The typical English schoolmaster of the century, Mulcaster, was in this and many other ways greatly in advance of Sturm. To him it was plain that we should "care for that most which we ever use most, because we need it most."[11] The only need recognized by Sturm was need of the classical languages. Thus he and his admirers led the unlucky schoolboy straight into that "slough of Despond"—verbalism, in which he has struggled ever since;

> "Plunged for some sense, but found no bottom there,
> So learned and floundered on in mere despair."[12]

IV.

SCHOOLS OF THE JESUITS.

§ 1. Since the Revival of Learning, no body of men has played so prominent a part in education as the Jesuits. With characteristic sagacity and energy they soon seized on education as a stepping-stone to power and influence; and with their talent for organization, they framed a system of schools which drove all important competitors from the field, and made Jesuits the instructors of Catholic, and even, to some extent, of Protestant Europe. Their skill in this capacity is attested by the highest authorities, by Bacon[13] and by Descartes, the latter of whom had himself been their pupil; and it naturally met with its reward: for more than one hundred years nearly all the foremost men throughout Christendom, both among the clergy and laity, had received the Jesuit training, and in most cases retained for life an attachment to their old masters.

§ 2. About these Jesuit schools—once so celebrated and so powerful, and still existing in great numbers, though little remains of their original importance—there does not seem to be much information accessible to the English reader. I have, therefore, collected the following particulars about them; and refer any one who is dissatisfied with so meagre an account, to the works which I have consulted.[14] The Jesuit schools, as I said, still exist, but they did their great work in other centuries; and I therefore prefer to speak of them as things of the past.[15]

§ 3. When the Jesuits were first formally recognized by a Bull of Paul III in 1540, the Bull stated that the Order was formed, among other things, "especially for the purpose of instructing boys and ignorant persons in the Christian religion." But the Society well understood that secular was more in demand than religious learning; and they offered the more valued instruction, that they might have the opportunity of inculcating lessons which, to the Society at least, were the more valuable. From various Popes they obtained powers for founding schools and colleges, for giving degrees, and for lecturing publicly at universities. Their foundations rapidly extended in the Romance countries, except in France, where they were long

in overcoming the opposition of the Regular clergy and of the University of Paris. Over the Teutonic and Slavonic countries they spread their influence first by means of national colleges at Rome, where boys of the different nations were trained as missionaries. But, in time, the Jesuits pushed their camps forward, even into the heart of the enemy's country.

§ 4. The system of education to be adopted in all the Jesuit institutions was settled during the Generalship of Aquaviva. In 1584 that General appointed a School Commission, consisting of six distinguished Jesuits from the various countries of Europe. These spent nearly a year in Rome, in study and consultation; and the fruit of their labours was the ground-work of the *Ratio atque Institutio Studiorum Societatis Jesu*. This, however, did not take its final form till twelve other commissioners had been at work upon it. It was then (1599) revised and approved by Aquaviva and the Fifth and Sixth General Assemblies. By this code the Jesuit schools were governed till 1832, when the curriculum was enlarged so as to include physical science and modern languages.

§ 5. The Jesuits who formed the *Societas Professa*, *i.e.*, those who had taken all the vows, had spent from fifteen to eighteen years in preparation, viz., two years as novices and one as approved scholars, during which they were engaged chiefly in religious exercises, three years in the study of philosophy and mathematics, four years of theology, and, in the case of the more distinguished students, two years more in repetition and private theological study. At some point in this course, mostly after the philosophy, the students were sent, for a while, to teach the "lower studies" to boys.[16] The method of teaching was to be learnt in the training schools, called Juvenats,[17] one of which was founded in each province.

Few, even of the most distinguished students, received dispensation from giving elementary instruction. Salmeron and Bobadilla performed this duty in Naples, Lainez in Florence, Borgia (who had been Viceroy of Catalonia) in Cordova, Canisius in Cologne.

§ 6. During the time the Jesuit held his post as teacher he was to give himself up entirely to the work. His private studies were abandoned; his religious exercises shortened. He began generally with the boys in the lowest form, and that he might be able to study the character of his pupils he went up the school with them, advancing a step every year, as in the

system now common in Scotland. But some forms were always taught, as the highest is in Scotland, by the same master, who remained a teacher for life.

§ 7. Great care was to be taken that the frequent changes in the staff of masters did not lead to alteration in the conduct of the school. Each teacher was bound to carry on the established instruction by the established methods. All his personal peculiarities and opinions were to be as much as possible suppressed. To secure this a rigid system of supervision was adopted, and reports were furnished by each officer to his immediate superior. Over all stood the General of the Order. Next came the Provincial, appointed by the General. Over each college was the Rector, who was appointed (for three years) by the General, though he was responsible to the Provincial, and made his reports to him. Next came the Prefect of Studies, appointed, not by the Rector, but by the Provincial. The teachers were carefully watched both by the Rector and the Prefect of Studies, and it was the duty of the latter to visit each teacher in his class at least once a fortnight, to hear him teach. The other authorities, besides the masters of classes, were usually a House Prefect, and Monitors selected from the boys, one in each form.

§ 8. The school or college was to be built and maintained by gifts and bequests which the Society might receive for this purpose only. Their instruction was always given gratuitously. When sufficient funds were raised to support the officers, teachers, and at least twelve scholars, no effort was to be made to increase them; but if they fell short of this, donations were to be sought by begging from house to house. Want of money, however, was not a difficulty which the Jesuits often experienced.

§ 9. The Jesuit education included two courses of study, *studia superiora et inferiora*. In the smaller colleges only the *studia inferiora* were carried on; and it is to these *lower schools* that the following account mainly refers. The boys usually began this course at ten years old and ended it at sixteen. [18]

§ 10. The pupils in the Jesuit colleges were of two kinds: 1st, those who were training for the Order, and had passed the Novitiate; 2nd, the externs, who were pupils merely. When the building was not filled by the first of these (the Scholastici, or *Nostri*, as they are called in the Jesuit writings),

other pupils were taken in to board, who had to pay simply the cost of their living, and not even this unless they could well afford it. Instruction, as I said, was gratuitous to all. “Gratis receive, gratis give,” was the Society’s rule; so they would neither make any charge for instruction, nor accept any gift that was burdened with conditions.

§ 11. Faithful to the tradition of the Catholic Church, the Society did not estimate a man’s worth simply according to his birth and outward circumstances. The Constitutions expressly laid down that poverty and mean extraction were never to be any hindrance to a pupil’s admission; and Sacchini says: “Do not let any favouring of the higher classes interfere with the care of meaner pupils, since the birth of all is equal in Adam, and the inheritance in Christ.”[19]

§ 12. The externs who could not be received into the building were boarded in licensed houses, which were always liable to an unexpected visit from the Prefect of Studies.

§ 13. The “lower school” was arranged in five classes (since increased to eight), of which the lowest usually had two divisions. Parallel classes were formed wherever the number of pupils was too great for five masters. The names given to the several divisions were as follows:

1.	Infima	}	
2.	Media	}	Classis Grammaticæ.
3.	Suprema	}	
4.	Humanitas.		
5.	Rhetorica.		

Each was “absolved” in a year, except Rhetorica, which required two years (Stöckl, p. 237).

Jesuits and Protestants alike in the sixteenth and seventeenth centuries thought of little but literary instruction, and that too connected only with Latin and Greek. The subject-matter of the teaching in the Jesuit schools was to be “præter Grammaticam, quod ad Rhetoricam, Poësim et Historiam pertinet,” in addition to Grammar, whatever related to Rhetoric, Poetry, and History. Reading and writing the mother-tongue might not be taught without special leave from the Provincial. Latin was as much as possible to

supersede all other languages, even in speaking; and nothing else might be used by the pupils in the higher forms on any day but a holiday.[20] To gain a supply of Latin words for ordinary use, the pupils committed to memory Latin conversations on general topics, such as Francis Pomey's "Indiculus Universalis" and "Colloquia Scholastica."

§ 14. Although many good school-books were written by the Jesuits, a great part of their teaching was given orally. The master was, in fact, a lecturer, who expounded sometimes a piece of a Latin or Greek author, sometimes the rules of grammar. The pupils were required to get up the substance of these lectures, and to learn the grammar-rules and parts of the classical authors by heart. The master for his part had to bestow great pains on the preparation of his lectures.[21]

§ 15. Written exercises, translations, &c., were given in on every day, except Saturday; and the master had, if possible, to go over each one with its writer and his appointed rival or *æmulus*.

§ 16. The method of hearing the rules, &c., committed to memory was this:—Certain boys in each class, who were called Decurions, repeated their tasks to the master, and then in his presence heard the other boys repeat theirs. The master meanwhile corrected the written exercises.[22]

§ 17. One of the leading peculiarities in the Jesuits' system was the pains they took to foster emulation—"cotem ingenii puerilis, calcar industriæ—the whetstone of talent, the spur of industry." For this purpose all the boys in the lower part of the school were arranged in pairs, each pair being rivals (*æmuli*) to one another. Every boy was to be constantly on the watch to catch his rival tripping, and was immediately to correct him. Besides this individual rivalry, every class was divided into two hostile camps, called Rome and Carthage, which had frequent pitched battles of questions on set subjects. These were the "Concertations," in which the boys sometimes had to put questions to the opposite camp, sometimes to expose erroneous answers when the questions were asked by the master[23] (see Appendix: Class Matches, p. 529). Emulation, indeed, was encouraged to a point where, as it seems to me, it must have endangered the good feeling of the boys among themselves. Jouvency mentions a practice of appointing mock defenders of any particularly bad exercise, who should make the author of it ridiculous by their excuses; and any boy whose work was very

discreditable, was placed on a form by himself, with a daily punishment, until he could show that some one deserved to change places with him.

§ 18. In the higher classes a better kind of rivalry was cultivated by means of "Academies," *i.e.*, voluntary associations for study, which met together, under the superintendence of a master, to read themes, translations, &c., and to discuss passages from the classics. The new members were elected by the old, and to be thus elected was a much-coveted distinction. In these Academies the cleverer students got practice for the disputations, which formed an important part of the school work of the higher classes.

§ 19. There was a vast number of other expedients by which the Jesuits sought to work on their pupils' *amour propre*, such as, on the one hand, the weekly publication of offences *per præconem*, and, on the other, besides prizes (which could be won only by the externs), titles and badges of honour, and the like. "There are," says Jouvency, "hundreds of expedients of this sort, all tending to sharpen the boys' wits, to lighten the labour of the master, and to free him from the invidious and troublesome necessity of punishing."

§ 20. The school-hours were remarkably short: two hours and a half in the morning, and the same in the afternoon; with a whole holiday a week in summer, and a half holiday in winter. The time was spent in the first form after the following manner:—During the first half-hour the master corrected the exercises of the previous day, while the Decurions heard the lesson which had been learnt by heart. Then the master heard the piece of Latin which he had explained on the previous day. With this construing, was connected a great deal of parsing, conjugating, declining, &c. The teacher then explained the piece for the following day, which, in this form, was never to exceed four lines. The last half-hour of the morning was spent in explaining grammar. This was done very slowly and carefully: in the words of the *Ratio Studd.*: "Pluribus diebus fere singula præcepta inculcanda sunt"—"Generally take a single rule and drive it in, several days." For the first hour of the afternoon the master corrected exercises, and the boys learnt grammar. If there was time, the master put questions about the grammar he had explained in the morning. The second hour was taken up with more explanations of grammar, and the school closed with half an hour's concertation, or the master corrected the notes which the pupils had

taken during the day. In the other forms, the work was very similar to this, except that Greek was added, and also in the higher classes a little mathematics.

§ 21. It will be observed from the above account, that almost all the strength of the Jesuit teaching was thrown into the study of the Latin language, which was to be used, not only for reading, but also in writing and speaking. But under the name of "erudition" some amount of instruction in other subjects, especially in history and geography, was given in explaining, or rather lecturing on, the classical authors. Jouvency says that this lecture must consist of the following parts:—1st, the general meaning of the whole passage; 2nd, the explanation of each clause, both as to the meaning and construction; 3rd, any information, such as accounts of historical events, or of ancient manners and customs, which could be connected with the text; 4th, in the higher forms, applications of the rules of rhetoric and poetry; 5th, an examination of the Latinity; 6th, the inculcation of some moral lesson. This treatment of a subject he illustrates by examples. Among these is an account of a lesson for the first (*i.e.*, lowest) class in the Fable of the Fox and the Mask:—1st, comes the argument and the explanation of words; 2nd, the grammar and parsing, as *vulpes*, a substantive of the third declension, &c., like *proles*, *clades*, &c. (here the master is always to give among his examples some which the boys already know); 3rd, comes the *eruditio*—something about foxes, about tragedy, about the brain, and hence about other parts of the head; 4th, Latinity, the order of the words, choice of the words, synonyms, &c. Then the sentences may be parodied; other suitable substantives may be found for the adjectives and *vice versâ*; and every method is to be adopted of showing the boys how to *use* the words they have learnt. Lastly, comes the moral.

§ 22. The practical teacher will be tempted to ask, How is the attention of the class to be kept up whilst all this information is given? This the Jesuits did partly by punishing the inattentive. Every boy was subsequently required to reproduce what the teacher had said, and to show his written notes of it. But no doubt this matter of attention was found a difficulty. Jouvency tells the teachers to break off from time to time in their lectures, and to ask questions; and he adds: "Variæ sunt artes excitandæ attentionis quas docebit usus et sua cuique industria suggeret.—Very various are the devices for arousing attention. These will occur with practice and pains."

For private study, besides written exercises and learning by heart, the pupils were recommended subjects to get up in their own time; and in this, and also as to the length of some of the regular lessons, they were permitted to decide for themselves. Here, as everywhere, the Jesuits trusted to the sense of honour and emulation—those who did extra work were praised and rewarded.

§ 23. One of the maxims of this system was: "Repetitio mater studiorum." Every lesson was connected with two repetitions—one before it began, of preceding work, and the other at the close, of the work just done. Besides this, one day a week was devoted entirely to repetition. In the three lowest classes the desire of laying a solid foundation even led to the second six months in the year being given to again going over the work of the first six months.[24] By this means boys of extraordinary ability could pass through these forms in eighteen months, instead of three years.

§ 23. *Thoroughness* in work was the one thing insisted on. Sacchini says that much time should be spent in going over the more important things, which are "veluti multorum fontes et capita (as it were the sources and starting points of many others)"; and that the master should prefer to teach a few things perfectly, to giving indistinct impressions of many things.[25] We should remember, however, that the pupils of the Jesuits were not *children*. Subjects such as grammar cannot, by any expenditure of time and trouble, be perfectly taught to children, because children cannot perfectly understand them; so that the Jesuit thoroughness is not always attainable.

§ 24. The usual duration of the course in the lower schools was six years —*i.e.*, one year in each of the four lower classes, and two years in the highest class. Every year closed with a very formal examination. Before this examination took place, the pupils had lessons in the manner of it, so that they might come prepared, not only with a knowledge of the subjects, but also of the laws of writing for examination ("scribendi ad examen leges"). The examination was conducted by a commission appointed for the purpose, of which commission the Prefect of Studies was an *ex officio* member. The masters of the classes, though they were present, and could make remarks, were not of the examining body. For the *vivâ voce* the boys were ushered in, three at a time, before the solemn conclave. The results of the examination, both written and verbal, were joined with the records of the work done in the past year; and the names of those pupils who had

distinguished themselves were then published in order of merit, but the poll was arranged alphabetically, or according to birthplace.

§ 25. As might be expected, the Jesuits were to be very careful of the moral and religious training of their pupils. “Quam maxime in vitæ probitate ac bonis artibus doctrinaque proficiant ad Dei gloriam.” (*Ratio Studd.*, quoted by Schmid.) And Sacchini tells the master to remember how honourable his office is; as it has to do, not with grammar only, but also with the science and practice of a Christian and religious life: “atque eo quidem ordine ut ipsa ingenii eruditio sit expolitio morum, et humana literatura divinæ ancilletur sapientiæ.”[26]

Each lesson was to begin with prayer or the sign of the Cross. The pupils were to hear Mass every morning, and were to be urged to frequent confession and receiving of the Holy Communion. The Father Confessor was always a Jesuit, but he was not a master in the school.

§ 26. The bodily health also was to be carefully attended to. The pupils were not to study too much or too long at a time. Nothing was to be done for a space of from one or two hours after dinner. On holidays excursions were made to farms in the country.[27]

§ 27. Punishments were to be as light as possible, and the master was to shut his eyes to offences whenever he thought he might do so with safety. Grave offences were to be visited with corporal punishment, performed by a “corrector,” who was not a member of the Order. Where this chastisement did not have a good effect, the pupil was to be expelled.[28]

§ 28. The dry details into which I have been drawn by faithfully copying the manner of the *Ratio Studiorum* may seem to the reader to afford no answer to the question which naturally suggests itself—To what did the school-system of the Jesuits owe its enormous popularity? But in part, at least, these details do afford an answer. They show us that the Jesuits were intensely practical. The *Ratio Studiorum* hardly contains a single principle; but what it does is this—it points out a perfectly attainable goal, and carefully defines the road by which that goal is to be approached. For each class was prescribed not only the work to be done, but also the end to be kept in view. Thus method reigned throughout—perhaps not the best method, as the object to be attained was assuredly not the highest object—but the method, such as it was, was applied with undeviating exactness. In

this particular the Jesuit schools contrasted strongly with their rivals of old, as indeed with the ordinary school of the present day. The Head Master, who is to the modern English school what the General, Provincial, Rector, Prefect of Studies, and *Ratio Studiorum* combined were to a school of the Jesuits, has perhaps no standard in view up to which the boy should have been brought when his school course is completed.[29] The masters of forms teach just those portion of their subject in which they themselves are interested, in any way that occurs to them, with by no means uniform success; so that when two forms are examined with the same examination paper, it is no very uncommon occurrence for the lower to be found superior to the higher. It is, perhaps, to be expected that a course in which uniform method tends to a definite goal would on the whole be more successful than one in which a boy has to accustom himself by turns to half-a-dozen different methods, invented at haphazard by individual masters with different aims in view, if indeed they have any aim at all.

§ 29. I have said that the object which the Jesuits proposed in their teaching was not the highest object. They did not aim at developing *all* the faculties of their pupils, but mainly the receptive and reproductive faculties. When the young man had acquired a thorough mastery of the Latin language for all purposes, when he was well versed in the theological and philosophical opinions of his preceptors, when he was skilful in dispute, and could make a brilliant display from the resources of a well-stored memory, he had reached the highest point to which the Jesuits sought to lead him.[30] Originality and independence of mind, love of truth for its own sake, the power of reflecting, and of forming correct judgments were not merely neglected—they were suppressed in the Jesuits' system. But in what they attempted they were eminently successful, and their success went a long way towards securing their popularity.[31]

§ 30. Their popularity was due, moreover, to the means employed, as well as to the result attained. The Jesuit teachers were to *lead*, not drive their pupils, to make their learning, not merely endurable, but even acceptable, "disciplinam non modo tolerabilem, sed etiam amabilem." Sacchini expresses himself very forcibly on this subject. "It is," says he, "the unvarying decision of wise men, whether in ancient or modern times, that the instruction of youth will be always best when it is pleasantest: whence this application of the word *ludus*. The tenderness of youth requires

of us that we should not overstrain it, its innocence that we should abstain from harshness.... That which enters into willing ears the mind as it were runs to welcome, seizes with avidity, carefully stows away, and faithfully preserves."[32] The pupils were therefore to be encouraged in every way to take kindly to their learning. With this end in view (and no doubt other objects also), the masters were carefully to seek the boys' affections. "When pupils love the master," says Sacchini, "they will soon love his teaching. Let him, therefore, show an interest in everything that concerns them and not merely in their studies. Let him rejoice with those that rejoice, and not disdain to weep with those that weep. After the example of the Apostle let him become a little one amongst little ones, that he may make them adult in Christ, and Christ adult in them ... Let him unite the grave kindness and authority of a father with a mother's tenderness."[33]

§ 31. In order that learning might be pleasant to the pupils, it was necessary that they should not be overtasked. To avoid this, the master had to study the character and capacity of each boy in his class, and to keep a book with all particulars about him, and marks from one to six indicating proficiency. Thus the master formed an estimate of what should be required, and the amount varied considerably with the pupil, though the quality of the work was always to be good.

§ 32. Not only was the work not to be excessive, it was never to be of great difficulty. Even the grammar was to be made as easy and attractive as possible. "I think it a mistake" says Sacchini, "to introduce at an early stage the more thorny difficulties of grammar: ... for when the pupils have become familiar with the earlier parts, use will, by degrees, make the more difficult clear to them. His mind expanding and his judgment ripening as he grows older the pupil will often see for himself that which he could hardly be made to see by others. Moreover, in reading an author, examples of grammatical difficulties will be more easily observed in connection with the context, and will make more impression on the mind, than if they are taught in an abstract form by themselves. Let them then, be carefully explained whenever they occur."[34]

§ 33. Perhaps no body of men in Europe (the Thugs may, in this respect, rival them in Asia) have been so hated as the Jesuits. I once heard Frederick Denison Maurice say he thought Kingsley could find good in every one

except the Jesuits, and, he added, he thought *he* could find good even in them. But why should a devoted Christian find a difficulty in seeing good in the Jesuits, a body of men whose devotion to their idea of Christian duty has never been surpassed?[35] The difficulty arose from differences in ideal. Both held that the ideal Christian would do everything "to the greater glory of God," or as the Jesuits put it in their business-like fashion, "A.M.D.G.," (*i.e.*, *ad majorem Dei gloriam*). But Maurice and Kingsley thought of a divine idea for every man. The Jesuits' idea lost sight of the individual. Like their enemy, Carlyle, the Jesuits in effect worshipped strength, but Carlyle thought of the strength of the individual, the Jesuits of the strength of "the Catholic Church." "The Catholic Church" was to them the manifested kingdom of God. Everything therefore that gave power to the Church tended "A.M.D.G." The Company of Jesus was the regular army of the Church, so, arguing logically from their premises, they made the glory of God and the success of the Society convertible terms.

§ 34. Thus their conception was a purely military conception. A commander-in-chief, if he were an ardent patriot and a great general, would do all he could to make the army powerful. He would care much for the health, morals, and training of the soldiers, but always with direct reference to the army. He would attend to everything that made a man a better soldier; beyond this he would not concern himself. In his eyes the army would be everything, and a soldier nothing but a part of it, just as a link is only a part of a chain. Paulsen, speaking of the Jesuits, says truly that no great organization can exist without a root idea. The root idea of the army is the sacrifice and annihilation of the individual, that the body may be fused together and so gain a strength greater than that of any number of individuals. Formed on this idea the army acts all together and in obedience to a single will, and no mob can stand its charge. Ignatius Loyola and succeeding Generals took up this idea and formed an army for the Church, an army that became the wonder and the terror of all men. Never, as Compayré says, had a body been so sagaciously organized, or had wielded so great resources for good and for evil.[36] (*See* Buisson, ij, 1419.)

§ 35. To the English schoolmaster the Jesuits must always be interesting, if for no other reason at least for this—that they were so intensely practical. "*Les Jésuites ne sont pas des pédagogues assez desintéressés pour nous plaire.*—The Jesuits as schoolmasters," says M. Compayré, "are not

disinterested enough for us." (Buisson, sub v. *Jésuites*, ad f.). But disinterested pedagogy is not much to the mind of the Englishman. It does not seem to know quite what it would be after, and deals in generalities, such as "Education is not a means but an end;" and the end being somewhat indefinite, the means are still more wanting in precision. This vagueness is what the English master hates. He prefers not to trouble himself about the end. The wisdom of his ancestors has settled that, and he can direct his attention to what really interests him—the practical details. In this he resembles the Jesuits. The end has been settled for them by their founder. They revel in practical details, in which they are truly great, and here we may learn much from them. "*Ratio* applied to studies" says Father Eyre,[37] "more naturally means *Method* than *Principle*; and our *Ratio Studiorum* is essentially a Method or System of teaching and learning." Here is a method that has been worked uniformly and with singular success for three centuries, and can still give a good account of its old rivals. But will it hold its own against the late Reformers? As regards intellectual training the new school seeks to draw out the faculties of the young mind by employing them on subjects in which it is *interested*. The Jesuits fixed a course of study which, as they frankly recognized, could not be made interesting. So they endeavoured to secure accuracy by constant repetition, and relied for industry on two motive powers: 1st, the personal influence of the master; and, 2nd, "the spur of industry"—emulation.

§ 36. To acquire "influence" has ever been the main object of the Society, and his devotion to this object makes a great distinction between the Jesuit and most other instructors. His notion of the task was thus expressed by Father Gerard, S. J., at the Educational Conference of 1884: "Teaching is an art amongst arts. To be worthy of the name it must be the work of an individual upon individuals. The true teacher must understand, appreciate, and sympathize with those who are committed to him. He must be daily discovering what there is (and undoubtedly there is something in each of them) capable of fruitful development, and contriving how better to get at them and to evoke whatever possibilities there are in them for good." The Jesuit master, then, tried to gain influence over the boys and to use that influence for many purposes; to make them work well being one of these, but not perhaps the most important.

§ 37. As for emulation, no instructors have used it so elaborately as the Jesuits. In most English schools the prizes have no effect whatever except on the first three or four boys, and the marking is so arranged that those who take the lead in the first few lessons can keep their position without much effort. This clumsy system would not suit the Jesuits. They often for prize-giving divide a class into a number of small groups, the boys in each group being approximately equal, and a prize is offered for each group. The class matches, too, stimulate the weaker pupils even more than the strong.

§ 38. In conclusion, I will give the chief points of the system in the words of one of its advocates and admirers, who was himself educated at Stonyhurst:

"Let us now try to put together the various pieces of this school machinery and study the effect. We have seen that the boys have masters entirely at their disposition, not only at class time, but at recreation time after supper in the night Reading Rooms. Each day they record victory or defeat in the recurring exercises or themes upon various matters. By the quarterly papers or examinations in composition, for which nine hours are assigned, the order of merit is fixed, and this order entails many little privileges and precedencies, in chapel, refectory, class room, and elsewhere. Each master, if he prove a success and his health permit, continues to be the instructor of the boys in his class during the space of six years. 'It is obvious' says Sheil, in his account of Stonyhurst, 'that much of a boy's acquirements, and a good deal of the character of his taste, must have depended upon the individual to whose instructions he was thus almost exclusively confined.' And in many cases the effects must be a greater interest felt in the students by their teachers, a mutual attachment founded on long acquaintance, and a more thorough knowledge, on the part of the master, of the weak and strong points of his pupils. Add to the above, the 'rival' and 'side' system, the effect of challenges and class combats; of the wearing of decorations and medals by the Imperators on Sundays, Festival Days, Concertation Days, and Examination Days; of the extraordinary work —done much more as *private* than as *class* work—helping to give individuality to the boy's exertions, which might otherwise be merged in the routine work of the class; and the 'free time' given for improvement on wet evenings and after night prayers; add the Honours Matter; the Reports read before the Rector and all subordinate Superiors, the Professors, and whole

body of Students; add the competition in each class and between the various classes, and even between the various colleges in England of the Society; and only one conclusion can be arrived at. It is a system which everyone is free to admire or think inferior to some other preferred by him; but it *is* a system." (*Stonyhurst College, Present and Past*, by A. Hewitson, 2nd edition, 1878, pp. 214, ff.)

§ 39. Yes, it *is* a system, a system built up by the united efforts of many astute intellects and showing marvellous skill in selecting means to attain a clearly conceived end. There is then in the history of education little that should be more interesting or might be more instructive to the master of an English public school than the chapter about the Jesuits.[38]

V.

RABELAIS.

(1483-1553.)

§ 1. To great geniuses it is given to think themselves in a measure free from the ordinary notions of their time and often to anticipate the discoveries of a future age. In all literature there is perhaps hardly a more striking instance of this "detached" thinking than we find in Rabelais' account of the education of Gargantua.

§ 2. We see in Rabelais an enthusiasm for learning and a tendency to verbal realism; that is, he turned to the old writers for instruction about *things*. So far he was a child of the Renascence. But in other respects he advanced far beyond it.

§ 3. After a scornful account of the ordinary school books and methods by which Gargantua "though he studied hard, did nevertheless profit nothing, but only grew thereby foolish, simple, dolted, and blockish," Rabelais decides that "it were better for him to learn nothing at all than to be taught suchlike books under suchlike schoolmasters." All this old lumber must be swept away, and in two years a youth may acquire a better judgment, a better manner, and more command of language than could ever have been obtained by the old method.

We are then introduced to the model pupil. The end of education has been declared to be *sapiens et eloquens pietas*; and we find that though Rabelais might have substituted knowledge for piety, he did care for piety, and valued very highly both wisdom and eloquence. The eloquent Roman was the ideal of the Renascence, and Rabelais' model pupil expresses himself "with gestures so proper, pronunciation so distinct, a voice so eloquent, language so well turned *and in such good Latin* that he seemed rather a Gracchus, a Cicero, an Æmilius of the time past than a youth of the present age."

§ 4. So a Renascence tutor is appointed for Gargantua and administers to him a potion that makes him forget all he has ever learned. He then puts

him through a very different course. Like all wise instructors he first endeavours to secure the will of the pupil. He allows Gargantua to go the accustomed road till he can convince him it is the wrong one. This seems to me a remarkable proof of wisdom. How often does the "new master" break abruptly with the past, and raise the opposition of the pupil by dispraise of all he has already done! By degrees Ponocrates, the model tutor, inspired in his pupil a great desire for improvement. This he did by bringing him into the society of learned men, who filled him with ambition to be like them. Thereupon Gargantua "put himself into such a train of study that he lost not any hour in the day, but employed all his time in learning and honest knowledge." The day was to begin at 4 a.m., with reading of "some chapter of the Holy Scripture, and oftentimes he gave himself to revere, adore, pray, and send up his supplications to that good God, whose word did show His majesty and marvellous judgments." This is the only hint we get in this part of the book on the subject of religious or moral education: the training is directed to the intellect and the body.

§ 5. The remarkable feature in Rabelais' curriculum is this, that it is concerned mainly with *things*. Of the Seven Liberal Arts of the Middle Ages, the first three were purely formal: grammar, logic, rhetoric; while the following course: arithmetic, geometry, astronomy, and music, were not. The effect of the Renascence was to cause increasing neglect of the Quadrivium, but Rabelais cares for the Quadrivium only; Gargantua studies arithmetic, geometry, astronomy, and music, and the Trivium is not mentioned. Great use is made of books and Gargantua learned them by heart; but all that he learned he at once "applied to practical cases concerning the estate of man." It was the substance of the reading, not the form, that was thought of. At dinner "if they thought good they continued reading or began to discourse merrily together; speaking first of the virtue, propriety, efficacy, and nature of all that was served in at that table; of bread, of wine, of water, of salt, of flesh, fish, fruits, herbs, roots, and of their dressing. By means whereof he learned in a little time all the passages that on these subjects are to be found in Pliny, Athenæus, &c. Whilst they talked of these things, many times to be more certain they caused the very books to be brought to the table; and so well and perfectly did he in his memory retain the things above said, that in that time there was not a physician that knew half so much as he did." Again, out of doors he was to observe trees and plants, and "compare them with what is written of them in

the books of the ancients, such as Theophrastus, Dioscorides, &c." Here again, actual realism was to be joined with verbal realism, for Gargantua was to carry home with him great handfuls for herborising. Rabelais even recommends studying the face of the heavens at night, and then observing the change that has taken place at 4 in the morning. So he seems to have been the first writer on education (and the first by a long interval), who would teach about things by observing the things themselves. It was this *Anschauungs-prinzip*—use of sense-impressions—that Pestalozzi extended and claimed as his invention two centuries and a half later. Rabelais also gives a hint of the use of hand-work as well as head-work. Gargantua and his fellows "did recreate themselves in bottling hay, in cleaving and sawing wood, and in threshing sheaves of corn in the barn. They also studied the art of painting or carving." The course was further connected with life by visits to the various handicraftsmen, in whose workshops "they did learn and consider the industry and invention of the trader."

Thus, even in the time of the Renascence, Rabelais saw that the life of the intellect might be nourished by many things besides books. But books were still kept in the highest place. Even on a holiday, which occurred on some fine and clear day once a month, "though spent without books or lecture, yet was the day not without profit; for in the meadows they repeated certain pleasant verses of Virgil's *Agriculture*, of Hesiod, of Politian's *Husbandry*." They also turned Latin epigrams into French *rondeaux*.

This course of study, "although at first it seemed difficult, yet soon became so sweet, so easy, and so delightful, that it seemed rather the recreation of a king than the study of a scholar."

In preferring the Quadrivial studies to the Trivial, and still more in his use of actual things, Rabelais separates himself from all the teachers of his time.

§ 6. Very remarkable too is the attention he pays to physical education. A day does not pass on which Gargantua does not gallantly exercise his body as he has already exercised his mind. The exercises prescribed are very various, and include running, jumping, swimming, with practice on the horizontal bar and with dumb-bells, &c. But in one respect Rabelais seems behind our own writer, Richard Mulcaster. Mulcaster trained the body

simply with a view to health. Rabelais is thinking of the gentleman, and all his physical exercises are to prepare him for the gentleman's occupation, war. The constant preparation for war had a strong and in some respects a very beneficial influence on the education of gentlemen in the fifteen and sixteen hundreds, as it has had on that of the Germans in the eighteen hundreds. But to be ready to slaughter one's fellow creatures is not an ideal aim in education; and besides this, one half of the human race can never (as far as we can judge at present) be affected by it. We therefore prefer the physical training recommended by the Englishman.

Mr. Walter Besant by his *Readings in Rabelais* (Blackwood, 1883), has put Rabelais' wit and wisdom where we can get at most of it without searching in the dung-hill. But he has unfortunately omitted Gargantua's letter to Pantagruel at Paris (book ij, chap. 8), where we get the curriculum as proposed by Rabelais, a chapter in which no scavenger is needed.

I will give some extracts from it:—

"Although my deceased father of happy memory, Grangousier, had bent his best endeavours to make me profit in all perfection and political knowledge, and that my labour and study was fully correspondent to, yea, went beyond his desire; nevertheless, the time then was not so proper and fit for learning as it is at present, neither had I plenty of such good masters as thou hast had; for that time was darksome, obscured with clouds of ignorance and savouring a little of the infelicity and calamity of the Goths, who had, wherever they set footing, destroyed all good literature, which in my age hath by the Divine Goodness been restored unto its former light and dignity, and that with such amendment and increase of knowledge that now hardly should I be admitted unto the first form of the little grammar school boys (*des petits grimaulx*): I say, I, who in my youthful days was (and that justly) reputed the most learned of that age. Now it is that the old knowledges (*disciplines*) are restored, the languages revived. Greek (without which it is a shame for any one to call himself learned), Hebrew, Chaldee, Latin. Printing (*Des impressions*) too, so elegant and exact, is in use, which in my day was invented by divine inspiration, as cannon were by suggestion of the devil. All the world is full of men of knowledge, of very learned teachers, of large libraries; so that it seems to me that neither in the age of Plato, nor of Cicero, nor of Papinian was there such convenience for studying as there is now. I see the robbers, hangmen, adventurers, ostlers of to-day more learned then the doctors and the preachers of my youth. Why, women and girls have aspired to the heavenly manna of good learning ... I mean you to learn the languages perfectly first of all, the Greek as Quintilian wishes, then the Latin, then Hebrew for the Scriptures, and Chaldee and Arabic at the same time; and that thou form thy style in Greek on Plato, in Latin on Cicero. Let there be no history which thou hast not ready in thy memory, in which cosmography will aid thee. Of the Liberal Arts, geometry, arithmetic, music, I have given thee a taste when thou wast still a child, at the age of five or six [Pantagruel was a giant, we must remember]; carry them on; and know'st thou all the rules of astronomy? Don't touch astrology for divination and the art of Lullius, which are mere vanity. In the civil law thou must know the five texts by heart.

" ... As for knowledge of the works of Nature, I would have thee devote thyself to them so that there may be no sea, river, or spring of which thou knowest not the fishes; all the birds of the air, all the trees, forest or orchard, all the herbs of the field, all the metals hid in the bowels of the earth, all the precious stones of the East and the South, let nothing be unknown to thee.

"Then turn again with diligence to the books of the Greek physicians, and the Arabs, and the Latin, without despising the Talmudists and the Cabalists; and by frequent dissections acquire a perfect

knowledge of the other world, which is Man. And some hours a-day begin to read the Sacred Writings, first in Greek the New Testament and Epistles of the Apostles; then in Hebrew the Old Testament. In brief, let me see thee an abyss and bottomless pit of knowledge, for from henceforth as thou growest great and becomest a man thou must part from this tranquillity and rest of study ... And because, as Solomon saith, wisdom entereth not into a malicious mind, and science without conscience is but the ruin of the soul, thou shouldst serve, love, and fear God, and in Him centre all thy thoughts, all thy hope; and by faith rooted in charity be joined to Him, so as never to be separated from Him by sin."

The influence of Rabelais on Montaigne, Locke, and Rousseau has been well traced by Dr. F. A. Arnstädt. (*François Rabelais*, Leipzig, Barth, 1872.)

VI.

MONTAIGNE.

(1533-1592.)

§ 1. The learned ideal established by the Renascence was accepted by Rabelais, though he made some suggestions about *Realien*[39] that seem to us much in advance of it. When he quotes the saying "Magis magnos clericos non sunt magis magnos sapientes" ("the greatest clerks are not the greatest sages"), this singular piece of Latinity is appropriately put into the mouth of a monk, who represents everything the Renascence scholars despised. In Montaigne we strike into a new vein of thought, and we find that what the monk alleges in defence of his ignorance the cultured gentleman adopts as the expression of an important truth.

§ 2. We ordinary people see truths indeed, but we see them indistinctly, and are not completely guided by them. It is reserved for men of genius to see truths, some truths that is, often a very few, with intense clearness. Some of these men have no great talent for speech or writing, and they try to express the truths they see, not so much by books as by action. Such men in education were Comenius, Pestalozzi, and Froebel. But sometimes the man of genius has a great power over language, and then he finds for the truths he has seen, fitting expression, which becomes almost as lasting as the truths themselves. Such men were Montaigne and Rousseau. If the historian of education is asked "What did Montaigne do?" he will answer "Nothing." "What did Froebel say?" "He said a great deal, but very few people can read him and still fewer understand him." Both, however, are and must remain forces in education. Montaigne has given to some truths imperishable form in his *Essays*, and Froebel's ideas come home to all the world in the Kindergarten.

§ 3. The ideal set up by the Renascence attached the highest importance to learning. Montaigne maintained that the resulting training *even at its best* was not suited to a gentleman or man of action. Virtue, wisdom, and intellectual activity should be thought of before learning. Education should

be first and foremost the development and exercise of faculties. And even if the acquirement of knowledge is thought of, Montaigne maintains that the pedants do not understand the first conditions of knowledge and give a semblance not the true thing.—"*Il ne faut pas attacher le savoir à l'âme, il faut l'incorporer.*—Knowledge cannot be fastened on to the mind; it must become part and parcel of the mind itself."[40]

Here then we have two separate counts against the Renascence education:

1st.—Knowledge is not the main thing.

2nd.—True knowledge is something very different from knowing by heart.

§ 4. It is a pity Montaigne's utterances about education are to be found in English only in the complete translation of his essays. Seeing that a good many millions of people read English, and are most of them concerned in education, one may hope that some day the sayings of the shrewd old Frenchman may be offered them in a convenient form.

§ 5. Here are some of them: "The evil comes of the foolish way in which our [instructors] set to work; and on the plan on which we are taught no wonder if neither scholars nor masters become more able, whatever they may do in becoming more learned. In truth the trouble and expense of our fathers are directed only to furnish our heads with knowledge: not a word of judgment or virtue. Cry out to our people about a passer-by, 'There's a learned man!' and about another 'There's a good man!' they will be all agog after the learned man, and will not look at the good man. One might fairly raise a third cry: 'There's a set of numskulls!' We are ready enough to ask 'Does he know Greek or know Latin? Does he write verse or write prose?' But whether he has become wiser or better should be the first question, and that is always the last. We ought to find out, not who knows *most* but who knows *best*." (I, chap. 24, *Du Pédantisme*, page or two beyond *Odi homines*.)

§ 6. The true educators, according to Montaigne, were the Spartans, who despised literature, and cared only for character and action. At Athens they thought about words, at Sparta about things. At Athens boys learnt to speak well, at Sparta to do well: at Athens to escape from sophistical arguments,

and to face all attempts to deceive them; at Sparta to escape from the allurements of pleasure, and to face the slings and arrows of outrageous fortune, even death itself. In the one system there was constant exercise of the tongue, in the other of the soul. “So it is not strange that when Antipater demanded of the Spartans fifty children as hostages they replied they would sooner give twice as many grown men, such store did they set by their country’s training.” (*Du Pédantisme*, ad f.)

§ 7. It is odd to find a man of the fifteen hundreds who quotes from the old authors at every turn, and yet maintains that “we lean so much on the arm of other people that we lose our own strength.” The thing a boy should learn is not what the old authors say, but “what he himself ought to do when he becomes a man.” Wisdom, not knowledge! “We may become learned from the learning of others; wise we can never be except by our own wisdom.” (Bk. j, chap. 24).

§ 8. So entirely was Montaigne detached from the thought of the Renascence that he scoffs at his own learning, and declares that true learning has for its subject, not the past or the future, but the present. “We are truly learned from knowing the present, not from knowing the past any more than the future.” And yet “we toil only to stuff the memory and leave the conscience and the understanding void. And like birds who fly abroad to forage for grain bring it home in their beak, without tasting it themselves, to feed their young, so our pedants go picking knowledge here and there out of several authors, and hold it at their tongue’s end, only to spit it out and distribute it amongst their pupils.” (*Du Pédantisme.*) “We are all richer than we think, but they drill us in borrowing and begging, and lead us to make more use of other people’s goods than of our own.”[41] (Bk. iij, chap. 12, *De la Physionomie*, beg. of 3rd paragraph).

§ 9. So far Montaigne. What do we schoolmasters say to all this? If we would be quite candid I think we must allow that, after reading Montaigne’s essay, we put it down with the conviction that in the main he was right, and that he had proved the error and absurdity of a vast deal that goes on in the schoolroom. But from this first view we have had on reflection to make several drawbacks.

§ 10. Montaigne, like Locke and Rousseau, who followed in his steps, arranges for every boy to have a tutor entirely devoted to him. We may

question whether this method of bringing up children is desirable, and we may assert, without question, that in most cases it is impossible. It seems ordained that at every stage of life we should require the companionship of those of our own age. If we take two beings as little alike as a man and a child and force them to be each other's companions, so great is the difference in their thoughts and interests that they will fall into inevitable boredom and restraint. So we see that this plan, even in the few cases in which it would be possible, would not be desirable; and for the great majority of boys it would be out of the question. We must then arrange for the young to be taught, not as individuals, but in classes, and this greatly changes the conditions of the problem. One of the first conditions is this, that we have to employ each class regularly and uniformly for some hours every day. Schoolmasters know what their non-scholastic mentors forget: we can make a class learn, but, broadly speaking, we cannot make a class think, still less can we make it judge. As a great deal of occupation has to be provided, we are therefore forced to make our pupils learn. Whatever may be the value of the learning in itself it is absolutely necessary *as employment*.

§ 11. No doubt it will make a vast difference whether we consider the learning mainly as employment, as a means of taking up time and preventing "sauntering," as Locke boldly calls it, or whether we are chiefly anxious to secure some special results. The knowledge of the Latin and Greek languages and the Latin and Greek authors was a result so highly prized by the Renascence scholars that they insisted on a prodigious quantity of learning, not as employment, but simply as the means of acquiring this knowledge. As the knowledge got to be less esteemed the pressure was by degrees relaxed. In our public schools fifty or sixty years ago the learning was to some extent retained as employment, but there certainly was no pressure, and the majority of the boys never learnt the ancient languages. So the masters of that time had given up the Renascence enthusiasm for the classics, and on the negative side of his teaching had come to an agreement with Montaigne. Any one inclined to sarcasm might say that on the positive side they were still totally opposed to him, for *he* thought virtue and judgment were the main things to be cared for, and *they* did not care for these things at all. But this is not a fair statement. The one thing gained, or supposed to be gained, in the public schools was the art of living, and this art, though it does not demand heroic virtue, requires at least

prudence and self-control. Montaigne's system was a revolt against the *bookishness* of the Renascence. "In our studies," says he, "whatever presents itself before us is book enough; a roguish trick of a page, a blunder of a servant, a jest at table, are so many new subjects." So the education *out of school* was in his eyes of more value than the education in school. And this was acknowledged also in our public schools: "It is not the Latin and Greek they learn or don't learn that we consider so important," the masters used to say, "but it is the tone of the school and the discipline of the games." But of late years this virtual agreement with Montaigne has been broken up. School work is no longer mere employment, but it is done under pressure, and with penalties if the tale of brick turned out does not pass the inspector.

§ 12. What has produced this great change? It is due mainly to two causes:

1. The pressure put on the young to attain classical knowledge was relaxed when it was thought that they could get through life very well without this knowledge. But in these days new knowledge has awakened a new enthusiasm. The knowledge of science promises such great advantages that the latest reformers, headed by Mr. Herbert Spencer, seem to make the well-being of the grown person depend mainly on the amount of scientific knowledge he stored up in his youth. This is the first cause of educational pressure.

§ 13. 2. The second and more urgent cause is the rapid development of our system of examinations. Everybody's educational status is now settled by the examiner, a potentate whose influence has brought back in a very malignant form all the evils of which Montaigne complains. Do what we will, the faculty chiefly exercised in preparing for ordinary examinations is the "carrying memory." So the acquisition of knowledge—mere memory or examination knowledge—has again come to be regarded as the one thing needful in education, and there is great danger of everything else being neglected for it. Of the fourfold results of education—virtue, wisdom, good manners, learning—the last alone can be fairly tested in examinations; and as the schoolmaster's very bread depends nowadays first on his getting through examinations himself and then on getting his pupils through, he would be more than human, if with Locke he thought of learning "last and least." A great change has come over our public schools. The amount of

work required from the boys is far greater than it used to be and masters again measure their success by the amount of knowledge the average boy takes away with him. It seems to me high time that another Montaigne arose to protest that a man's intellectual life does not consist in the number of things he remembers, and that his true life is not his intellectual life only, but embraces his power of will and action and his love of what is noble and right. "Wisdom cried of old, I am the mother of fair Love and Fear and Knowledge and holy Hope" (*Ecclesiasticus*). In these days of science and examinations does there not seem some danger lest knowledge should prove the sole survivor? May not Knowledge, like another Cain, raise its hand against its brethren "fair Love and Fear and holy Hope?" This is perhaps the great danger of our time, a danger especially felt in education. Every school parades its scholarships at the public schools or at the universities, or its passes in the Oxford and Cambridge Locals, or its percentage at the last Inspection, and asks to be judged by these. And yet these are not the one thing or indeed the chief thing needful: and it will be the ruin of true education if, as Mark Pattison said, the master's attention is concentrated on the least important part of his duty.[42]

VII.

ASCHAM.

(1515-1568.)

§ 1. Masters and scholars who sigh over what seem to them the intricacies and obscurities of modern grammars may find some consolation in thinking that, after all, matters might have been worse, and that our fate is enviable indeed compared with that of the students of Latin 400 years ago. Did the reader ever open the *Doctrinale* of Alexander de Villa Dei, which was the grammar in general use from the middle of the thirteenth to the end of the fifteenth century? (*v.* Appendix, p. 532). If so, he is aware how great a step towards simplicity was made by our grammatical reformers, Lily, Colet, and Erasmus. Indeed, those whom we now regard as the forgers of our chains were, in their own opinion and that of their contemporaries, the champions of freedom (Appendix, p. 533).

§ 2. I have given elsewhere (Appendix, p. 533) a remarkable passage from Colet, in which he recommends the leaving of rules, and the study of examples in good Latin authors. Wolsey also, in his directions to the masters of Ipswich School (dated 1528), proposes that the boys should be exercised in the eight parts of speech in the first form, and should begin to speak Latin and translate from English into Latin in the second. If the masters think fit, they may also let the pupils read Lily's *Carmen Monitorium*, or Cato's *Distichs*. From the third upwards a regular course of classical authors was to be read, and Lily's rules were to be introduced by degrees. "Although I confess such things are necessary," writes Wolsey, "yet, as far as possible, we could wish them so appointed as not to occupy the more valuable part of the day." Only in the sixth form, the highest but two, Lily's syntax was to be begun. In these schools the boys' time was wholly taken up with Latin, and the speaking of Latin was enforced even in play hours, so we see that anomalies in the accidence as taught in the *As in præsenti* were not given till the boys had been some time using the language; and the syntax was kept till they had a good practical knowledge of the usages to which the rules referred.[43]

§ 3. But although there was a great stir in education throughout this century, and several English books were published about it, we come to 1570 before we find anything that has lived till now. We then have Roger Ascham's *Scholemaster*, a posthumous work brought out by Ascham's widow, and republished in 1571 and 1589. The book was then lost sight of, but reappeared, with James Upton as editor, in 1711,[44] and has been regarded as an educational classic ever since. Dr. Johnson says "it contains perhaps the best advice that was ever given for the study of languages," and Professor J. E. B. Mayor, who on this point is a higher authority than Dr. Johnson, declares that "this book sets forth the only sound method of acquiring a dead language."

§ 4. With all their contempt for theory, English schoolmasters might have been expected to take an interest in one part of the history of education, viz., the history of methods. There is a true saying attributed by Marcel to Talleyrand, "*Les Méthodes sont les maîtres des maîtres*—Method is the master's master." The history of education shows us that every subject of instruction has been taught in various ways, and further, that the contest of methods has not uniformly ended in the survival of the fittest. Methods then might often teach the teachers, if the teachers cared to be taught; but till within the last half century or so an unintelligent traditional routine has sufficed for them. There has no doubt been a great change since men now old were at school, but in those days the main strength of the teaching was given to Latin, and the masters knew of no better method of starting boys in this language than making them learn by heart Lily's, or as it was then called, the Eton Latin Grammar. If reason had had anything to do with teaching, this book would have been demolished by Richard Johnson's *Grammatical Commentaries* published in 1706; but worthless as Johnson proved it to be, the Grammar was for another 150 years treated by English schoolmasters as the only introduction to the Latin tongue. The books that have recently been published show a tendency to revert to methods set forth in Elizabeth's reign in Ascham's *Scholemaster* (1570) and William Kempe's *Education of Children* (1588), but the innovators have not as a rule been drawn to these methods by historical inquiry.

§ 5. There seem to be only three English writers on education who have caught the ear of other nations, and these are Ascham, Locke, and Herbert Spencer. Of a contemporary we do well to speak with the same reserve as of

"present company," but of the other two we may say that the choice has been somewhat capricious. Locke's *Thoughts* perhaps deserves the reputation and influence it has always had, but in it he hardly does himself justice as a philosopher of the mind; and much of the advice which has been considered his exclusively, is to be found in his English predecessors whose very names are unknown except to the educational antiquarian. Ascham wrote a few pages on method which entitle him to mention in an account of methods of language-learning. He also wrote a great many pages about things in general which would have shared the fate of many more valuable but long forgotten books had he not had one peculiarity in which the other writers were wanting, that indescribable something which Matthew Arnold calls "charm."

§ 6. Ascham has been very fortunate in his editors, Professor Arber and Professor Mayor, and the last editions[45] give everyone an opportunity of reading the *Scholemaster*. I shall therefore speak of nothing but the method.

§ 7. Latin is to be taught as follows:—First, let the child learn the eight parts of speech, and then the right joining together of substantives with adjectives, the noun with the verb, the relative with the antecedent. After the concords are learned, let the master take Sturm's selection of Cicero's Epistles, and read them after this manner: "first, let him teach the child, cheerfully and plainly, the cause and matter of the letter; then, let him construe it into English so oft as the child may easily carry away the understanding of it; lastly, parse it over perfectly. This done, then let the child by and by both construe and parse it over again; so that it may appear that the child doubteth in nothing that his master has taught him before. After this, the child must take a paper book, and, sitting in some place where no man shall prompt him, by himself let him translate into English his former lesson. Then showing it to his master, let the master take from him his Latin book, and pausing an hour at the least, then let the child translate his own English into Latin again in another paper book. When the child bringeth it turned into Latin, the master must compare it with Tully's book, and lay them both together, and where the child doth well, praise him," where amiss point out why Tully's use is better. Thus the child will easily acquire a knowledge of grammar, "and also the ground of almost all the rules that are so busily taught by the master, and so hardly learned by the scholar in all common schools.... We do not contemn rules, but we

gladly teach rules; and teach them more plainly, sensibly, and orderly, than they be commonly taught in common schools. For when the master shall compare Tully's book with the scholar's translation, let the master at the first lead and teach the scholar to join the rules of his grammar book with the examples of his present lesson, until the scholar by himself be able to fetch out of his grammar every rule for every example; and let the grammar book be ever in the scholars hand, and also used by him as a dictionary for every present use. This is a lively and perfect way of teaching of rules; where the common way used in common schools to read the grammar alone by itself is tedious for the master, hard for the scholar, cold and uncomfortable for them both." And elsewhere Ascham says: "Yea, I do wish that all rules for young scholars were shorter than they be. For, without doubt, *grammatica* itself is sooner and surer learned by examples of good authors than by the naked rules of grammarians."

§ 8. "As you perceive your scholar to go better on away, first, with understanding his lesson more quickly, with parsing more readily, with translating more speedily and perfectly than he was wont; after, give him longer lessons to translate, and, withal, begin to teach him, both in nouns and verbs, what is *proprium* and what is *translatum*, what *synonymum*, what *diversum*, which be *contraria*, and which be most notable *phrases*, in all his lectures, as—

Proprium	Rex sepultus est magnifice.
Translatum	Cum illo principe, sepulta est et gloria et salus reipublicæ.
Synonyma	Ensis, gladius: laudare, prædicare.
Diversa	Diligere, amare: calere, exardescere: inimicus, hostis.
Contraria	Acerbum et luctuosum bellum, dulcis et læta pax.
Phrases	Dare verba, adjicere obedientiam."

Every lesson is to be thus carefully analysed, and entered under these headings in a third MS. book.

§ 9. Here Ascham leaves his method, and returns to it only at the beginning of Book II. He there supposes the first stage to be finished and "your scholar to have come indeed, first to a ready perfectness in translating, then to a ripe and skilful choice in marking out his six points."

He now recommends a course of Cicero, Terence, Cæsar, and Livy which is to be read "a good deal at every lecture." And the master is to give passages "put into plain natural English." These the scholar shall "not know where to find" till he shall have tried his hand at putting them into Latin; then the master shall "bring forth the place in Tully."

§ 10. In the Second Book of the *Scholemaster*, Ascham discusses the various branches of the study then common, viz.: 1. Translatio linguarum; 2. Paraphrasis; 3. Metaphrasis; 4. Epitome; 5. Imitatio; 6. Declamatio. He does not lay much stress on any of these, except *translatio* and *imitatio*. Of the last he says: "All languages, both learned and mother-tongue, be gotten, and gotten only, by imitation. For, as ye use to hear, so ye use to speak; if ye hear no other, ye speak not yourself; and whom ye only hear, of them ye only learn." But translation was his great instrument for all kinds of learning. "The translation," he says, "is the most common and most commendable of all other exercises for youth; most common, for all your constructions in grammar schools be nothing else but translations, but because they be not *double* translations (as I do require) they bring forth but simple and single commodity: and because also they lack the daily use of writing, which is the only thing that breedeth deep root, both in the wit for good understanding and in the memory for sure keeping of all that is learned; most commendable also, and that by the judgment of all authors which entreat of these exercises."

§ 11. After quoting Pliny,[46] he says: "You perceive how Pliny teacheth that by this exercise of double translating is learned easily, sensibly, by little and little, not only all the hard congruities of grammar, the choice of ablest words, the right pronouncing of words and sentences, comeliness of figures, and forms fit for every matter and proper for every tongue: but, that which is greater also, in marking daily and following diligently thus the footsteps of the best authors, like invention of arguments, like order in disposition, like utterance in elocution, is easily gathered up; and hereby your scholar shall be brought not only to like eloquence, but also to all true understanding and rightful judgment, both for writing and speaking."

Again he says: "For speedy attaining, I durst venture a good wager if a scholar in whom is aptness, love, diligence, and constancy, would but translate after this sort some little book in Tully (as *De Senectute*, with two Epistles, the first 'Ad Quintum Fratrem,' the other 'Ad Lentulum'), that

scholar, I say, should come to a better knowledge in the Latin tongue than the most part do that spend from five to six years in tossing all the rules of grammar in common schools." After quoting the instance of Dion Prussæus, who came to great learning and utterance by reading and following only two books, the *Phædo*, and *Demosthenes de Falsa Legatione*, he goes on: "And a better and nearer example herein may be our most noble Queen Elizabeth, who never took yet Greek nor Latin grammar in her hand after the first declining of a noun and a verb; but only by this double translating of Demosthenes and Isocrates daily, without missing, every forenoon, and likewise some part of Tully every afternoon, for the space of a year or two, hath attained to such a perfect understanding in both the tongues, and to such a ready utterance of the Latin, and that with such a judgment, as there be few now in both Universities or elsewhere in England that be in both tongues comparable with Her Majesty." Ascham's authority is indeed not conclusive on this point, as he, in praising the Queen's attainments, was vaunting his own success as a teacher, and, moreover, if he flattered her he could plead prevailing custom. But we have, I believe, abundant evidence that Elizabeth was an accomplished scholar.

§ 12. Before I leave Ascham I must make one more quotation, to which I shall more than once have occasion to refer. Speaking of the plan of double translation, he says: "Ere the scholar have construed, parsed, twice translated over by good advisement, marked out his six points by skilful judgment, he shall have necessary occasion to read over every lecture a *dozen times at the least*; which because he shall do always in order, he shall do it always with pleasure. And pleasure allureth love: love hath lust to labour; labour always obtaineth his purpose."

§ 13. A good deal has been said, and perhaps something learnt, about the teaching of Latin since the days of Ascham. As far as I know the method which Ascham denounced, and which most English schoolmasters stuck to for more than two centuries longer, has now been abandoned. No one thinks of making the beginner learn by heart all the Latin Grammar before he is introduced to the Latin language. To understand the machinery of which an account is given in the grammar, the learner must see it at work, and must even endeavour in a small way to work it himself. So it seems pretty well agreed that the information given in the grammar must be joined with some construing and some exercises from the very first. But here the agreement

ends. Our teachers, consciously or in ignorance, follow one or more of a number of methodizers who have examined the problem of language-learning, such men as Ascham, Ratke, Comenius, Jacotot, Hamilton, Robertson, and Prendergast. These naturally divide themselves into two parties, which I have ventured to call "Rapid Impressionists," and "Complete Retainers." The first of these plunge the beginner into the language, and trust to the great mass of vague impressions clearing and defining themselves as he goes along. The second insist on his learning at the first a very small portion of the language, and mastering and retaining everything he learns. It will be seen that in the first stage of the course Ascham is a "Complete Retainer." He does not talk, like Prendergast, of "mastery," nor, like Jacotot, does he require the learner to begin every lesson at the beginning of the book: but he makes the pupil go over each lesson "a dozen times at the least," before he may advance beyond it. As for his practice of double translation, for the advanced pupil it is excellent, but if it is required from the beginner, it leads to unintelligent memorizing. I think I shall be able to show later on that other methodizers have advanced beyond Ascham. (*Infra*, 246 *n.*)

VIII.

MULCASTER.

(1531(?)-1611.)

§ 1. The history of English thought on education has yet to be written. In the literature of education the Germans have been the pioneers, and have consequently settled the routes; and when a track has once been established few travellers will face the risk and trouble of leaving it. So up to the present time, writers on the history of European education after the Renascence have occupied themselves chiefly with men who lived in Germany, or wrote in German. But the French are at length exploring the country for themselves; and in time, no doubt, the English-speaking races will show an interest in the thoughts and doings of their common ancestors.

We know what toils and dangers men will encounter in getting to the source of great rivers; and although, as Mr. Widgery truly says, "the study of origins is not everybody's business,"[47] we yet may hope that students will be found ready to give time and trouble to an investigation of great interest and perhaps some utility—the origin of the school course which now affects the millions who have English for their mother-tongue.

§ 2. In the fifteen hundreds there were published several works on education, three of which, Elyot's *Governour*, Ascham's *Scholemaster*, and Mulcaster's *Positions*, have been recently reprinted.[48] Others, such as Edward Coote's *English Schoolmaster*, and Mulcaster's *Elementarie*, are pretty sure to follow, without serious loss, let us hope, to their editors, though neither Coote nor Mulcaster are likely to become as well-known writers as Roger Ascham.

§ 3. Henry Barnard, whose knowledge of our educational literature no less than his labours in it, makes him the greatest living authority, says that Mulcaster's *Positions* is "one of the earliest, and still one of the best treatises in the English language." (*English Pedagogy*, 2nd series, p. 177.) Mulcaster was one of the most famous of English schoolmasters, and by his writings he proved that he was far in advance of the schoolmasters of his

own time, and of the times which succeeded. But he paid the penalty of thinking of himself more highly than he should have thought; and whether or no the conjecture is right that Shakespeare had him in his mind when writing *Love's Labour's Lost*, there is an affectation in Mulcaster's style which is very irritating, for it has caused even the master of Edmund Spenser to be forgotten. In a curious and interesting allegory on the progress of language (in the *Elementarie*, pp. 66, ff.), Mulcaster says that Art selects the best age of a language to draw rules from, such as the age of Demosthenes in Greece and of Tully in Rome; and he goes on: "Such a period in the English tongue I take to be in our days for both the pen and the speech." And he suggests that the English language, having reached its zenith, is seen to advantage, not in the writings of Shakespeare or Spenser, but in those of Richard Mulcaster. After enumerating the excellencies of the language, he adds: "I need no example in any of these, whereof my own penning is a general pattern." Here we feel tempted to exclaim with Armado in *Love's Labour's Lost* (Act 5, sc. 2): "I protest the schoolmaster is exceeding fantastical: too too vain, too too vain." He speaks elsewhere of his "so careful, I will not say so curious writing" (*Elementarie*, p. 253), and says very truly: "Even some of reasonable study can hardly understand the couching of my sentence, and the depth of my conceit" (*ib.*, 235). And this was the death-warrant of his literary renown.

§ 4. But there is good reason why Mulcaster should not be forgotten. When we read his books we find that wisdom which we are importing in the nineteenth century was in a great measure offered us by an English schoolmaster in the sixteenth. The latest advances in pedagogy have established (1) that the end and aim of education is to develop the faculties of the mind and body; (2) that all teaching processes should be carefully adapted to the mental constitution of the learner; (3) that the first stage in learning is of immense importance and requires a very high degree of skill in the teacher; (4) that the brain of children, especially of clever children, should not be subjected to "pressure"; (5) that childhood should not be spent in learning foreign languages, but that its language should be the mother-tongue, and its exercises should include handwork, especially drawing; (6) that girls' education should be cared for no less than boys'; (7) that the only hope of improving our schools lies in providing training for our teachers. These are all regarded as planks in the platform of "the new education," and these were all advocated by Mulcaster.

§ 5. Before I point this out in detail I may remark how greatly education has suffered from being confounded with learning. There are interesting passages both in Ascham and Mulcaster which prove that the class-ideal of the "scholar and gentleman" was of later growth. In the fifteen hundreds learning was thought suitable, not for the rich, but for the clever. Still, learning, and therefore education, was not for the many, but the few. Mulcaster considers at some length how the number of the educated is to be kept down (*Positions*, chapp. 36, 37, 39), though even here he is in the van, and would have everyone taught to read and write (*Positions*, chapp. 5, 36). But the true problem of education was not faced till it was discovered that every human being was to be considered in it. This was, I think, first seen by Comenius.

With this abatement we find Mulcaster's sixteenth-century notions not much behind our nineteenth.

§ 6. (1 & 2) "Why is it not good," he asks, "to have every part of the body and every power of the soul to be fined to his best?" (*PP.*, p. 34[49]). Elsewhere he says: "The end of education and train is to help Nature to her perfection, which is, when all her abilities be perfected in their habit, whereunto right elements be right great helps. Consideration and judgment must wisely mark whereunto Nature is either evidently given or secretly affectionate and must frame an education consonant thereto." (*El.*, p. 28).

Michelet has with justice claimed for Montaigne that he drew the teacher's attention from the thing to be learnt to the *learner*: "*Non l'objet, le savoir, mais le sujet, c'est l'homme.*" (*Nos Fils*, p. 170.) Mulcaster has a claim to share this honour with his great contemporary. He really laid the foundation of a science of education. Discussing our natural abilities, he says: "We have a perceiving by outward sense to feel, to hear, to see, to smell, to taste all sensible things; which qualities of the outward, being received in by the *common sense* and examined by *fantsie*, are delivered to *remembrance*, and afterward prove our great and only grounds unto further knowledge."[50] (*El.*, p. 32.) Here we see Mulcaster endeavouring to base education, or as he so well calls it, "train," on what we receive from Nature. Elsewhere he speaks of the three things which we "find peering out of the little young souls," viz: "wit to take, memory to keep, and discretion to discern." (*PP.*, p. 27.)

§ 7. (3) I have pointed out that the false ideal of the Renascence led schoolmasters to neglect children. Mulcaster remarks that the ancients considered the training of children should date from the birth; but he himself begins with the school age. Here he has the boldness to propose that those who teach the beginners should have the smallest number of pupils, and should receive the highest pay. "The first groundwork would be laid by the best workman," says Mulcaster (*PP.*, 130), here expressing a truth which, like many truths that are not quite convenient, is seldom denied but almost systematically ignored.[51]

§ 8. (4) In the *Nineteenth Century* Magazine for November, 1888, appeared a vigorous protest with nearly 400 signatures, many of which carried great weight with them, against our *sacrifice of education to examination*. Our present system, whether good or bad, is the result of accident. Winchester and Eton had large endowments, and naturally endeavoured by means of these endowments to get hold of clever boys. At first no doubt they succeeded fairly well; but other schools felt bound to compete for juvenile brains, and as the number of prizes increased, many of our preparatory schools became mere racing stables for children destined at 12 or 14 to run for "scholarship stakes." Thus, in the scramble for the money all thought of education has been lost sight of; injury has been done in many cases to those who have succeeded, still greater injury to those who have failed or who have from the first been considered "out of the running." These very serious evils would have been avoided had we taken counsel with Mulcaster: "Pity it were for so petty a gain to forego a greater; to win an hour in the morning and lose the whole day after; as those people most commonly do which start out of their beds too early before they be well awaked or know what it is o'clock; and be drowsy when they are up for want of their sleep." (*PP.*, p. 19; see also *El.*, xi., pp. 52 ff.)

§ 9. (5) It would have been a vast gain to all Europe if Mulcaster had been followed instead of Sturm. He was one of the earliest advocates of the use of English instead of Latin (see Appendix, p. 534), and good reading and writing in English were to be secured before Latin was begun. His elementary course included these five things: English reading, English writing, drawing, singing, playing a musical instrument. If the first course were made to occupy the school-time up to the age of 12, Mulcaster held that more would be done between 12 and 16 than between 7 and 17 in the

ordinary way. There would be the further gain that the children would not be set against learning. “Because of the too timely onset too little is done in too long a time, and the school is made a torture, which as it brings forth delight in the end when learning is held fast, so should it pass on very pleasantly by the way, while it is in learning.”[52] (*PP.*, 33.)

§ 10. (6) Among the many changes brought about in the nineteenth century we find little that can compare in importance with the advance in the education of women. In the last century, whenever a woman exercised her mental powers she had to do it by stealth,[53] and her position was degraded indeed when compared not only with her descendants of the nineteenth century, but also with her ancestors of the sixteenth. This I know has been disputed by some authorities, *e.g.*, by the late Professor Brewer: but to others, *e.g.*, to a man who, as regards honesty and wisdom, has had few equals and no superiors in investigating the course of education, I mean the late Joseph Payne, this educational superiority of the women of Elizabeth’s time has seemed to be entirely beyond question. On this point Mulcaster’s evidence is very valuable, and, to me at least, conclusive. He not only “admits young maidens to learn,” but says that “custom stands for him,” and that “the custom of my country ... hath made the maidens’ train her own approved travail.” (*PP.*, p. 167.)

§ 11. (7) Of all the educational reforms of the nineteenth century by far the most fruitful and most expansive is, in my opinion, the training of teachers. In this, as in most educational matters, the English, though advancing, are in the rear. Far more is made of “training” on the Continent and in the United States than in England. And yet we made a good start. Our early writers on education saw that the teacher has immense influence, and that to turn this influence to good account he must have made a study of his profession and have learnt “the best that has been thought and done” in it. Every occupation in life has a traditional capital of knowledge and experience, and those who intend to follow the business, whatever it may be, are required to go through some kind of training or apprenticeship before they earn wages. To this rule there is but one exception. In English elementary schools children are paid to “teach” children, and in the higher schools the beginner is allowed to blunder at the expense of his first pupils into whatever skill he may in the end manage to pick up. But our English

practice received no encouragement from the early English writers, Mulcaster, Brinsley,[54] and Hoole.

As far as I am aware the first suggestion of a training college for teachers came from Mulcaster. He schemed seven special colleges at the University; and of these one is for teachers. Some of his suggestions, *e.g.*, about "University Readers" have lately been adopted, though without acknowledgment; and as the University of Cambridge has since 1879 acknowledged the existence of teachers, and appointed a "Teachers' Training Syndicate," we may perhaps in a few centuries more carry out his scheme, and have training colleges at Oxford and Cambridge.[55] Some of the reasons he gives us have not gone out of date with his English. They are as follows:—

"And why should not these men (the teachers) have both this sufficiency in learning, and such room to rest in, thence to be chosen and set forth for the common service? Be either children or schools so small a portion of our multitude? or is the framing of young minds, and the training of their bodies so mean a point of cunning? Be schoolmasters in this Realm such a paucity, as they are not even in good sadness to be soundly thought on? If the chancel have a minister, the belfry hath a master: and where youth is, as it is eachwhere, there must be trainers, or there will be worse. He that will not allow of this careful provision for such a seminary of masters, is most unworthy either to have had a good master himself, or hereafter to have a good one for his. Why should not teachers be well provided for, to continue their whole life in the school, as *Divines*, *Lawyers*, *Physicians* do in their several professions? Thereby judgment, cunning, and discretion will grow in them: and masters would prove old men, and such as *Xenophon* setteth over children in the schooling of *Cyrus*. Whereas now, the school being used but for a shift, afterward to pass thence to the other professions, though it send out very sufficient men to them, itself remaineth too too naked, considering the necessity of the thing. I conclude, therefore, that this trade requireth a particular college, for these four causes. 1. First, for the subject being the mean to make or mar the whole fry of our State. 2. Secondly, for the number, whether of them that are to learn, or of them that are to teach. 3. Thirdly, for the necessity of the profession, which may not be spared. 4. Fourthly, for the matter of their study, which is comparable to the greatest professions, for language, for judgment, for skill how to train,

for variety in all points of learning, wherein the framing of the mind, and the exercising of the body craveth exquisite consideration, beside the staidness of the person." (*PP.*, 9 pp. 248, 9.)

§ 12. Though once a celebrated man, and moreover the master of Edmund Spenser, Mulcaster has been long forgotten; but when the history of education in England comes to be written, the historian will show that few schoolmasters in the fifteen hundreds or since were so enlightened as the first headmaster of Merchant Taylors'.[56]

IX.

RATICHIUS.

(1571-1635.)

§ 1. The history of Education in the fifteen hundreds tells chiefly of two very different classes of men. First we have the practical men, who set themselves to supply the general demand for instruction in the classical languages. This class includes most of the successful schoolmasters, such as Sturm, Trotzendorf, Neander, and the Jesuits. The other class were thinkers, who never attempted to teach, but merely gave form to truths which would in the end affect teaching. These were especially Rabelais and Montaigne.

§ 2. With the sixteen hundreds we come to men who have earned for themselves a name unpleasant in our ears, although it might fittingly be applied to all the greatest benefactors of the human race. I mean the name of *Innovators*. These men were not successful; at least they seemed unsuccessful to their contemporaries, who contrasted the promised results with the actual. But their efforts were by no means thrown away: and posterity at least, has acknowledged its obligations to them. One sees now that they could hardly have expected justice in their own time. It is safe to adopt the customary plan; it is safe to speculate how that plan may and should be altered; but it is dangerous to attempt to translate new thought into new action, and boldly to advance without a track, trusting to principles which may, like the compass, show you the right direction, but, like the compass, will give you no hint of the obstacles that lie before you.

The chief demands made by the Innovators have been: 1st, that the study of *things* should precede, or be united with, the study of *words* (*v.* Appendix, p. 538); 2nd, that knowledge should be communicated, where possible, by appeals to the senses; 3rd, that all linguistic study should begin with that of the mother-tongue; 4th, that Latin and Greek should be taught to such boys only as would be likely to complete a learned education; 5th, that physical education should be attended to in all classes of society for the sake of health, not simply with a view to gentlemanly accomplishments;

6th, that a new method of teaching should be adopted, framed "according to Nature."

Their notions of method have, of course, been very various; but their systems mostly agree in these particulars:—

1. They proceed from the concrete to the abstract, giving some knowledge of the thing itself before the rules which refer to it. 2. They employ the student in analysing matter put before him, rather than in working synthetically according to precept. 3. They require the student to *teach himself* and investigate for himself under the superintendence and guidance of the master, rather than be taught by the master and receive anything on the master's authority. 4. They rely on the interest excited in the pupil by the acquisition of knowledge, and renounce coercion. 5. Only that which is understood may be committed to memory (*v. supra, p. 74, n.*)

§ 3. The first of the Innovators was Wolfgang Ratichius, who, oddly enough, is known to posterity by a name he and his contemporaries never heard of. His father's name was Radtké or Ratké, and the son having received a University education, translated this into Ratichius. With our usual impatience of redundant syllables, we have attempted to reduce the word to its original dimensions, and in the process have hit upon *Ratich*, which is a new name altogether.

Ratke (to adopt the true form of the original) was connected, as Basedow was a hundred and fifty years later, with Holstein and Hamburg. He was born at Wilster in Holstein in 1571, and studied at Hamburg and at the University of Rostock. He afterwards travelled to Amsterdam and to England, and it was perhaps owing to his residence in this country that he was acquainted with the new philosophy of Bacon. We next hear of him at the Electoral Diet, held as usual in Frankfurt-on-Main, in 1612. He was then over forty years old, and he had elaborated a new scheme for teaching. Like all inventors, he was fully impressed with the importance of his discovery, and he sent to the assembled Princes an address, in which he undertook some startling performances. He was able, he said: (1) to teach young or old Hebrew, Greek, and Latin, or other languages, in a very short time and without any difficulty; (2) to establish schools in which all arts should be taught and extended; (3) to introduce and peaceably establish throughout

the German Empire a uniform speech, a uniform government, and (still more wonderful) a uniform religion.

§ 4. Naturally enough the address arrested the attention of the Princes. The Landgraf Lewis of Darmstadt thought the matter worthy of examination, and he deputed two learned men, Jung and Helwig, to confer with Ratke. Their report was entirely favourable, and they did all they could to get for Ratke the means of carrying his scheme into execution. "We are," writes Helwig, "in bondage to Latin. The Greeks and Saracens would never have done so much for posterity if they had spent their youth in acquiring a foreign tongue. We must study our own language, and then sciences. Ratichius has discovered the art of teaching according to Nature. By his method, languages will be quickly learned, so that we shall have time for science; and science will be learned even better still, as the natural system suits best with science, which is the study of Nature." Moved by this report the Town Council of Augsburg agreed to give Ratke the necessary power over their schools, and accompanied by Helwig, he accordingly went to Augsburg and set to work. But the good folks of Augsburg were like children, who expect a plant as soon as they have sown the seed. They were speedily dissatisfied, and Ratke and Helwig left Augsburg, the latter much discouraged but still faithful to his friend. Ratke went to Frankfurt again, and a Commission was appointed to consider his proposals, but by its advice Ratke was "allowed to try elsewhere."

§ 5. He would never have had a fair chance had he not had a firm friend in the Duchess Dorothy of Weimar. Then, as now, we find women taking the lead in everything which promises to improve education, and this good Duchess sent for Ratke and tested his method by herself taking lessons of him in Hebrew. With this adult pupil his plans seem to have answered well, and she always continued his admirer and advocate. By her advice her brother, Prince Lewis of Anhalt-Koethen, decided that the great discovery should not be lost for want of a fair trial; so he called Ratke to Koethen and complied with all his demands. A band of teachers sworn to secrecy were first of all instructed in the art by Ratke himself. Next, schools with very costly appliances were provided, and lastly some 500 little Koetheners—boys and girls—were collected and handed over to Ratke to work his wonders with.

§ 6. It never seems to have occurred either to Ratke or his friends or the Prince that all the principles and methods that ever were or ever will be established could not enable a man without experience to organize a school of 500 children. A man who had never been in the water might just as well plunge into the sea at once and trust to his knowledge of the laws of fluid pressure to save him from drowning. There are endless details to be settled which would bewilder any one without experience. Some years ago school-buildings were provided for one of our county schools, and the council consulted a master of great experience who strongly urged them not to start as they had intended with 300 boys. "*I* would not undertake such a thing," said he. When pressed for his reason, he said quietly, "I would not be responsible for the *boots*." I have no doubt Ratke had to come down from his principles and his new method to deal with numberless little questions of caps, bonnets, late children, broken windows, and the like; and he was without the tact and the experience which enable many ordinary men and women, who know nothing of principles, to settle such matters satisfactorily.

§ 7. Years afterwards there was another thinker much more profound and influential than Ratke, who was quite as incompetent to organize. I mean Pestalozzi. But Pestalozzi had one great advantage over Ratke. He attached all his assistants to him by inspiring them with love and reverence of himself. This made up for many deficiencies. But Ratke was not like the fatherly, self-sacrificing Pestalozzi. He leads us to suspect him of being an impostor by making a mystery of his invention, and he never could keep the peace with his assistants.

§ 8. So, as might have been expected, the grand experiment failed. The Prince, exasperated at being placed in a somewhat ridiculous position, and possibly at the serious loss of money into the bargain, revenged himself on Ratke by throwing him into prison, nor would he release him till he had made him sign a paper in which he admitted that he had undertaken more than he was able to fulfil.

§ 9. This was no doubt the case; and yet Ratke had done more for the Prince than the Prince for Ratke. In Koethen had been opened the first German school in which the children were taught to make a study of the German language.

Ratke never recovered from his failure at Koethen, and nothing memorable is recorded of him afterwards. He died in 1635.

§ 10. Much was written by Ratke; much has been written about him; and those who wish to know more than the few particulars I have given may find all they want in Raumer or Barnard. The Innovator failed in gaining the applause of his contemporaries, and he does not seem to stand high in the respect of posterity; but he was a pioneer in the art of didactics, and the rules which Raumer has gathered from the *Methodus Institutionis nova ... Ratichii et Ratichianorum*, published by Rhenius at Leipzig in 1626, raise some of the most interesting points to which a teachers attention can be directed. I will therefore state them, and say briefly what I think of them.

§ 11. I. *In everything we should follow the order of Nature. There is a certain natural sequence along which the human intelligence moves in acquiring knowledge. This sequence must be studied, and instruction must be based on the knowledge of it.*

Here, as in all teaching of the Reformers, we find "Nature" used as if the word stood for some definite idea. From the time of the Stoics we have been exhorted to "follow Nature." In more modern times the demand was well formulated by Picus of Mirandola: "Take no heed what thing many men do, but what thing the *very law of Nature*, what thing *very reason*, what thing *our Lord Himself* showeth thee to be done." (Trans. by Sir Thomas More, quoted in Seebohm, *Oxford Reformers*.)

Pope, always happy in expression but not always clear in thought, talks of—

"Unerring Nature, still divinely bright,
One clear, unchanged, and universal light."
(*Essay on C.*, i, 70.)

But as Dr. W. T. Harris has well pointed out (*St. Louis, Mo., School Report, '78, '79*, p. 217), with this word "Nature" writers on education do a great deal of juggling. Some times they use it for the external world, including in it man's *unconscious* growth, sometimes they make it stand for the ideal. What sense does Ratke attach to it? One might have some difficulty in determining. Perhaps the best meaning we can nowadays find for his rule is: *study Psychology*.

§ 12. II. *One thing at a time.* Master one subject before you take up another. For each language master a single book. Go over it again and again till you have completely made it your own.

In its crude form this rule could not be carried out. If the attempt were made the results would be no better than from the six months' course of Terence under Ratke. It is "against all Nature" to go on hammering away at one thing day after day without any change; and there is a point beyond which any attempt at thoroughness must end in simple stagnation. The rule then would have two fatal drawbacks: 1st, it would lead to monotony; 2nd, it would require a completeness of learning which to the young would be impossible. But in these days no one follows Ratke. On the other hand, concentration in study is often neglected, and our time-tables afford specimens of the most ingenious mosaic work, in which everything has a place, but in so small a quantity that the learners never find out what each thing really is. School subjects are like the clubs of the eastern tale, which did not give out their medicinal properties till the patient got warm in the use of them.

When a good hold on a subject has once been secured, short study, with considerable intervals between, may suffice to keep up and even increase the knowledge already obtained; but in matters of any difficulty, *e.g.*, in a new language, no start is ever made without allotting to it much more than two or three hours a week. It is perhaps a mistake to suppose that if a good deal of the language may be learnt by giving it ten hours a week, twice that

amount might be acquired in twenty hours. It is a much greater mistake if we think that one-fifth of the amount might be acquired in two hours.

§ 13. III. *The same thing should be repeated over and over again.*

This is like the Jesuits' *Repetitio Mater Studiorum*; and the same notion was well developed 200 years later by Jacotot.

By Ratke's application of this rule some odd results were produced. The little Koetheners were drilled for German in a book of the Bible (Genesis was selected), and then for Latin in a play of Terence.

Unlike many "theoretical notions" this precept of Ratke's comes more and more into favour as the schoolmaster increases in age and experience. But we must be careful to take our pupils with us; and this repeating the same thing over and over may seem to them what marking time would seem to soldiers who wanted to march. Even more than the last rule this is open to the objections that monotony is deadening, and perfect attainment of anything but words impossible. In keeping to a subject then we must not rely on simple repetition. The rule now accepted is thus stated by Diesterweg:—"Every subject of instruction should be viewed from as many sides as possible, and as varied exercises as possible should be set on one and the same thing." The art of the master is shown in disguising repetition and bringing known things into new connection, so that they may partially at least retain their freshness.

§ 14. IV. *First let the mother-tongue be studied, and teach everything through the mother-tongue, so that the learners attention may not be diverted to the language.*

We saw that Sturm, the leading schoolmaster of Renascence, tried to suppress the mother-tongue and substitute Latin for it. Against this a vigorous protest was made in this country by Mulcaster. And our language was never conquered by a foreign language, as German was conquered first by Latin and then by French. But "the tongues" have always had the lion's share of attention in the schoolroom, and though many have seen and Milton has said that "our understanding cannot in this body found itself but on sensible things," this truth is only now making its way into the schoolroom. Hitherto the foundation has hardly been laid before "the schoolmaster has stept in and staid the building by confounding the

language."[57] Ratke's protest against this will always be put to his credit in the history of education.

§ 15. V. *Everything without constraint.* "The young should not be beaten to make them learn or for not having learnt. It is compulsion and stripes that set young people against studying. Boys are often beaten for not having learnt, but they would have learnt had they been well taught. The human understanding is so formed that it has pleasure in receiving what it should retain: and this pleasure you destroy by your harshness. Where the master is skilful and judicious, the boys will take to him and to their lessons. Folly lurks indeed in the heart of the child and must be driven out with the rod; but not by the *teacher*."

Here at least there is nothing original in Ratke's precept. A goodly array of authorities have condemned learning "upon compulsion." This array extends at least as far as from Plato to Bishop Dupanloup. "In the case of the mind, no study pursued under compulsion remains rooted in the memory," says Plato.[58] "Everything depends," says Dupanloup, "on what the teacher induces his pupils to do *freely*: for authority is not constraint—it ought to be inseparable from respect and devotion. I will respect human liberty in the smallest child." As far as I have observed there is only one class of persons whom the authorities from Plato to Dupanloup have failed to convince, and that is the schoolmasters. This is the class to which I have belonged, and I should not be prepared to take Plato's counsel: "Bring up your boys in their studies without constraint and in a playful manner." (*Ib.*) At the same time I see the importance of self-activity, and there is no such thing as self-activity upon compulsion. You can no more hurry thought with the cane than you can hurry a snail with a pin. So without interest there can be no proper learning. Interest must be aroused—even in Latin Grammar. But if they could choose their own occupation, the boys, however interested in their work, would probably find something else more interesting still. We cannot get on, and never shall, without the *must*.

§ 16. VI. *Nothing may be learnt by heart.*

It has always been a common mistake in the schoolroom to confound the power of running along a sequence of sounds with a mastery of the thought with which those sounds should be connected. But, as I have remarked elsewhere (*supra*, p. 74, note), the two things, though different, are not

opposed. Too much is likely to be made of learning by heart, for of the two things the pupils find it the easier, and the teacher the more easily tested. We may, however, guard against the abuse without giving up the use.

§ 17. VII.[59] *Uniformity in all things.*

Both in the way of learning, and in the books, and the rules, a uniform method should be observed, says Ratke.

The right plan is for the learner to acquire familiar knowledge of one subject or part of a subject, and then use this for comparison when he learns beyond it. If the same method of learning is adopted throughout, this will render comparison more easy and more striking.[60]

§ 18. VIII. *The thing itself should come first, then whatever explains it.*

To those who do not with closed eyes cling to the method of their predecessors, this rule may seem founded on common-sense. Would any one but a "teacher," or a writer of school books, ever think of making children who do not know a word of French, learn about the French accents? And yet what Ratke said 250 years ago has not been disproved since: "Accidens rei priusquam rem ipsam quaerere prorsus absonum et absurdum esse videtur," which I take to mean: "Before the learner has a notion of the thing itself, it is folly to worry him about its accidents or even its properties, essential or unessential." *Ne modus rei ante rem.*[61]

This rule of Ratke's warns teachers against a very common mistake. The subject is *to them* in full view, and they make the most minute observations on it. But these things cannot be seen by their pupils; and even if the beginner could see these minutiæ, he would find in them neither interest nor advantage. But when we apply Ratke's principle more widely, we find ourselves involved in the great question whether our method should be based on synthesis or analysis, a question which Ratke's method did not settle for us.

§ 19. IX. *Everything by experience and examination of the parts.* Or as he states the rule in Latin: *Per inductionem et experimentum omnia.*

Nothing was to be received on authority, and this disciple of Bacon went beyond his master and took for his motto: *Vetustas cessit, ratio vicit* ("Age

has yielded, reason prevailed"); as if reason must be brand-new, and truth might wax old and be ready to vanish away.

§ 20. From these rules of his we see that Ratke did much to formulate the main principles of Didactics. He also deserves to be remembered among the methodizers who have tackled the problem—how to teach a language.

At Köthen the instructor of the lowest class had to talk with the children, and to take pains with their pronunciation. When they knew their letters (Ickelsamer's plan for reading Ratke seems to have neglected) the teacher read the Book of Genesis through to them, each chapter twice over, requiring the children to follow with eye and finger. Then the teacher began the chapter again, and read about four lines only, which the children read after him. When the book had been worked over in this way, the children were required to read it through without assistance. Reading once secured, the master proceeded to grammar. He explained, say, what a substantive was, and then showed instances in Genesis, and next required the children to point out others. In this way the grammar was verified throughout from Genesis, and the pupils were exercised in declining and conjugating words taken from the Book.

When they advanced to the study of Latin, they were given a *translation* of a play of Terence, and worked over it several times before they were shown the Latin.

The master then translated the play to them, each half-hour's work twice over. At the next reading, the master translated the first half-hour, and the boys translated the same piece the second. Having thus got through the play, they began again, and only the boys translated. After this there was a course of grammar, which was applied to the Terence, as the grammar of the mother-tongue had been to Genesis. Finally, the pupils were put through a course of exercises, in which they had to turn into Latin sentences imitated from the Terence, and differing from the original only in the number or person used.

Raumer gives other particulars, and quotes largely from the almost unreadable account of Kromayer, one of Ratke's followers, in order that we may have, as he says, a notion of the tediousness of the method. No doubt anyone who has followed me hitherto, will consider that this point has been brought out already with sufficient distinctness.

§ 21. When we compare Ratke's method with Ascham's, we find several points of agreement. Ratke would begin the study of a language by taking a model book, and working through it with the pupil a great many times. Ascham did the same. Each lecture according to his plan would be gone over "a dozen times at the least." Both construed to the pupil instead of requiring him to make out the sense for himself. Both Ratke and Ascham taught grammar not by itself, but in connection with the model book.

But the points of difference are still more striking. In one respect Ratke's plan was weak. It gave the pupils little to do, and made no use of the pen. Ascham's was better in this and also as a training in accuracy. Ascham was, as I have pointed out, a "complete retainer." Ratke was a "rapid impressionist." His system was a good deal like that which had great vogue in the early part of this century as the "Hamiltonian System." From the first the language was to be laid on "very thick," in the belief that "some of it was sure to stick." The impressions would be slight, and there would at first be much confusion between words which had a superficial resemblance, but accuracy it was thought would come in time.

§ 22. The contest between the two schools of thought of which Ascham and Ratke may be taken as representatives has continued till now, and within the last few years both parties have made great advances in method. But in nothing does progress seem slower than in education; and the plan of grammar-teaching in vogue fifty years ago was inferior to the methods advocated by the old writers.[62]

X.

COMENIUS.

(1592-1671).

§ 1. One of the most hopeful signs of the improvement of education is the rapid advance in the last thirty years of the fame of Comenius, and the growth of a large literature about the man and his ideas. Twenty-three years ago, when I first became interested in him, his name was hardly known beyond Germany. In English there was indeed an excellent life of him prefixed to a translation of his *School of Infancy*; but this work, by Daniel Benham (London, 1858), had not then, and has not now, anything like the circulation it deserves. A much more successful book has been Professor S. S. Laurie's *John Amos Comenius* (Cambridge University Press), and this is known to most, and should be to all, English students of education. By the Germans and French Comenius is now recognised as the man who first treated education in a scientific spirit, and who bequeathed the rudiments of a science to later ages. On this account the great library of pedagogy at Leipzig has been named in his honour the "Comenius Stiftung."

§ 2. John Amos Komensky or Comenius, the son of a miller, who belonged to the Moravian Brethren, was born, at the Moravian village of Niwnic, in 1592. Of his early life we know nothing but what he himself tells us in the following passage:—"Losing both my parents while I was yet a child, I began, through the neglect of my guardians, but at sixteen years of age to taste of the Latin tongue. Yet by the goodness of God, that taste bred such a thirst in me, that I ceased not from that time, by all means and endeavours, to labour for the repairing of my lost years; and now not only for myself, but for the good of others also. For I could not but pity others also in this respect, especially in my own nation, which is too slothful and careless in matter of learning. Thereupon I was continually full of thoughts for the finding out of some means whereby more might be inflamed with the love of learning, and whereby learning itself might be made more compendious, both in matter of the charge and cost, and of the labour belonging thereto, that so the youth might be brought by a more easy

method, unto some notable proficiency in learning."[63] With these thoughts in his head, he pursued his studies in several German towns, especially at Herborn in Nassau. Here he saw the Report on Ratke's method published in 1612 for the Universities of Jena and Giessen; and we find him shortly afterwards writing his first book, *Grammaticæ facilioris Præcepta*, which was published at Prag in 1616. On his return to Moravia, he was appointed to the Brethren's school at Prerau, but (to use his own words) "being shortly after at the age of twenty-four called to the service of the Church, because *that divine function* challenged all my endeavours (divinumque HOC AGE præ oculis erat) these scholastic cares were laid aside."[64] His pastoral charge was at Fulneck, the headquarters of the Brethren. As such it soon felt the effects of the Battle of Prag, being in the following year (1621) taken and plundered by the Spaniards. On this occasion Comenius lost his MSS. and almost everything he possessed. The year after his wife died, and then his only child. In 1624 all Protestant ministers were banished, and in 1627 a new decree extended the banishment to Protestants of every description. Comenius bore up against wave after wave of calamity with Christian courage and resignation, and his writings at this period were of great value to his fellow-sufferers.

§ 3. For a time he found a hiding-place in the family of a Bohemian nobleman, Baron Sadowsky, at Slaupna, in the Bohemian mountains, and in this retirement, his attention was again directed to the science of teaching. The Baron had engaged Stadius, one of the proscribed, to educate his three sons, and, at Stadius' request, Comenius wrote "some canons of a better method," for his use. We find him, too, endeavouring to enrich the literature of his mother-tongue, making a metrical translation of the Psalms of David, and even writing imitations of Virgil, Ovid, and Cato's *Distichs*.

In 1627, however, the persecution waxed so hot, that Comenius, with most of the Brethren, had to flee their country, never to return. On crossing the border, Comenius and the exiles who accompanied him knelt down, and prayed that God would not suffer His truth to fail out of their native land.

§ 4. Comenius had now, as Michelet says, lost his country and found his country, which was the world. Many of the banished, and Comenius among them, settled at the Polish town of Leszna, or, as the Germans call it, Lissa, near the Silesian frontier. Here there was an old-established school of the Brethren, in which Comenius found employment. Once more engaged in

education, he earnestly set about improving the traditional methods. As he himself says,[65] "Being by God's permission banished my country with divers others, and forced for my sustenance to apply myself to the instruction of youth, I gave my mind to the perusal of divers authors, and lighted upon many which in this age have made a beginning in reforming the method of studies, as Ratichius, Helvicus, Rhenius, Ritterus, Glaumius, Cæcilius, and who indeed should have had the first place, Joannes Valentinus Andreæ, a man of a nimble and clear brain; as also Campanella and the Lord Verulam, those famous restorers of philosophy;—by reading of whom I was raised in good hope, that at last those so many various sparks would conspire into a flame; yet observing here and there some defects and gaps as it were, I could not contain myself from attempting something that might rest upon an immovable foundation, and which, if it could be once found out, should not be subject to any ruin. Therefore, after many workings and tossings of my thoughts, by reducing everything to the immovable laws of Nature, I lighted upon my *Didactica Magna*, which shows the art of readily and solidly teaching all men all things."

§ 5. This work did not immediately see the light, but in 1631 Comenius published a book which made him and the little Polish town where he lived known throughout Europe and beyond it. This was the *Janua Linguarum Reserata*, or "Gate of Tongues unlocked." Writing about it many years afterwards he says that he never could have imagined that that little work, fitted only for children (*puerile istud opusculum*), would have been received with applause by all the learned world. Letters of congratulation came to him from every quarter; and the work was translated not only into Greek, Bohemian, Polish, Swedish, Belgian, English, French, Spanish, Italian, Hungarian, but also into Turkish, Arabic, Persian, and even "Mongolian, which is familiar to all the East Indies." (Dedication of *Schola Ludus* in vol. i. of collected works.)

§ 6. Incited by the applause of the learned, Comenius now planned a scheme of universal knowledge, to impart which a series of works would have to be written, far exceeding what the resources and industry of one man, however great a scholar, could produce. He therefore looked about for a patron to supply money for the support of himself and his assistants, whilst these works were in progress. "The vastness of the labours I contemplate," he writes to a Polish nobleman, "demands that I should have

a wealthy patron, whether we look at their extent, or at the necessity of securing assistants, or at the expenses generally."

§ 7. At Leszna there seemed no prospect of his obtaining the aid he required; but his fame now procured him invitations from distant countries. First he received a call to improve the schools of Sweden. After declining this he was induced by his English friends to undertake a journey to London, where Parliament had shown its interest in the matter of education, and had employed Hartlib,[66] an enthusiastic admirer of Comenius, to attempt a reform. Probably through his family connections, Hartlib was on intimate terms with Comenius, and he had much influence on his career. It would seem that Comenius, though never tired of forming magnificent schemes, hung back from putting anything into a definite shape. After the appearance of the *Janua Linguarum Reserata*, he planned a *Janua Rerum*, and even allowed that title to appear in "the list of new books to come forth at the next Mart at Frankford."[67] But again he hesitated, and withdrew the announcement. Here Hartlib came in, and forced him into print without his intending or even knowing it ("præter meam spem et me inconsulto"; preface to *Conatuum Pansophicorum Dilucidatio*, 1638). Hartlib begged of Comenius a sketch of his great scheme, and with apologies to the author for not awaiting his consent, he published it at Oxford in 1637, under the title of *Conatuum Comenianorum Præludia*. Comenius accepted the *fait accompli* with the best grace he could—pleased at the stir the book made in the learned world, but galled by criticisms, especially by doubts of his orthodoxy. To refute the cavillers, he wrote a tract called *Conatuum Pansophicorum Dilucidatio* which was published in 1638. In 1639 Hartlib issued in London a new duodecimo edition of the *Præludia* (or as he then called it, *Prodromus*) and the *Dilucidatio*, adding a dissertation by Comenius on the study of Latin. Now, when everything seemed ripe for a change in education, and Comenius himself was on his way to England, Hartlib translated the *Prodromus*, and when Comenius had come he published it with the title, *A Reformation of Schools*, 1642.[68]

§ 8. It was no doubt by Hartlib's influence that Parliament had been led to summon Comenius, and at any other time the visit might have been "the occasion of great good to this island," but *inter arma silent magistri*, and Comenius went away again. This is the account he himself has left us:—

"When seriously proposing to abandon the thorny studies of Didactics, and pass on to the pleasing studies of philosophical truth, I find myself again among the same thorns.... After the *Pansophiæ Prodromus* had been published and dispersed through various kingdoms of Europe, many of the learned approved of the object and plan of the work, but despaired of its ever being accomplished by one man alone, and therefore advised that a college of learned men should be instituted to carry it into effect. Mr. S. Hartlib, who had forwarded the publication of the *Pansophiæ Prodromus* in England, laboured earnestly in this matter, and endeavoured, by every possible means, to bring together for this purpose a number of men of intellectual activity. And at length, having found one or two, he invited me also, with many very strong entreaties. My people having consented to the journey, I came to London on the very day of the autumnal equinox (September 22, 1641), and there at last learnt that I had been invited by the order of the Parliament. But as the Parliament, the King having then gone to Scotland [August 10], was dismissed for a three months' recess [not quite three months, but from September 9 to October 20], I was detained there through the winter, my friends mustering what pansophic apparatus they could, though it was but slender.... The Parliament meanwhile, having re assembled, and our presence being known, I had orders to wait until they should have sufficient leisure from other business to appoint a Commission of learned and wise men from their body for hearing us and considering the grounds of our design. They communicated also beforehand their thoughts of assigning to us some college with its revenues, whereby a certain number of learned and industrious men called from all nations might be honourably maintained, either for a term of years or in perpetuity. There was even named for the purpose *The Savoy* in London; *Winchester College* out of London was named; and again nearer the city, *Chelsea College*, inventories of which and of its revenues were communicated to us, so that nothing seemed more certain than that the design of the great Verulam, concerning the opening somewhere of a Universal College, devoted to the advancement of the Sciences could be carried out. But the rumour of the Insurrection in Ireland, and of the massacre in one night of more than 200,000 English [October, November], and the sudden departure of the King from London [January 10, 1641-2], and the plentiful signs of the bloody war about to break out disturbed these plans, and obliged me to hasten my return to my own people."[69]

§ 9. While Comenius was in England, where he stayed till August, 1642, he received an invitation to France. This invitation, which he did not accept, came perhaps through his correspondent Mersenne, a man of great learning, who is said to have been highly esteemed and often consulted by Descartes. It is characteristic of the state of opinion in such matters in those days, that Mersenne tells Comenius of a certain Le Maire, by whose method a boy of six years old, might, with nine months' instruction, acquire a perfect knowledge of three languages. Mersenne also had dreams of a universal alphabet, and even of a universal language.

§ 10. Comenius' hopes of assistance in England being at an end, he thought of returning to Leszna; but a letter now reached him from a rich Dutch merchant, Lewis de Geer, who offered him a home and means for carrying out his plans. This Lewis de Geer, "the Grand Almoner of Europe," as Comenius calls him, displayed a princely munificence in the assistance he gave the exiled Protestants. At this time he was living at Nordcoping in Sweden. Comenius having now found such a patron as he was seeking, set out from England and joined him there.

§ 11. Soon after the arrival of Comenius in Sweden, the great Oxenstiern sent for him to Stockholm, and with John Skyte, the Chancellor of Upsal University, examined him and his system. "These two," as Comenius says, "exercised me in colloquy for four days, and chiefly the most illustrious Oxenstiern, that eagle of the North (*Aquila Aquilonius*). He inquired into the foundations of both my schemes, the Didactic and the Pansophic, so searchingly, that it was unlike anything that had been done before by any of my learned critics. In the first two days he examined the Didactics, and finally said: 'From an early age I perceived that our Method of Studies generally in use is a harsh and crude one (*violentum quiddam*), but where the thing stuck I could not find out. At length, having been sent by my King of glorious memory [*i.e.*, by Gustavus Adolphus], as ambassador into Germany, I conversed on the subject with various learned men. And when I had heard that Wolfgang Ratichius was toiling at an amended Method I had no rest of mind till I had him before me, but instead of talking on the subject, he put into my hands a big quarto volume. I swallowed this trouble, and having turned over the whole book, I saw that he had detected well enough the maladies of our schools but the remedies he proposed did not seem to me sufficient. Yours, Mr. Comenius, rest on firmer foundations. Go

on with the work.' I answered that I had done all I could in those matters, and must now go on to others. 'I know,' said he, 'that you are toiling at greater affairs, for I have read your *Prodromus Pansophiæ*. That we will discuss to-morrow, I must now to public business.' Next day he began on my Pansophic attempts, and examined them with still greater severity. 'Are you a man,' he asked, 'who can bear contradiction?' 'I can,' said I, 'and for that reason my *Prodromus* or preliminary sketch was sent out first (not indeed that I sent it out myself, this was done by friends), that it might meet with criticism. And if we seek the criticism of all and sundry, how much more from men of mature wisdom and heroic reason?' He began accordingly to discourse against the hope of a better state of things arising from a rightly instituted study of Pansophia; first, objecting political reasons, then what was said in Scripture about 'the last times.' All which objections I so answered that he ended with these words: 'Into no one's mind do I think such things have come before. Stand upon these grounds of yours; so shall we some time come to agreement, or there will be no way left. My advice, however,' added he, 'is that you first do something for the schools, and bring the study of the Latin tongue to a greater facility; thus you will prepare the way for those greater matters.'" As Skyte and afterwards De Geer gave the same advice, Comenius felt himself constrained to follow it; so he agreed to settle at Elbing, in Prussia, and there write a work on teaching, in which the principles of the *Didactica Magna* should be worked out with especial reference to teaching languages. Notwithstanding the remonstrances of his English friends, to which Comenius would gladly have listened, he was kept by Oxenstiern and De Geer strictly to his agreement, and thus, much against his will, he was held fast for eight years in what he calls the "miry entanglements of logomachy."

§ 12. Elbing, where, after a journey to Leszna to fetch his family (for he had married again), Comenius now settled, is in West Prussia, thirty-six miles south-east of Dantzic. From 1577 to 1660 an English trading company was settled here, with which the family of Hartlib was connected. This perhaps was one reason why Comenius chose this town for his residence. But although he had a grant of £300 a year from Parliament, Hartlib, instead of assisting with money, seems at this time to have himself needed assistance, for in October, 1642, Comenius writes to De Geer that he fears Fundanius and Hartlib are suffering from want, and that he intends for

them £200 promised by the London booksellers; he suggests that De Geer shall give them £30 each meanwhile. (Benham, p. 63.)

§ 13. The relation between Comenius and his patron naturally proved a difficult one. The Dutchman thought that as he supported Comenius, and contributed something more for the assistants, he might expect of Comenius that he would devote all his time to the scholastic treatise he had undertaken. Comenius, however, was a man of immense energy and of widely extended sympathies and connections. He was a "Bishop" of the religious body to which he belonged, and in this capacity he engaged in controversy, and attended some religious conferences. Then again, pupils were pressed upon him, and as money to pay five writers whom he kept at work was always running short, he did not decline them. De Geer complained of this, and supplies were not furnished with wonted regularity. In 1647 Comenius writes to Hartlib that he is almost overwhelmed with cares, and sick to death of writing begging-letters. Yet in this year he found means to publish a book *On the Causes of this* (*i.e.*, the Thirty Years) *War*, in which the Roman Catholics are attacked with great bitterness—a bitterness for which the position of the writer affords too good an excuse.

§ 14. The year 1648 brought with it the downfall of all Comenius' hopes of returning to his native land. The Peace of Westphalia was concluded without any provision being made for the restoration of the exiles. But though thus doomed to pass the remaining years of his life in banishment, Comenius, in this year, seemed to have found an escape from all his pecuniary difficulties. The Senior Bishop, the head of the Moravian Brethren, died, and Comenius was chosen to succeed him. In consequence of this, Comenius returned to Leszna, where due provision was made for him by the Brethren. Before he left Elbing, however, the fruit of his residence there, the *Methodus Linguarum Novissima*, had been submitted to a commission of learned Swedes, and approved of by them. The MS. went with him to Leszna, where it was published.

§ 15. As head of the Moravian Church, there now devolved upon Comenius the care of all the exiles, and his widespread reputation enabled him to get situations for many of them in all Protestant countries. But he was now so much connected with the science of education, that even his post at Leszna did not prevent his receiving and accepting a call to reform the schools in Transylvania. A model school was formed at Saros-Patak,

where there was a settlement of the banished Brethren, and in this school Comenius laboured from 1650 till 1654. At this time he wrote his most celebrated book, which is indeed only an abridgment of his *Janua* with the important addition of pictures, and sent it to Nürnberg, where it appeared three years later (1657). This was the famous *Orbis Pictus*.

§ 16. Full of trouble as Comenius' life had hitherto been, its greatest calamity was still before him. After he was again settled at Leszna, Poland was invaded by the Swedes, on which occasion the sympathies of the Brethren were with their fellow-Protestants, and Comenius was imprudent enough to write a congratulatory address to the Swedish King. A peace followed, by the terms of which, several towns, and Leszna among them, were made over to Sweden; but when the King withdrew, the Poles took up arms again, and Leszna, the headquarters of the Protestants, the town in which the chief of the Moravian Brethren had written his address welcoming the enemy, was taken and plundered.

Comenius and his family escaped, but his house was marked for special violence, and nothing was preserved. His sole remaining possessions were the clothes in which he and his family travelled. All his books and manuscripts were burnt, among them his valued work on Pansophia, and a Latin-Bohemian and Bohemian-Latin Dictionary, giving words, phrases, idioms, adages, and aphorisms—a book on which he had been labouring for forty years. "This loss," he writes, "I shall cease to lament only when I cease to breathe."

§ 17. After wandering for some time about Germany, and being prostrated by fever at Hamburg, he at length came to Amsterdam, where Lawrence De Geer, the son of his deceased patron, gave him an asylum. Here were spent the remaining years of his life in ease and dignity. Compassion for his misfortunes was united with veneration for his learning and piety. He earned a sufficient income by giving instruction in the families of the wealthy; and by the liberality of De Geer he was enabled to publish a fine folio edition of all his writings on Education (1657). His political works, however, were to the last a source of trouble to him. His hostility to the Pope and the House of Hapsburg made him the dupe of certain "prophets" whose soothsayings he published as *Lux in Tenebris*. One of these prophets, who had announced that the Turk was to take Vienna, was executed at Pressburg, and the *Lux in Tenebris* at the same time

burnt by the hangman. Before the news of this disgrace reached Amsterdam, Comenius was no more. He died in the year 1671, at the advanced age of eighty, and with him terminated the office of Chief Bishop among the Moravian Brethren.

§ 18. His long life had been full of trouble, and he saw little of the improvements he so earnestly desired and laboured after, but he continued the struggle hopefully to the end. In his seventy-seventh year he wrote these memorable words: "I thank God that I have all my life been a man of aspirations.... For the longing after good, however it spring up in the heart, is always a rill flowing from the Fountain of all good—from God."[70] Labouring in this spirit he did not toil in vain, and the historians of education have agreed in ranking him among the most influential as well as the most noble-minded of the Reformers.

§ 19. Before Comenius, no one had brought the mind of a philosopher to bear practically on the subject of education. Montaigne and Bacon had advanced principles, leaving others to see to their application. A few able schoolmasters, Ascham, *e.g.*, had investigated new methods, but had made success in teaching the test to which they appealed, rather than any abstract principle. Comenius was at once a philosopher who had learnt of Bacon, and a schoolmaster who had earned his livelihood by teaching the rudiments. Dissatisfied with the state of education as he found it, he sought for a better system by an examination of the laws of Nature. Whatever is thus established is indeed on an immovable foundation, and, as Comenius himself says, "not liable to any ruin." It will hardly be disputed, when broadly stated, that there are laws of Nature which must be obeyed in dealing with the mind, as with the body. No doubt these laws are not so easily established in the first case as in the second, nor can we find them without much "groping" and some mistakes; but whoever in any way assists or even tries to assist in the discovery, deserves our gratitude; and greatly are we indebted to him who first boldly set about the task, and devoted to it years of patient labour.

§ 20. Comenius has left voluminous Latin writings. Professor Laurie gives us the titles of the books connected with education, and they are in number forty-two: so there must be much repetition and indeed retractation; for Comenius was always learning, and one of his last books was *Ventilabrum Sapientiæ, sive sapienter sua retractandi Ars—i.e.*, "Wisdom's

Winnowing-machine, or the Art of wisely withdrawing one's own assertions." We owe much to Professor Laurie, who has served as a *ventilabrum* and left us a succinct and clear account of the Reformer's teaching. I have read little of the writings of Comenius except the German translation of the "Great Didactic," from which the following is taken.

§ 21. We live, says Comenius, a threefold life—a vegetative, an animal, and an intellectual or spiritual. Of these, the first is perfect in the womb, the last in heaven. He is happy who comes with healthy body into the world, much more he who goes with healthy spirit out of it. According to the heavenly idea, man should (1) know all things; (2) should be master of all things, and of himself; (3) should refer everything to God. So that within us Nature has implanted the seeds of (1) learning, (2) virtue, and (3) piety. To bring these seeds to maturity is the object of education. All men require education, and God has made children unfit for other employments that they may have leisure to learn.

§ 22. But schools have failed, and instead of keeping to the true object of education, and teaching the foundations, relations, and intentions of all the most important things, they have neglected even the mother tongue, and confined the teaching to Latin; and yet that has been so badly taught, and so much time has been wasted over grammar rules and dictionaries, that from ten to twenty years are spent in acquiring as much knowledge of Latin as is speedily acquired of any modern tongue.

§ 23. The cause of this want of success is that the system does not follow Nature. Everything natural goes smoothly and easily. There must therefore be no pressure. Learning should come to children as swimming to fish, flying to birds, running to animals. As Aristotle says, the desire of knowledge is implanted in man: and the mind grows as the body does—by taking proper nourishment, not by being stretched on the rack.

§ 24. If we would ascertain how teaching and learning are to have good results, we must look to the known processes of Nature and Art. A man sows seed, and it comes up he knows not how, but in sowing it he must attend to the requirements of Nature. Let us then look to Nature to find out how knowledge takes root in young minds. We find that Nature waits for the fit time. Then, too, she has prepared the material before she gives it form. In our teaching we constantly run counter to these principles of hers.

We give instruction before the young minds are ready to receive it. We give the form before the material. Words are taught before the things to which they refer. When a foreign tongue is to be taught, we commonly give the form, *i.e.*, the grammatical rules, before we give the material, *i.e.*, the language, to which the rules apply. We should begin with an author, or properly prepared translation-book, and abstract rules should never come before the examples.

§ 25. Again, Nature begins each of her works with its inmost part. Moreover, the crude form comes first, then the elaboration of the parts. The architect, acting on this principle, first makes a rough plan or model, and then by degrees designs the details; last of all he attends to the ornamentation. In teaching, then, let the inmost part, *i.e.*, the understanding of the subject, come first; then let the thing understood be used to exercise the memory, the speech, and the hands; and let every language, science, and art be taught first in its rudimentary outline; then more completely with examples and rules; finally, with exceptions and anomalies. Instead of this, some teachers are foolish enough to require beginners to get up all the anomalies in Latin Grammar, and the dialects in Greek.

§ 26. Again, as Nature does nothing *per saltum*, nor halts when she has begun, the whole course of studies should be arranged in strict order, so that the earlier studies prepare the way for the later. Every year, every month, every day and hour even, should have its task marked out beforehand, and the plan should be rigidly carried out. Much loss is occasioned by absence of boys from school, and by changes in the instruction. Iron that might be wrought with one heating should not be allowed to get cold, and be heated over and over again.

§ 27. Nature protects her work from injurious influences, so boys should be kept from injurious companionships and books.

§ 28. In a chapter devoted to the principles of easy teaching, Comenius lays down, among rules similar to the foregoing, that children will learn if they are taught only what they have a desire to learn, with due regard to their age and the method of instruction, and especially when everything is first taught by means of the senses. On this point Comenius laid great stress, and he was the first who did so. Education should proceed, he said, in the following order: first, educate the senses, then the memory, then the

intellect; last of all the critical faculty. This is the order of Nature. The child first perceives through the senses. "*Nihil est in intellectu quod non prius fuerit in sensu.* Everything in the intellect must have come through the senses." These perceptions are stored in the memory, and called up by the imagination.[71] By comparing one with another, the understanding forms general ideas, and at length the judgment decides between the false and the true. By keeping to this order, Comenius believed it would be possible to make learning entirely pleasant to the pupils, however young. Here Comenius went even further than the Jesuits. They wished to make learning pleasant, but despaired of doing this except by external influences, emulation and the like. Comenius did not neglect external means to make the road to learning agreeable. Like the Jesuits, he would have short school-hours, and would make great use of praise and blame, but he did not depend, as they did almost exclusively, on emulation. He would have the desire of learning fostered in every possible way—by parents, by teachers, by school buildings and apparatus, by the subjects themselves, by the method of teaching them, and lastly, by the public authorities. (1) The parents must praise learning and learned men, must show children beautiful books, &c., must treat the teachers with great respect. (2) The teacher must be kind and fatherly, he must distribute praise and reward, and must always, where it is possible, give the children something to look at. (3) The school buildings must be light, airy, and cheerful, and well furnished with apparatus, as pictures, maps, models, collections of specimens. (4) The subjects taught must not be too hard for the learner's comprehension, and the more entertaining parts of them must be especially dwelt upon. (5) The method must be natural, and everything that is not essential to the subject or is beyond the pupil must be omitted. Fables and allegories should be introduced, and enigmas given for the pupils to guess. (6) The authorities must appoint public examinations and reward merit.

§ 29. Nature helps herself in various ways, so the pupils should have every assistance given them. It should especially be made clear what the pupils are to learn, and how they should learn it.

§ 30. The pupils should be punished for offences against morals only. If they do not learn, the fault is with the teacher.

§ 31. One of Comenius's most distinctive principles was that there should no longer be "*infelix divortium rerum et verborum*, the wretched divorce of

words from things" (the phrase, I think, is Campanella's), but that knowledge of *things* and words should go together. This, together with his desire of submitting everything to the pupil's senses, would have introduced a great change into the course of instruction, which was then, as it has for the most part continued, purely literary. We should learn, says Comenius, as much as possible, not from books, but from the great book of Nature, from heaven and earth, from oaks and beeches.

§ 32. When languages are to be learnt, he would have them taught separately. Till the pupil is from eight to ten years old, he should be instructed only in the mother-tongue, and about things. Then other languages can be acquired in about a year each; Latin (which is to be studied more thoroughly) in about two years. Every language must be learnt by use rather than by rules, *i.e.*, it must be learnt by hearing, reading and re-reading, transcribing, attempting imitations in writing and orally, and by using the language in conversation. Rules assist and confirm practice, but they must come after, not before it. The first exercises in a language should take for their subject something of which the sense is already known, so that the mind may be fixed on the words and their connections.[72] The Catechism and Bible History may be used for this purpose.

§ 33. Considering the classical authors not suited to boys' understanding, and not fit for the education of Christians, Comenius proposed writing a set of Latin manuals for the different stages between childhood and manhood: these were to be called "Vestibulum," "Janua," "Palatium" or "Atrium," "Thesaurus." The "Vestibulum," "Janua," and "Atrium" were really carried out.

§ 34. In Comenius's scheme there were to be four kinds of schools for a perfect educational course:—1st, the mother's breast for infancy; 2nd, the public vernacular school for children, to which all should be sent from six years old till twelve; 3rd, the Latin school or Gymnasium; 4th, residence at a University and travelling, to complete the course. The public schools were to be for all classes alike, and for girls[73] as well as boys.

§ 35. Most boys and girls in every community would stop at the vernacular school; and as this school is a very distinctive feature in Comenius's plan, it may be worth while to give his programme of studies. In this school the children should learn—1st, to read and write the mother-

tongue *well*, both with writing and printing letters; 2nd, to compose grammatically; 3rd, to cipher; 4th, to measure and weigh; 5th, to sing, at first popular airs, then from music; 6th, to say by heart, sacred psalms and hymns; 7th, Catechism, Bible History, and texts; 8th, moral rules, with examples; 9th, economics and politics, as far as they could be understood; 10th, general history of the world; 11th, figure of the earth and motion of stars, &c., physics and geography, especially of native land; 12th, general knowledge of arts and handicrafts.

§ 36. Each school was to be divided into six classes, corresponding to the six years the pupil should spend in it. The hours of work were to be, in school, two hours in the morning and two in the afternoon, with nearly the same amount of private study. In the morning the mind and memory were to be exercised, in the afternoon the hands and voice. Each class was to have its proper lesson-book written expressly for it, so as to contain everything that class had to learn. When a lesson was to be got by heart from the book, the teacher was first to read it to the class, explain it, and re-read it; the boys then to read it aloud by turns till one of them offered to repeat it without book; the others were to do the same as soon as they were able, till all had repeated it. This lesson was then to be worked over again as a writing lesson, &c. In the higher forms of the vernacular school a modern language was to be taught and duly practised.

§ 37. Here we see a regular school course projected which differed essentially from the only complete school course still earlier, that of the Jesuits. In education Comenius was immeasurably in advance of Loyola and Aquaviva. Like the great thinkers, Pestalozzi and Froebel, who most resemble him, he thought of the development of the child from its birth; and in a singularly wise little book, called *Schola materni gremii*, or "School of the Mother's Breast," he has given advice for bringing up children to the age of six.[74]

§ 38. Very interesting are the hints here given, in which we get the first approaches to Kindergarten training. Comenius saw that, much as their elders might do to develop children's powers of thought and expression, "yet children of the same age and the same manners and habits are of greater service still. When they talk or play together, they sharpen each other more effectually; for the one does not surpass the other in depth of invention, and there is among them no assumption of superiority of the one

over the other, only love, candour, free questionings and answers" (*School of Infancy*, vi, 12, p. 38).[75] The constant activity of children must be provided for. "It is better to play than to be idle, for during play the mind is intent on some object which often sharpens the abilities. In this way children may be early exercised to an active life without any difficulty, since Nature herself stirs them up to be doing something" (*Ib.* ix, 15, p. 55). "In the second, third, fourth years, &c., let their spirits be stirred up by means of agreeable play with them or their playing among themselves.... Nay, if some little occupation can be conveniently provided for the child's eyes, ears, or other senses, these will contribute to its vigour of mind and body" (*Ib.* vi, 21, p. 31).

§ 39. We have the usual cautions against forcing. "Early fruit is useful for the day, but will not keep; whereas late fruit may be kept all the year. As some natural capacities would fly, as it were, before the sixth, the fifth, or even the fourth year, yet it will be beneficial rather to restrain than permit this; but very much worse to enforce it." "It is safer that the brain be rightly consolidated before it begin to sustain labours: in a little child the whole *bregma* is scarcely closed and the brain consolidated within the fifth or sixth year. It is sufficient, therefore, for this age to comprehend spontaneously, imperceptibly and as it were in play, so much as is employed in the domestic circle" (*Ib.* chap. xi).

§ 40. One disastrous tendency has always shown itself in the schoolroom —the tendency to sever all connection between studies in the schoolroom and life outside. The young pack away their knowledge as it were in water-tight compartments, where it may lie conveniently till the scholastic voyage is over and it can be again unshipped.[76] Against this tendency many great teachers have striven, and none more vigorously than Comenius. Like Pestalozzi he sought to resolve everything into its simplest elements, and he finds the commencements before the school age. In the *School of Infancy* he says (speaking of rhetoric), "My aim is to shew, although this is not generally attended to, that the roots of all sciences and arts in every instance arise as early as in the tender age, and that on these foundations it is neither impossible nor difficult for the whole superstructure to be laid; provided always that we act reasonably with a reasonable creature" (viij, 6, p. 46). This principle he applies in his chapter, "How children ought to be accustomed to an active life and perpetual employment" (chap. vij). In the

fourth and fifth year their powers are to be drawn out in mechanical or architectural efforts, in drawing and writing, in music, in arithmetic, geometry, and dialectics. For arithmetic in the fourth, fifth, or sixth year, it will be sufficient if they count up to twenty; and they may be taught to play at "odd and even." In geometry they may learn in the fourth year what are lines, what are squares, what are circles; also the usual measures—foot, pint, quart, &c., and soon they should try to measure and weigh for themselves. Similar beginnings are found for other sciences such as physics, astronomy, geography, history, economics, and politics. "The elements of *geography* will be during the course of the first year and thenceforward, when children begin to distinguish between their cradles and their mother's bosom" (vj, 6, p. 34). As this geographical knowledge extends, they discover "what a field is, what a mountain, forest, meadow, river" (iv, 9, p. 17). "The beginning of *history* will be, to be able to remember what was done yesterday, what recently, what a year ago."[77] (*Ib.*)

§ 41. In this book Comenius is careful to provide children with occupation for "*mind and hand*" (iv, 10, p. 18). Drawing is to be practised by all. "It matters not," says Comenius, "whether the objects be correctly drawn or otherwise *provided that they afford delight to the mind*."[78]

§ 42. We see then that this restless thinker considered the entire course of a child's bringing-up from the cradle to maturity; and we cannot doubt that Raumer is right in saying, "The influence of Comenius on subsequent thinkers and workers in education, especially on the Methodizers, is incalculable." (*Gesch. d. P.*, ij, "Comenius," § 10.)

Before we think of his methods and school books, let us inquire what he did for education that has proved to be on a solid foundation and "not liable to any ruin."

§ 43. He was the first to reach a standpoint which was and perhaps always will be above the heads of "the practical men," and demand *education for all*. "We design for all who have been born human beings, general instruction to fit them for everything human. They must, therefore, as far as possible be taught together, so that they may mutually draw each other out, enliven and stimulate. Of the 'mother-tongue school' the end and aim will be, that all the youth of both sexes between the sixth and the

twelfth or thirteenth years be taught those things which will be useful to them all their life long."[79]

In these days we often hear controversies between the men of science and the ministers of religion. It is as far beyond my intention as it is beyond my abilities to discuss how far the antithesis between religion and science is a true one; but our subject sometimes forces us to observe that religion and science often bring thinkers by different paths to the same result; *e.g.*, they both refuse to recognise class distinctions and make us see an essential unity underlying superficial variations. In Comenius we have an earnest Christian minister who was also an enthusiast for science. Moreover he was without social and virtually without national restrictions, and he was thus in a good position for expressing freely and without bias what both his science and his religion taught him. "Not only are the children of the rich and noble to be drawn to the school, but all alike, gentle and simple, rich and poor, boys and girls, in great towns and small, down to the country villages. And for this reason. Every one who is born a human being is born with this intent—that he should be a human being, that is, a reasonable creature ruling over the other creatures and bearing the likeness of his Maker." (*Didactica M.* ix, § 1.) This sounds to me nobler than the utterances of Rousseau and the French Revolutionists, not to mention Locke who fell back on considering merely "the gentleman's calling." Even Bishop Butler a century after Comenius hardly takes so firm a ground, though he lays it down that "children have as much right to some proper education as to have their lives preserved."[80]

§ 44. The first man who demanded training for every human being *because he or she was a human being* must always be thought of with respect and gratitude by all who care either for science or religion. It has taken us 250 years to reach the standpoint of Comenius; but we have reached it, or almost reached it at last, and when we have once got hold of the idea we are not likely to lose it again. The only question is whether we shall not go on and in the end agree with Comenius that the primary school shall be for rich and poor alike. At present the practical men, in England especially, have things all their own way; but their horizon is and must be very limited. They have already had to adjust themselves to many things which their predecessors declared to be "quite impracticable—indeed

impossible." May not their successors in like manner get accustomed to other "impossible" things, this scheme of Comenius among them?

§ 45. The champions of realism have always recognised Comenius as one of their earliest leaders. Bacon had just given voice to the scientific spirit which had at length rebelled against the literary spirit dominant at the Renascence, and had begun to turn from all that had been thought and said about Nature, straight to Nature herself. Comenius was the professed disciple of "the noble Verulam, who," said he, "has given us the true key of Nature." Furnished with this key, Comenius would unlock the door of the treasure-house for himself. "It grieved me," he says, "that I saw most noble Verulam present us indeed with a true key of Nature, but not to open the secrets of Nature, only shewing us by a few examples how they were to be opened, and leave [*i.e.*, leaving] the rest to depend on observations and inductions continued for several ages." Comenius thought that by the light of the senses, of reason, and of the Bible, he might advance faster. "For what? Are not we as well as the old philosophers placed in Nature's garden? Why then do we not cast about our eyes, nostrils, and ears as well as they? Why should we learn the works of Nature of any other master rather than of these our senses? Why do we not, I say, turn over the living book of the world instead of dead papers? In it we may contemplate more things and with greater delight and profit than any one can tell us. If we have anywhere need of an interpreter, the Maker of Nature is the best interpreter Himself." (Preface to *Naturall Philosophie reformed*. English trans., 1651.)

§ 46. Several things are involved in this so-called "realism." First, Comenius would fix the mind of learners on material objects. Secondly, he would have them acquire their notions of these for themselves through the senses. From these two principles he drew the corollary that the vast accumulation of traditional learning and literature must be thrown overboard.

§ 47. The demand for the study of things has been best formulated by one of the greatest masters of words, by Milton. "Because our understanding cannot in the body found itself but on sensible things, nor arrive so clearly to the knowledge of God and things invisible, as by orderly conning over the visible and inferior creature, the same method is necessarily to be followed in all discreet teaching." (*To Hartlib.*) Its material surroundings then are to be the subjects on which the mind of the child must be fixed.

This being settled, Comenius demands that the child's knowledge shall not be *verbal* but *real* realism, knowledge derived at first hand through the senses.[81]

§ 48. On this subject Comenius may speak for himself: "The ground of this business is, that sensual objects [we now say *sensible*: why not *sensuous*?] be rightly presented to the senses, for fear they may not be received. I say, and say it again aloud, that this last is the foundation of all the rest: because we can neither act nor speak wisely, unless we first rightly understand all the things which are to be done and whereof we have to speak. Now there is nothing in the understanding which was not before in the sense. And therefore to exercise the senses well about the right perceiving the differences of things will be to lay the grounds for all wisdom and all wise discourse and all discreet actions in one's course of life. Which, because it is commonly neglected in Schools, and the things that are to be learned are offered to scholars without their being understood or being rightly presented to the senses, it cometh to pass that the work of teaching and learning goeth heavily onward and affordeth little benefit." (Preface to *Orbis Pictus*, Hoole's trans. A.D. 1658.)

§ 49. Without going into any metaphysical discussion, we must all agree that a vast amount of impressions come to children through the senses, and that it is by the exercise of the senses that they learn most readily. As Comenius says: "The senses (being the main guides of childhood, because therein the mind doth not as yet raise up it self to an abstracted contemplation of things) evermore seek their own objects; and if these be away, they grow dull, and wry themselves hither and thither out of a weariness of themselves: but when their objects are present, they grow merry, wax lively, and willingly suffer themselves to be fastened upon them till the thing be sufficiently discerned." (P. to *Orbis.*) This truth lay at the root of most of the methods of Pestalozzi; and though it has had little effect on teaching in England (where for the word *anschaulich* there is no equivalent), everything that goes on in a German Folkschool has reference to it.

§ 50. For children then Comenius gave good counsel when he would have their senses exercised on the world about them. But after all, whatever may be thought of the proposition that all knowledge comes through the senses, we must not ignore what is bequeathed to us, both in science and in

literature. Comenius says: "And now I beseech you let this be our business that the schools may cease to *persuade* and begin to *demonstrate*; cease to *dispute* and begin to *look*; cease lastly to *believe* and begin to *know*. For that Aristotellical maxim '*Discentem oportet credere*, A learner must believe,' is as tyrannical as it is dangerous; so also is that same Pythagorean '*Ipse dixit*, The Master has said it.' Let no man be compelled to swear to his Masters words, but let the things themselves constrain the intellect." (P. to *Nat. Phil. R.*) But the things themselves will not take us far. Even in Natural Science we need teachers, for Science is not reached through the senses but through the intellectual grasp of knowledge which has been accumulating for centuries. If the education of times past has neglected the senses, we must not demand that the education of the future should care for the senses only. There is as yet little danger of our thinking too much of physical education; but we sometimes hear reformers talking as if the true ideal were sketched in "Locksley Hall:"

> "Iron-jointed, supple-sinew'd, they shall dive, and they shall run,
> Catch the wild goat by the hair, and hurl their lances in the sun,
> Whistle back the parrot's call, and leap the rainbows of the brooks;
> Not with blinded eyesight poring over miserable books."

There seems, however, still some reason for counting "the gray barbarian lower than the Christian child." And the reason is that we are "the heirs of all the ages." Our education must enable every child to enter in some measure on his inheritance; and not a few of our most precious heirlooms will be found not only in scientific discoveries but also in those great works of literature which the votaries of science are apt to despise as "miserable books." This truth was not duly appreciated by Comenius. As Professor Laurie well says, "he accepted only in a half-hearted way the products of the genius of past ages." (Laurie's *C.*, p. 22.) In his day there was a violent reaction from the Renascence passion for literature, and Comenius would entirely banish from education the only literatures which were then important, the "heathen" literatures of Greece and Rome. "Our most learned men," says he, "even among the theologians take from Christ only the mask: the blood and life they draw from Aristotle and a crowd of other heathens." (See Paulsen's *Gesch.*, pp. 312, ff.) So for Cicero and Virgil he would substitute, and his contemporaries at first seemed willing to accept,

the *Janua Linguarum*. But though there may be much more "real" knowledge in the *Janua*, the classics have survived it.[82] In these days there is a passion for the study of things which in its intensity resembles the Renascence passion for literature. There is a craving for knowledge, and we know only the truths we can verify; so this craving must be satisfied, not by words, but things. And yet that domain which the physicists contemptuously describe as the study of words must not be lost sight of, indeed cannot be, either by young or old. As Matthew Arnold has said, "those who are for giving to natural knowledge the chief place in the education of the majority of mankind leave one important thing out of their account—the constitution of human nature."

> "We live by Admiration, Hope, and Love,
> And e'en as these are well and wisely fixed,
> In dignity of being we ascend."

So says Wordsworth, and if this assertion cannot be verified, no more can it be disproved; that the words have become almost proverbial shows that it commends itself to the general consciousness. Whatever knowledge we may acquire, it will have little effect on our lives unless we can "relate it" (again to use Matthew Arnold's words), "to our sense of conduct and our sense of beauty." (*Discourses in America.* "Literature and Science.") So long as we retain our sense for these, "the humanities" are safe. Like Milton we may have no inclination to study "modern Januas," but we shall not cease to value many of the works which the Janua of Comenius was supposed to have supplanted.[83]

§ 51. "Analogies are good for illustration, not for proof." If Comenius had accepted this caution, he would have escaped much useless labour, and might have had a better foundation for his rules than fanciful applications of what he observed in the external world. "Comenius" as August Vogel has said, "is unquestionably right in wishing to draw his principles of education from Nature; but instead of examining the proper constitution and nature of man, and taking that as the basis of his theory, he watches the life of birds, the growth of trees, or the quiet influence of the sun, and thus substitutes for the nature of man nature *without* man (*die objective Natur*). And yet by Nature he understands that first and primordial state to which as to our original [idea] we should be restored, and by the voice of Nature he

understands the universal Providence of God or the ceaseless influence of the Divine Goodness working all in all, that is, leading every creature to the state ordained for it. The vegetative and animal life in Nature is according to Comenius himself not life at all in its highest sense, but the only true life is the intellectual or spiritual life of Man. No doubt in the two lower kinds of life certain analogies may be found for the higher; but nothing can be less worthy of reliance and less scientific than a method which draws its principles for the higher life from what has been observed in the lower." (A. Vogel's *Gesch. d. Pädagogik als Wissenschaft*, p. 94.)

§ 52. This seems to me judicious criticism; but whatever mistakes he may have made, Comenius, like Froebel long after him, strove after a higher unity which should embrace knowledge of every kind. The connexion of knowledges (so constantly overlooked in the schoolroom) was always in his thoughts. "We see that the branches of a tree cannot live unless they all alike suck their juices from a common trunk with common roots. And can we hope that the branches of Wisdom can be torn asunder with safety to their life, that is to truth? Can one be a Natural Philosopher who is not also a Metaphysician? or an Ethical Thinker who does not know something of Physical Science? or a Logician who has no knowledge of real matters? or a Theologian, a jurisconsult, or a Physician, who is not first a Philosopher? or an Orator or Poet, who is not all these at once? He deprives himself of light, of hand, and of regulation, who pushes away from him any shred of the knowable." (Quoted in Masson's *L. of Milton* vol. iij., p. 213 from the Delineatio, [i.e., *Pansophiæ Prodromus*]. Conf. J. H. Newman, *Idea of a University*, Disc. iij.)

§ 53. We see then that on the side of theory, Comenius was truly great. But the practical man who has always been the tyrant of the schoolroom cared nothing for theory and held, with a modern English minister responsible for education, who proved his ignorance of theory by his "New Code," that there was, and could be no such thing. So the reputation of Comenius became pretty much what our great authority Hallam has recorded, that he was a person of some ingenuity and little judgment who invented a new way of learning Latin. This estimate of him enables us to follow some windings in the stream of thought about education. Comenius faced the whole problem in its double bearing, theory and practice: he asked, What is the educator's task? How can he best accomplish it? But his

contemporaries had not yet recovered from the idolatry of Latin which had been bequeathed to them by their fathers from the Renascence, and they too saw in Comenius chiefly an inventor of a new way of learning Latin. He sought to train up children for this world and the next; they supposed, as Oxenstiern himself said, that the main thing to be remedied was the clumsy way of teaching Latin. So Comenius was little understood. His books were seized upon as affording at once an introduction to the knowledge of *things* and a short way of learning Latin. But in the long run they were found more tiresome than the old classics: so they went out of fashion, and their author was forgotten with them. Now that schoolmasters are forming a more worthy conception of their office, they are beginning to do justice to Comenius.

§ 54. As the Jesuits kept to Latin as the common language of the Church, so Comenius thought to use it as a means of inter-communication for the instructed of every nationality. But he was singularly free from over-estimating the value of Latin, and he demanded that all nations should be taught in their own language wherein they were born. On this subject he expresses himself with great emphasis. "We desire and protest that studies of wisdom be no longer committed to Latin alone, and kept shut up in the schools, as has hitherto been done, to the greatest contempt and injury of the people at large, and the popular tongues. Let all things be delivered to each nation in its own speech." (*Delineatio* [*Prodromus*] in Masson *ut supra*.)

§ 55. Comenius was then neither a verbalist nor a classicist, and yet his contemporaries were not entirely wrong in thinking of him as "a man who had invented a new way of learning Latin." His great principle was that instruction in words and things should go together.[84] The young were to learn about things, and *at the same time* were to acquire both in the vernacular and also in Latin, the international tongue, the words which were connected with the things. Having settled on this plan of concurrent instruction in words and things, Comenius determined to write a book for carrying it out. Just then there fell into his hands a book which a less open-minded man might have thrown aside on account of its origin, for it was written by the bitter foes and persecutors of the Bohemian Protestants, by the Jesuits. But Comenius says truly, "I care not whether I teach or whether I learn," and he gave a marvellous proof of this by adopting the linguistic

method of the Jesuits' *Janua Linguarum*.[85] This "Noah's Ark for words," treated in a series of proverbs of all kinds of subjects, in such a way as to introduce in a natural connection every common word in the Latin language. "The idea," says Comenius, "was better than the execution. Nevertheless, inasmuch as they (the Jesuits) were the prime inventors, we thankfully acknowledge it, nor will we upbraid them with those errors they have committed." (Preface to Anchoran's trans. of *Janua*.)

§ 56. The plan commended itself to Comenius on various grounds. First, he had a notion of giving an outline of all knowledge before anything was taught in detail. Next, he could by such a book connect the teaching about simple things with instruction in the Latin words which applied to them. And thirdly, he hoped by this means to give such a complete Latin vocabulary as to render the use of Latin easy for all requirements of modern society. He accordingly wrote a short account of things in general, which he put in the form of a dialogue, and this he published in Latin and German at Leszna in 1531. The success of this work, as we have already seen, was prodigious. No doubt the spirit which animated Bacon was largely diffused among educated men in all countries, and they hailed the appearance of a book which called the youth from the study of old philosophical ideas to observe the facts around them.

§ 57. The countrymen of Bacon were not backward in adopting the new work, as the following, from the title-page of a volume in the British Museum, will show: "The Gate of Tongues Unlocked and Opened; or else, a Seminary or Seed-plot of all Tongues and Sciences. That is, a short way of teaching and thoroughly learning, within a yeare and a half at the furthest, the Latine, English, French and any other tongue, with the ground and foundation of arts and sciences, comprised under a hundred titles and 1058 periods. In Latin first, and now, as a token of thankfulness, brought to light in Latine, English and French, in the behalfe of the most illustrious Prince Charles, and of British, French, and Irish youth. The 4th edition, much enlarged, by the labour and industry of John Anchoran, Licentiate in Divinity, London. Printed by Edward Griffin for Michael Sparke, dwelling at the Blew Bible in Green Arbor, 1639." The first edition must have been some years earlier, and the work contains a letter to Anchoran from Comenius dated "Lessivæ polonorum (Leszna) 11th Oct, 1632." So we see

that, however the connexion arose, it was Anchoran not Hartlib who first made Comenius known in England.

§ 58. In the preface to the volume (signed by Anchoran and Comenius) we read of the complaints of "Ascam, Vives, Erasmus, Sturmius, Frisclinus, Dornavius and others." The Scaligers and Lipsius did climb but left no track. "Hence it is that the greater number of schools (howsoever some boast the happinesse of the age and the splendour of learning) have not as yet shaked off their ataxies. The youth was held off, nay distracted, and is yet in many places delayed with grammar precepts infinitely tedious, perplexed, obscure, and (for the most part) unprofitable, and that for many years." The names of things were taught to those who were in total ignorance of the things themselves.

§ 59. From this barren region the pupil was to escape to become acquainted with things. "Come on," says the teacher in the opening dialogue, "let us go forth into the open air. There you shall view whatsoever God produced from the beginning, and doth yet effect by nature. Afterwards we will go into towns, shops, schools, where you shall see how men do both apply those Divine works to their uses, and also instruct themselves in arts, manners, tongues. Then we will enter into houses, courts, and palaces of princes, to see in what manner communities of men are governed. At last we will visit temples, where you shall observe how diversely mortals seek to worship their Creator and to be spiritually united unto Him, and how He by His Almightiness disposeth all things." (This is from the 1656 edition, by "W.D.")

The book is still amusing, but only from the quaint manner in which the mode of life two hundred years ago is described in it.[86]

§ 60. But though parts of the book may on first reading have gratified the youth of the seventeenth century, a great deal of it gave scanty information about difficult subjects, such as physiology, geometry, logic, rhetoric, and that too in the driest and dullest way. Moreover, in his first version (much modified at Saros-Patak) Comenius following the Jesuit boasts that no important word occurs twice; so that the book, to attain the end of giving a perfect stock of Latin words, would have to be read and re-read till it was almost known by heart; and however amusing boys might find an account of their toys written in Latin the first time of reading, the interest would

somewhat wear away by the fifth or sixth time. We cannot then feel much surprised on reading this "general verdict," written some years later, touching those earlier works of Comenius: "They are of singular use, and very advantageous to those of more discretion (especially to such as have already got a smattering in Latin), to help their memories to retain what they have scatteringly gotten here and there, and to furnish them with many words which perhaps they had not formerly read or so well observed; but to young children (whom we have chiefly to instruct, as those that are ignorant altogether of most things and words), they prove rather a mere toil and burden than a delight and furtherance." (Chas. Hoole's preface to his trans. of *Orbis Pictus*, dated "From my school in *Lothbury*, London, Jan. 25, 1658.")

§ 61. The "*Janua*" would, therefore, have had but a short-lived popularity with teachers, and a still shorter with learners, if Comenius had not carried out his principle of appealing to the senses, and adopted a plan which had been suggested, nearly 50 years earlier, by a Protestant divine, Lubinus,[87] of Rostock. The artist was called in, and with Endter at Nürnberg in 1657 was published the first edition of a book which long outlived the *Janua*. This was the famous *Orbis Sensualium Pictus*, which was used for a century at least in many a schoolroom, and lives in imitations to the present day. Comenius wrote this book on the same lines as the *Janua*, but he goes into less detail, and every subject is illustrated by a small engraving. The text is mostly on the opposite page to the picture, and is connected with it by a series of corresponding numbers. Everything named in the text is numbered as in the picture. The artist employed must have been a bold man, as he sticks at nothing; but in skill he was not the equal of many of his contemporaries; witness the pictures in the Schaffhausen *Janua* (Editio secunda, SchaffhusI, 1658), in Daniel's edition of the *Janua*, 1562, and the very small but beautiful illustrations in the *Vestibulum* of "Jacob Redinger and J. S." (Amsterdam, 1673). However, the *Orbis Pictus* gives such a quaint delineation of life 200 years ago that copies with the original engravings keep rising in value, and an American publisher (Bardeen of Syracuse, New York), has lately reproduced the old book with the help of photography.

§ 62. And yet as instruments of teaching, these books, *i.e.* the *Vestibulum* and the *Janua* and even the *Orbis Pictus* which in a great measure

superseded both, proved a failure. How shall we account for this?

Comenius immensely over-estimated the importance of knowledge and the power of the human mind to acquire knowledge. He took it for the heavenly idea that *man should know all things*. This notion started him on the wrong road for forming a scheme of instruction, and it needed many years and much experience to show him his error. When he wrote the *Orbis Pictus* he said of it: "It is *a little book*, as you see, of no great bulk, yet a brief of the whole world and a whole language;" (Hoole's trans. Preface); and he afterwards speaks of "this our *little encyclopædia* of things subject to the senses." But in his old age he saw that his text-books were too condensed and attempted too much (Laurie, p. 59); and he admitted that after all Seneca was right: "Melius est scire pauca et iis recté uti quam scire multa, quorum ignores usum. It is better to know a few things and have the right use of them than to know many things which you cannot use at all."

§ 63. The attempt to give "information" has been the ruin of a vast number of professing educators since Comenius. Masters "of the old school" whom some of us can still remember made boys learn Latin and Greek Grammar and *nothing else*. Their successors seem to think that boys should not learn Latin and Greek Grammar but *everything else*: and the last error I take to be much worse than the first. As Ruskin has neatly said, education is not teaching people to know what they do not know, but to behave as they do not behave. It is to be judged not by the knowledge acquired, but the habits, powers, interests: knowledge must be thought of "last and least."

§ 64. So the attempt to teach about everything was unwise. The means adopted were unwise also. It is a great mistake to suppose that a "general view" should come first; this is not the right way to give knowledge in any subject. "A child begins by seeing bits of everything—here a little and there a little; it makes up its wholes out of its own littles, and is long in reaching the fulness of a whole; and in this we are children all our lives in much." (Dr. John Brown in *Horæ Subsecivæ*, p. 5.) So nothing could have been much more unfortunate than an attempt to give the young "a brief of the whole world." *Compendia, dispendia.*

§ 65. Corresponding to "a brief of the whole world," Comenius offers "a brief of a whole language." The two mistakes were well matched. In "the

whole world" there are a vast number of things of which we must, and a good number of which we very advantageously *may* be ignorant. In a language there are many words which we cannot know and many more which we do not want to know. The language lives for us in a small vocabulary of essential words, and our hold upon the language depends upon the power we have in receiving and expressing thought by means of those words. But the Jesuit Bath, and after him Comenius, made the tremendous mistake of treating all Latin words as of equal value, and took credit for using each word once and once only! Moreover, Comenius wrote not simply to teach the Latin language, but also to stretch the Latin language till it covered the whole area of modern life. He aimed at two things and missed them both.

§ 66. We see then that Comenius was not what Hallam calls him, "a man who invented a new way of learning Latin." He did not do this, but he did much more than this. He saw that every human creature should be trained up to become a reasonable being, and that the training should be such as to draw out God-given faculties. Thus he struck the key-note of the science of education.

The quantity and the diffuseness of the writings of Comenius are truly bewildering. In these days eminent men, Carlyle, *e.g.*, sometimes find it difficult to get into print; but printing-presses all over Europe seemed to be at the service of Comenius. An account of the various editions of the *Janua* would be an interesting piece of bibliography, but the task of making it would not be a light one. The earliest copy of which I can find a trace is entered in the catalogue of the Bodleian: "Comenius J. A. *Janua Linguarum*, 8vo, Lips (Leipzig) 1632." I also find there another copy entered "per Anchoranum, cum clave per W. Saltonstall, London, 1633."

The fame of Comenius is increasing and many interesting works have now been written about him. I have already mentioned the English books of Benham and Laurie. In German I have the following books, but not the time to read them all:—

Daniel, H. A. *Zerstreute Blätter.* Halle, 1866.

Free, H. *Pädagogik d. Comenius.* Bernburg, 1884.

Hiller, R. *Latein Methode d. J. A. Comenius.* Zschopau, 1883. (v. g. and terse; only 46 pp.)

Müller, Walter. *Comenius ein Systematiker in d. Päd.* Dresden, 1887.

Pappenheim, E. *Amos Comenius.* Berlin, 1871.

Seyffarth, L. W. *J. A. Comenius.* Leipzig, 2nd edition, 1871. (A careful and, as far as I can judge in haste, an excellent piece of work.)

Zoubek, Fr. J. *J. A. Comenius. Eine quellenmässige Lebensskizze*, (Prefixed to trans. of *Didac. M.* in Richter's *Päd. Bibliothek*.)

For a Port-Royalist's criticism of the *Janua*, see infra. (p. 185 *note*.)

XI.

THE GENTLEMEN OF PORT-ROYAL.[88]

§ 1. In the sixteen-hundreds by far the most successful schoolmasters were the Jesuits. In spite of their exclusion from the University, they had in the Province of Paris some 14,000 pupils, and in Paris itself at the Collège de Clermont, 1,800. Might they not have neglected "the Little Schools," which were organized by the friends and disciples of the Abbé de Saint-Cyran, schools in which the numbers were always small, about twenty or twenty-five, and only once increasing to fifty? And yet the Jesuits left no stone unturned, no weapon unemployed, in their attack on "the Little Schools." The conflict seems to us like an engagement between a man-of-war and a fishing-boat. That the poor fishing-boat would soon be beneath the waves, was clear enough from the beginning, and she did indeed speedily disappear; but the victors have never recovered from their victory and never will. Whenever we think of Jesuitism we are not more forcibly reminded of Loyola than of Pascal. All educated Frenchmen, most educated people everywhere, get their best remembered impressions of the Society of Loyola from the Provincial Letters.[89]

§ 2. The Society had a long standing rivalry with the University of Paris, and the University not only refused to admit the Jesuits, but several times petitioned the Parliament to chase them out of France. On one of these occasions the advocate who was retained by the University was Antoine Arnauld, a man of renowned eloquence; and he threw himself into the attack with all his heart. From that time the Jesuits had a standing feud with the house of Arnauld.

§ 3. But it was no mere personal dislike that separated the Port-Royalists and the Jesuits. Port-Royal with which the Arnauld family was so closely united, became the stronghold of a theology which was unlike that of the Jesuits, and was denounced by them as heresy. The daughter of Antoine Arnauld was made, at the age of eleven years, Abbess of Port-Royal, a Cistercian convent not far from Versailles. This position was obtained for her by a fraud of Marion, Henry IV's advocate-general, who thought only

of providing comfortably for one of the twenty children to whom his daughter, Made. Arnauld, had made him grandfather. Never was a nomination more scandalously obtained or used to better purpose. The Mère Angélique is one of the saints of the universal church, and she soon became the restorer of the religious life first in her own and then by her influence and example in other convents of her Order.

§ 4. In these reforms she had nothing to fear from her hereditary foes the Jesuits; but she soon came under the influence of a man whose theory of life was as much opposed to the Jesuits' theory as to that of the world which found in the Jesuits the most accommodating father confessors.

Duvergier de Hauranne (1581-1643) better known by the name of his "abbaye," Saint-Cyran, was one of those commanding spirits who seem born to direct others and form a distinct society. In vain Richelieu offered him the posts most likely to tempt him. The prize that Saint-Cyran had set his heart upon was not of this world, and Richelieu could assist him in one way only—by persecution. This assistance the Cardinal readily granted, and by his orders Saint-Cyran was imprisoned at Vincennes, and not set at liberty till Richelieu was himself summoned before a higher tribunal.

§ 5. Driven by prevailing sickness from Port-Royal des Champs, the Mère Angélique transported her community (in 1626) to a house purchased for them in Paris by her mother who in her widowhood became one of the Sisters. In Paris Angélique sought for herself and her convent the spiritual direction of Saint-Cyran (not yet a prisoner), and from that time Saint-Cyran added the Abbess and Sisters of Port-Royal to the number of those who looked up to him as their pattern and guide in all things.

Port-Royal des Champs was in course of time occupied by a band of solitaries who at the bidding of Saint-Cyran renounced the world and devoted themselves to prayer and study. To them we owe the works of "the Gentlemen of Port-Royal."

§ 6. It is then to Saint-Cyran we must look for the ideas which became the distinctive mark of the Port-Royalists.

Saint-Cyran was before all things a theologian. In his early days at Bayonne his studies had been shared by a friend who afterwards was professor of theology at Louvain, and then Bishop of Ypres. This friend was

Jansenius. Their searches after truth had brought them to opinions which in the England of the nineteenth century are known as "Evangelical." According to "Catholic" teaching all those who receive the creed and the sacraments of the Church and do not commit "mortal" sin are in a "state of salvation," that is to say the great majority of Christians are saved. This teaching is rejected by those of another school of thought who hold that only a few "elect" are saved and that the great body even of Christians are doomed to perdition.

§ 7. Such a belief as this would seem to be associated of necessity with harshness and gloom; but from whatever cause, there has been found in many, even in most, cases no such connexion. Those who have held that the great mass of their fellow-creatures had no hope in a future world, have thrown themselves lovingly into all attempts to improve their condition in this world. Still, their main effort has always been to increase the number of the converted and to preserve them from the wiles of the enemy. This Saint-Cyran sought to do by selecting a few children and bringing them up in their tender years like hot-house plants, in the hope that they would be prepared when older and stronger, to resist the evil influences of the world.

§ 8. His first plan was to choose out of all Paris six children and to confide them to the care of a priest appointed to direct their consciences, and a tutor of not more than twenty-five years old, to teach them Latin. "I should think," says he, "it was doing a good deal if I did not advance them far in Latin before the age of twelve, and made them pass their first years confined to one house or a monastery in the country where they might be allowed all the pastimes suited to their age and where they might see only the example of a good life set by those about them." (Letter quoted by Carré, p. 20.)

§ 9. His imprisonment put a stop to this plan, "but," says Saint-Cyran, "I do not lightly break off what I undertake for God;" so when intrusted with the disposal of 2,000 francs by M. Bignon, he started the first "Little School," in which two small sons of M. Bignon's were taken as pupils. The name of "Little Schools," was given partly perhaps because according to their design the numbers in any school could never be large, partly no doubt to deprecate any suspicion of rivalry with the schools of the University. The children were to be taken at an early age, nine or ten, before they could have any guilty knowledge of evil, and Saint-Cyran made in all cases a

stipulation that at any time a child might be returned to his friends; but in cases where the master's care seemed successful, the pupils were to be kept under it till they were grown up.

§ 10. The Little Schools had a short and troubled career of hardly more than fifteen years. They were not fully organized till 1646; they were proscribed a few years later and in 1661 were finally broken up by Louis XIV, who was under the influence of their enemies the Jesuits. But in that time the Gentlemen of Port-Royal had introduced new ideas which have been a force in French education and indeed in all literary education ever since.

To Saint-Cyran then we trace the attempt at a particular kind of school, and to his followers some new departures in the training of the intellect.

§ 11. Basing his system on the Fall of Man, Saint-Cyran came to a conclusion which was also reached by Locke though by a different road. To both of them it seemed that children require much more individual care and watching than they can possibly get in a public school. Saint-Cyran would have said what Locke said: "The difference is great between two or three pupils in the same house and three or four score boys lodged up and down: for let the master's industry and skill be never so great, it is impossible he should have fifty or one hundred scholars under his eye any longer than they are in school together: Nor can it be expected that he should instruct them successfully in anything but their books; the forming of their minds and manners [preserving them from the danger of the enemy, Saint-Cyran would have said] requiring a constant attention and particular application to every single boy, which is impossible in a numerous flock, and would be wholly in vain (could he have time to study and correct everyone's peculiar defects and wrong inclinations) when the lad was to be left to himself or the prevailing infection of his fellows the greater part of the four-and-twenty hours." (*Thoughts c. Ed.* § 70.)

§ 12. An English public schoolmaster told the Commission on Public Schools, that he stood *in loco parentis* to fifty boys. "Rather a large family," observed one of the Commissioners drily. The truth is that in the bringing up of the young there is the place of the schoolmaster and of the school-fellows, as well as that of the parents; and of these several forces one cannot fulfil the functions of the others.

§ 13. According to the theory or at least the practice of English public schools, boys are left in their leisure hours to organize their life for themselves, and they form a community from which the masters are, partly by their own over-work, partly by the traditions of the school, utterly excluded. From this the intellectual education of the boys no doubt suffers. "Engage them in conversation with men of parts and breeding," says Locke; and this was the old notion of training when boys of good family grew up as pages in the household of some nobleman. But, except in the holidays, the young aristocrats of the present day talk only with other boys, and servants, and tradesmen. Hence the amount of thought and conversation given to school topics, especially the games, is out of all proportion to the importance of such things; and this does much to increase what Matthew Arnold calls "the barbarians'" inaptitude for ideas.

§ 14. What are we to say about the effects of the system on the morals of the boys? If we were to start like Saint-Cyran from the doctrine of human depravity, we should entirely condemn the system and predict from it the most disastrous results;[90] but from experience we come to a very different conclusion. Bishop Dupanloup, indeed, spoke of the public schools of France as "*ces gouffres*." This is not what is said or thought of the English schools, and they are filled with boys whose fathers and grandfathers were brought up in them, and desire above all things to maintain the old traditions.

§ 15. The Little Schools of Port-Royal aimed at training a few boys very differently; each master had the charge of five or six only, and these were never to be out of his presence day or night.[91]

§ 16. It may reasonably be objected that such schools would be possible only for a few children of well-to-do parents, and that men who would thus devote themselves could be found only at seasons of great enthusiasm. Under ordinary circumstances small schools have most of the drawbacks and few of the advantages which are to be found in large schools. As I have already said, parents, schoolmasters, and school-fellows have separate functions in education; and even in the smallest school the master can never take the place of the parent, or the school become the home. Children at home enter into the world of their father and mother; the family friends are *their* friends, the family events affect them as a matter of course. But in the school, however small, the children's interests are unconnected with the

master and the master's family. The boys may be on the most intimate, even affectionate terms with the grown people who have charge of them; but the mental horizon of the two parties is very different, and their common area of vision but small. In such cases the young do not rise into the world of the adults, and it is almost impossible for the adults to descend into theirs. They are "no company" the one for the other, and to be constantly in each other's presence would subject both to very irksome restraint. When left to themselves, boys in small numbers are far more likely to get into harm than boys in large numbers. In large communities even of boys, "the common sense of most" is a check on the badly disposed. So as it seems to me if from any cause the young cannot live at home and attend a day-school, they will be far better off in a large boarding school than in one that would better fulfil the requirements of Erasmus,[92] Saint-Cyran, and Locke.

§ 17. As Saint-Cyran attributed immense importance to the part of the master in education, he was not easily satisfied with his qualifications. "There is no occupation in the Church that is more worthy of a Christian; next to giving up one's life there is no greater charity.... The charge of the soul of one of these little ones is a higher employment than the government of all the world." (Cadet, 2.) So thought Saint-Cyran, and he was ready to go to the ends of the earth to find the sort of teacher he wanted.

§ 18. He was so anxious that the children should see only that which was good that the servants were chosen with peculiar care.

§ 19. For the masters his favourite rule was: "Speak little; put up with much; pray still more." Piety was not to be instilled so much by precepts as by the atmosphere in which the children grew up. "Do not spend so much time in speaking to them about God as to God about them:" so formal instruction was never to be made wearisome. But there was to be an incessant watch against evil influences and for good. "In guarding the citadel," says Lancelot, "we fail if we leave open a single gateway by which the enemy might enter."

§ 20. Though anxious, like the Jesuits, to make their boys' studies "not only endurable, but even delightful," the Gentlemen of Port-Royal banished every form of rivalry. Each pupil was to think of one whom he should try to catch up, but this was not a school-fellow, but his own higher self, his ideal. Here Pascal admits that the exclusion of competition had its drawbacks and

that the boys sometimes became indifferent—"tombent dans la nonchalance," as he says.

§ 21. As for the instruction it was founded on this principle: the object of schools being piety rather than knowledge there was to be no pressure in studying, but the children were to be taught what was sound and enduring.

§ 22. In all occupations there is of necessity a tradition. In the higher callings the tradition may be of several kinds. First there may be a tradition of noble thoughts and high ideals, which will be conveyed in the words of the greatest men who have been engaged in that calling, or have thought out the theory of it. Next there will be the tradition of the very best workers in it. And lastly there is the tradition of the common man who learns and passes on just the ordinary views of his class and the ordinary expedients for getting through ordinary work. Of these different kinds of tradition, the school-room has always shown a tendency to keep to this last, and the common man is supreme. Young teachers are mostly required to fulfil their daily tasks without the smallest preparation for them; so they have to get through as best they can, and have no time to think of any high ideal, or of any way of doing their work except that which gives them least trouble. "Practice makes perfect," says the proverb, but it would be truer to say that practice in doing work badly soon makes perfect in contentment with bad workmanship. Thus it is that the tradition of the school-room settles down for the most part into a deadly routine, and teachers who have long been engaged in carrying it on seem to lose their powers of vision like horses who turn mills in the dark.

The Gentlemen of Port-Royal worked free from school-room tradition. "If the want of emulation was a drawback," says Sainte-Beuve, "it was a clear gain to escape from all routine, from all pedantry. *La crasse et la morgue des régents n'en approchaient pas.*" (*P.R.* vol. iij, p. 414) Piety as we have seen was their main object. Next to it they wished to "carry the intellects of their pupils to the highest point they could attain to."

§ 23. In doing this they profited by their freedom from routine to try experiments. They used their own judgments and sought to train the judgment of their pupils. Themselves knowing the delights of literature, they resolved that their pupils should know them also. They would banish all useless difficulties and do what they could to "help the young and make

study even more pleasant to them than play and pastime." (Preface to Cic.'s *Billets*, quoted by Sainte-Beuve, vol. iij, p. 423.)

§ 24. One of their innovations, though startling to their contemporaries, does not seem to us very surprising. It was the custom to begin reading with a three or four years' course of reading Latin, because in that language all the letters were pronounced. The connexion between sound and sense is in our days not always thought of, but even among teachers no advocates would now be found for the old method which kept young people for the first three or four years uttering sounds they could by no possibility understand. The French language might have some disadvantage from its silent letters, but this was small compared with the disadvantage felt in Latin from its silent sense. So the Port-Royalists began reading with French.

§ 25. Further than this, they objected to reading through spelling, and pointed out that as consonants cannot be pronounced by themselves they should be taken only in connexion with the adjacent vowel. Pascal applied himself to the subject and invented the method described in the 6th chap. of the General Grammar (Carré, p. xxiij) and introduced by his sister Jacqueline at Port-Royal des Champs.

§ 26. When the child could read French, the Gentlemen of Port-Royal sought for him books within the range of his intelligence. There was nothing suitable in French, so they set to work to produce translations in good French of the most readable Latin books, "altering them just a little—*en y changeant fort peu de chose*," as said the chief translator De Saci, for the sake of purity. In this way they gallicised the Fables of Phædrus, three Comedies of Terence, and the Familiar Letters (*Billets*) of Cicero.

§ 27. In this we see an important innovation. As I have tried to explain (*supra* pp. 14 ff.) the effect of the Renascence was to banish both the mother-tongue and literature proper from the school-room; for no language was tolerated but Latin, and no literature was thought possible except in Latin or Greek. Before any literature could be known, or indeed, instruction in any subject could be given, the pupils had to learn Latin. This neglect of the mother-tongue was one of the traditional mistakes pointed out and abandoned by the Port-Royalists. "People of quality complain," says De Saci, "and complain with reason, that in giving their children Latin we take away French, and to turn them into citizens of ancient Rome we make them

strangers in their native land. After learning Latin and Greek for 10 or 12 years, we are often obliged at the age of 30 to learn French." (Cadet, 10.) So Port-Royal proposed breaking through this bondage to Latin, and laid down the principle, new in France, though not in the country of Mulcaster or of Ratke, that everything should be taught through the mother-tongue.

Next, the Port-Royalists sought to give their pupils an early and a pleasing introduction to literature. The best literature in those days was the classical; and suitable works from that literature might be made intelligible *by means of translations*. In this way the Port-Royalists led their pupils to look upon some of the classical authors not as inventors of examples in syntax, but as writers of books that *meant* something. And thus both the mother-tongue and literature were brought into the school-room.

§ 28. When the boys had by this means got some feeling for literature and some acquaintance with the world of the ancients, they began the study of Latin. Here again all needless difficulties were taken out of their way. No attempt indeed was made to teach language without grammar, the rationale of language, but the science of grammar was reduced to first principles (set forth in the *Grammaire Générale et Raisonnée* of Arnauld and Lancelot), and the special grammar of the Latin language was no longer taught by means of the work established in the University, the *Latin* Latin Grammar of Despautère, but by a "New Method" written in French which gave essentials only and had for its motto: "Mihi inter virtutes grammatici habebitur aliqua nescire—To me it will be among the grammarian's good points not to know everything." (Quintil.)[93]

§ 29. With this minimum of the essentials of the grammar and with a previous acquaintance with the sense of the book the pupils were introduced to the Latin language and were taught to translate a Latin author into French. This was a departure from the ordinary route, which after a course of learning grammar-rules in Latin went to the "theme," *i.e.*, to composition in Latin.

The art of translating into the mother-tongue was made much of. School "construes," which consist in substituting a word for a word, were entirely forbidden, and the pupils had to produce the old writer's thoughts *in French*.[94]

§30. From this we see that the training was literary. But in the study of form the Port-Royalists did not neglect the inward for the outward. Their great work, which still stands the attacks of time, is the Port-Royal *Logic, or the Art of Thinking* (see Trans, by T. Spencer Baynes, 1850). This was substantially the work of Arnauld; and it was Arnauld who led the Port-Royalists in their rupture with the philosophy of the Middle Age, and who openly followed Descartes. In the *Logic* we find the claims of reason asserted as if in defiance of the Jesuits. "It is a heavy bondage to think oneself forced to agree in everything with Aristotle and to take him as the standard of truth in philosophy.... The world cannot long continue in this restraint, and is recovering by degrees its natural and reasonable liberty, which consists in accepting that which we judge to be true and rejecting that which we judge to be false." (Quoted by Cadet, p. 31.)[95]

§ 31. To mark the change, the Port-Royalists called their book not "the Art of Reasoning," but "the Art of Thinking," and it was in this art of thinking that they endeavoured to train their scholars. They paid great attention to geometry, and Arnauld wrote a book ("New Elements of Geometry") which so well satisfied Pascal that after reading the MS. he burnt a similar work of his own.

§ 32. The Port-Royalists then sought to introduce into the school-room a "sweet reasonableness." They were not touched, as Comenius was, by the spirit of Bacon, and knew nothing of a key for opening the secrets of Nature. They loved literature and resolved that their pupils should love it also; and with this end they would give the first notions of it in the mother-tongue; but the love of literature still bound them to the past, and they aimed simply at making the best of the Old Education without any thought of a New.

§ 33. In one respect they seem less wise than Rabelais and Mulcaster, less wise perhaps than their foes the Jesuits. They gave little heed to training the body, and thought of the soul and the mind only; or if they thought of the body they were concerned merely that it should do no harm. "Not only must we form the minds of our pupils to virtue," says Nicole, "we must also bend their bodies to it, that is, we must endeavour that the body do not prove a hindrance to their leading a well-regulated life or draw them by its weight to any disorder. For we should know that as men are made up of mind and body, a wrong turn given to the body in youth is often in after life a great

hindrance to piety." (*Vues p. bien élever un prince*, quoted by Cadet, p. 206.)

§ 34. But let us not underrate the good effect produced by this united effort of Christian toil and Christian thought. "Nothing should be more highly esteemed than good sense," (Preface to the *Logique*), and Port-Royal did a great work in bringing good sense and reason to bear on the practice of the school-room. When the Little Schools were dispersed the Gentlemen still continued to teach, but the lessons they gave were now in the "art of thinking" and in the art of teaching; and all the world might learn of them, for they taught in the only way left open to them; they published books.

§ 35. Of these writers on pedagogy the most distinguished was "the great Arnauld," *i.e.*, Antoine Arnauld, (1612-1694) brother of the Mère Angélique. His "*Règlement des Études*" shows us how literary instruction was given at Port-Royal. In these directions we have not so much the rules observed in the Little Schools as the experience of the Little Schools rendered available for the schools of the University. On this account Sainte-Beuve speaks of the *Règlement* of Arnauld as forming a preface to the *Treatise on Studies* (*Traité des Études*) of Rollin. In the *Règlement* we see Arnauld yielding to what seems a practical necessity and admitting competition and prizes. Some excellent advice is given, especially on practice in the use of the mother-tongue. The young people are to question and answer each other about the substance of what they have read, about the more remarkable thoughts in their author or the more beautiful expressions. Each day two of the boys are to narrate a story which they themselves have selected from a classical author.[96]

§ 36. With the notable exception of Pascal, Arnauld was the most distinguished writer among the Gentlemen of Port-Royal. A writer less devoted to controversy than Arnauld, less attached to the thought of Saint-Cyran and of Descartes, but of wider popularity, was Nicole, who had Made. de Sévigné for an admirer, and Locke for one of his translators.

Nicole has given us a valuable contribution to pedagogy in his essay on the right bringing-up of a prince. (*Vues générales pour bien élever un prince.*) In this essay he shows us with what thought and care he had applied himself to the art of instruction, and he gives us hints that all teachers may profit by. Take the following:—

§ 37. “Properly speaking it is not the masters, it is no instruction from without, that makes things understood; at the best the masters do nothing but expose the things to the interior light of the mind, by which alone they can be understood. It follows that where this light is wanting instruction is as useless as trying to shew pictures in the dark. The very greatest minds are nothing but lights in confinement, and they have always sombre and shady spots; but in children the mind is nearly full of shade and emits but little rays of light. So everything depends on making the most of these rays, on increasing them and exposing to them what one wishes to have understood. For this reason it is hard to give general rules for instructing anyone, because the instruction must be adapted to the mixture of light and darkness, which differs widely in different minds, especially with children. We must look where the day is breaking and bring to it what we wish them to understand; and to do this we must try a variety of ways for getting at their minds and must persevere with such as we find have most success.

“But generally speaking we may say that, as in children the light depends greatly on their senses, we should as far as possible attach to the senses the instruction we give them, and make it enter not only by the ear but also by the sight, as there is no sense which makes so lively an impression on the mind and forms such sharp and clear ideas.”

This is excellent. There is a wise proverb that warns us that “however soon we get up in the morning the sunrise comes never the earlier.” A vast amount of instruction is thrown away because the instructors will not wait for the day-break.

§ 38. For the moral training of the young there is one qualification in the teacher which is absolutely indispensable—goodness. Similarly for the intellectual training, there is an indispensable qualification—intelligence. This is the qualification required by the system of Port-Royal, but not required in working the ordinary machinery of the school-room either in those days or in ours. When Nicole has described how instruction should be given so as to train the judgment and cultivate the taste, he continues:

“As this kind of instruction comes without observation, so is the profit derived from it likely to escape observation also; that is, it will not announce itself by anything on the surface and palpable to the common man. And on this account persons of small intelligence are mistaken about it

and think that a boy thus instructed is no better than another, because he cannot make a better translation from Latin into French, or beat him in saying his Virgil. Thus judging of the instruction by these trifles only, they often make less account of a really able teacher than of one of little science and of a mind without light." (Nicole in Cadet, p. 204; Carré, p. 187.)

In these days of marks and percentages we seem agreed that it must be all right if the children can stand the tests of the examiner or the inspector. Something may no doubt be got at by these tests; but we cannot hope for any genuine care for education while everything is estimated "*par des signes grossiers et extérieurs*."

§ 39. Whatever was required to adapt the thought of Port-Royal to the needs of classical schools, especially the schools of the University of Paris was supplied by Rollin (1661-1741) whose *Traité des Études* or "Way of teaching and studying Literature," united the lessons of Port-Royal with much material drawn from his own experience and from his acquaintance with the writings of other authors, especially Quintilian and Seneca. Having been twice Rector of the University (in 1694 and 1695) Rollin had managed to bring into the schools much that was due to Port-Royal; and in his *Traité* he has the tact to give the improved methods as the ordinary practice of his colleagues.

§ 40. Much that Rollin has said applies only to classical or at most to literary instruction; but some of his advice will be good for all teachers as long as the human mind needs instruction. I have met with nothing that seems to me to go more truly to the very foundation of the art of teaching than the following:

"We should never lose sight of this grand principle that STUDY DEPENDS ON THE WILL, and the will does not endure constraint: '*Studium discendi voluntate quæ cogi non potest constat.*' (Quint. j, 1, cap. 3.)[97] We can, to be sure, put constraint on the body and make a pupil, however unwilling, stick to his desk, can double his toil by punishment, compel him to finish a task imposed upon him, and with this object we can deprive him of play and recreation. But is this work of the galley-slave studying? And what remains to the pupil from this kind of study but a hatred of books, of learning, and of masters, often till the end of his days? It is then the will that we must draw on our side, and this we must do by gentleness, by friendliness, by

persuasion, and above all by the allurement of pleasure." (*Traité*, 8th Bk. *Du Gouvernement des Classes*, 1re Partie, Art. x.)

§ 41. The passage I have quoted is from the *Article* "on giving a taste for study (*rendre l'étude aimable*);" and if some masters do not agree that this is "one of the most important points concerning education," they will not deny that "it is at the same time one of the most difficult." As Rollin truly says, "among a very great number of masters who in other respects are highly meritorious there will be found very few who manage to get their pupils to like their work."

§ 42. One of the great causes of the disinclination for school work is to be found according to Rollin and Quintilian, in the repulsive form in which children first become acquainted with the elements of learning. "In this matter success depends very much on first impressions; and the main effort of the masters who teach the first rudiments should be so to do this, that the child who cannot as yet love study should at least not get an aversion for it from that time forward, for fear lest the bitter taste once acquired should still be in his mouth when he grows older."[98] (Begin. of Art. x, as above.)

§ 43. In this matter Rollin was more truly the disciple of the Port-Royalists than of Quintilian. They it was who protested against the dismal "grind" of learning to read first in an unknown tongue, and of studying the rules of Latin in Latin with no knowledge of Latin, a course which professed to lead, as Sainte-Beuve puts it, "to the unknown through the unintelligible." They directed their highly-trained intellects to the teaching of the elements, and succeeded in proving that the ordinary difficulties were due not to the dulness of the learners, but to the stupidity of the masters. They showed how much might be done to remove these difficulties by following not routine but the dictates of thought, and study and love of the little ones.

There is an excellent though condensed account of the Port-Royalists under "Jansenists" in Sonnenschein's *Cyclopædia of Education*. In vol. ij, of Charles Beard's Port-Royal, (2 vols., 1861) there is a chapter on the Little Schools. The most pleasing account I have seen in English of the Port-Royalists (without reference to education) is in Sir Jas. Stephen's *Essays on Ecclesiastical Biography*. In French the great work on the subject is Sainte-Beuve's *Port-Royal*, 5 vols. (71 ed., 6 vols.) The account of the Schools is in 4th bk., in vol. iij, of 1st ed. Very useful for studying the pedagogy of Port-Royal are *L'Education à Port-Royal* by Félix Cadet (Hachette, 1887) and *Les Pédagogues de Port-Royal*, by I. Carré (Delagrave, 1887). These last give extracts from the main writings on education by Arnauld, Nicole, Lancelot, Coustel, &c. The article, *Port-Royal*, in Buisson's *D.*, is the "Introduction" to Carré's book. A 3-vol. ed. of Rollin's *Traité* was published

(Paris, Didot) in 1872. The more interesting parts of this book are contained in F. Cadet's *Rollin: Traité des Études* (Delagrave, 1882). Rollin's work was at one time well-known in the English trans., and copies of it are often to be found "second-hand." The best part comes last; which may account for the neglect into which the book has fallen. The accounts of Port-Royal and of Rollin in G. Compayré's *Histoire Critique* are very good parts of a very good book. Vérin's *Étude sur Lancelot* I have not seen, and it is only too probable that I have not given to Lancelot the attention due to him.

XII.

SOME ENGLISH WRITERS BEFORE LOCKE.

§ 1. The beginning of the 17th century brought with it a change in the main direction of thought and interest. As we have seen, the 16th century adored literature and was thrown back on the remote past. Some of the great scholars like Sturm had indeed visions of literary works to be written, that would rival the old models on which they were fashioned; but whether they hoped or not to bring back the Golden Age all the scholars of the Renascence thought of it as *having been*. With the change of century, however, a new conception came into men's minds. Might not this worship of the old writers after all be somewhat of a superstition? The languages in which they wrote were beautiful languages, no doubt, but they were ill adapted to express the ideas and wants of the modern world. As for the substance of these old writings, this did not satisfy the cravings of men's minds. It left unsolved all the main problems of existence, and offered for knowledge mere speculations or poetic fancies or polished rhetoric. Man needed to understand his position with regard to God and to Nature; but on both of these topics the classics were either silent or misleading. Revelation had supplied what the classics could not give concerning man's relation to God; but nothing had as yet thrown light on his relation to Nature. And yet with his material body and animal life he could not but see how close that relation was, and could not but wish that something about it might be *known*, not simply guessed or feigned. Hence the demand for *real* knowledge, that is, a knowledge of the facts of the universe as distinct from the knowledge of what men have thought and said. We have heard of the mathematician who put down Paradise Lost with the remark that it seemed to him a poor book, for it did not prove anything; and it was just in this spirit that the new school of thinkers, the Realists, looked upon the classics. They wanted to know Nature's laws: and words which did not convey such knowledge seemed to them of little value.

§ 2. Here was a tremendous revolution from the mode of thought prevalent in the Renascence. No longer was the Golden Age in the past. In

science the Golden Age must always be in the future. Scientific men start with what has been discovered and add to it. Every discovery passes into the common stock of knowledge, and becomes the property of everyone who knows it just as much as of the discoverer. Harvey had no more property in the circulation of the blood, Newton and Leibnitz no more property in the Differential Calculus than Columbus in the Continent of America; indeed not so much, for Columbus gained some exclusive rights in America, but Harvey gained none over the blood.

So we see that whereas the literary spirit made the dominant minds reverence the past, the scientific spirit led them to despise the past; and whereas the literary spirit raised the value of words and led to the study of celebrated writings, the scientific spirit was totally careless about words and prized only physical truths which were entirely independent of words. Again, the literary spirit naturally favoured the principle of authority, for its oracles had already spoken: the scientific spirit set aside all authority and accepted nothing that did not of itself satisfy the reason. (Compare Comenius, *supra* p. 152.)

§ 3. The first great leader in this revolution was an Englishman, Francis Bacon. But the school-room felt his influence only through those who learnt from him; and among educational reformers, the chief advocates of realism have been found on the Continent, *e.g.*, Ratke and Comenius.[99] But the desire to learn by "things, not words" affected the minds of many English writers on education, and we find this spirit showing itself even in Milton and Locke, and far more clearly in some writers less known to fame.

§ 4. There is a wide distinction in educational writers between those who were schoolmasters and those who were not. Schoolmasters have to come to terms with what exists and to make a livelihood by it. So they are conservatives by position, and rarely get beyond an attempt at showing how that which is now done badly might be done well. Suggestions of radical change usually come from those who never belonged to the class of teachers, or who, not without disgust, have left it.

Among English schoolmasters of the olden times the chief writers I have met with besides Mulcaster are John Brinsley the elder, and Charles Hoole.

§ 5. John Brinsley the elder, a Puritan schoolmaster at Ashby-de-la-Zouch, a brother-in-law of Bishop Hall's, and father of John Brinsley the

younger who became a leading Puritan minister and author, was a veritable reformer, but only with reference to methods. His most interesting books are *Ludus Literarius or the Grammar Schoole*, 1612 (written after 20 years' experience in teaching, as we learn from the *Consolation*, p. 45), and *A Consolation for our Grammar Schooles: or a faithfull and most comfortable incouragement for laying of a sure foundation of all good learning in our schooles and for prosperous building thereupon*, 1622. The first of these, when reprinted, as it is sure to be, will always secure for its author the notice and the gratitude of students of the history of our education; for in this book he tells us not only what should be done in the school-room, but also what was done. In a dialogue with the ordinary schoolmaster the reformer draws to light the usual practice, criticizes it, and suggests improvements.

§ 6. In Brinsley we get no hint of realism; but by the middle of the sixteen hundreds we find the realistic spirit is felt even by a schoolmaster, Charles Hoole,[100] who was a kinsman of Bishop Sanderson, the Casuist, and was master first of the Grammar School at Rotherham, then of a private Grammar School in London, published besides a number of school books, a translation of the *Orbis Pictus* (date of preface, January, 1658), and also "A New Discovery of the old art of teaching schoole ... published for the general profit, especially of young Schoolemasters" (date of preface, December, 1659). In these books we find that Hoole succeeded even in the school-room in keeping his mind open. He complains of the neglect of English, and evidently in theory at least went a long way with the realistic reformers. "Comenius," he says, "hath proceeded (as Nature itself doth) in an orderly way, first to exercise the senses well by presenting their objects to them, and then to fasten upon the intellect by impressing the first notions of things upon it and linking them one to another by a rational discourse; whereas indeed we generally, missing this way, do teach children as we do parrots to speak they know not what, nay, which is worse, we taking the way of teaching little ones by grammar only, at the first do puzzle their imaginations with abstractive terms and secondary intentions, which, till they be somewhat acquainted with things, and the words belonging to them in the language which they learn, they cannot apprehend what they mean. And this I guess to be the reason why many greater persons do resolve sometimes not to put a child to school till he be at least eleven or twelve years of age.... You then, that have the care of little children, do not too

much trouble their thoughts and clog their memories with bare grammar rudiments, which to them are harsh in getting, and fluid in retaining; because indeed to them they signifie nothing but a meer swimming notion of a general term, which they know not what it meaneth till they comprehend all particulars: but by this [*i.e.*, the *Orbis P.*] or the like subsidiarie inform them first with some knowledge of things and words wherewith to express them; and then their rules of speaking will be better understood and more firmly kept in mind. Else how should a child conceive what a rule meaneth when he neither knoweth what the Latine word importeth, nor what manner of thing it is which is signified to him in his own native language which is given him thereby to understand the rule? for rules consisting of generalities are delivered (as I may say) at a third hand, presuming first the things and then the words to be already apprehended touching which they are made." This subject Hoole wisely commends to the consideration of teachers, "it being *the very basis of our profession to search into the way of children's taking hold by little and little of what we teach them*, that so we may apply ourselves to their reach." (Preface to trans. of *Orbis Pictus*.)

§ 7. "Good Lord! how many good and clear wits of children be now-a-days perished by ignorant schoolmasters!" So said Sir Thomas Elyot in his *Governor* in 1531, and the complaint would not have been out of date in the 17th century, possibly not in the 19th. In the sixteen hundreds we certainly find little advance in practice, though in theory many bold projects were advanced, some of which pointed to the study of things, to the training of the hand, and even to observation of the "educands."

§ 8. The poet Cowley's "proposition for the advancement of experimental philosophy" is a scheme of a college near London to which is to be attached a school of 200 boys. "And because it is deplorable to consider the loss which children make of their time at most schools, employing or rather casting away six or seven years in the learning of words only, and that too very imperfectly; that a method be here established for the infusing knowledge and language at the same time, [Is this an echo of Comenius?] and that this may be their apprenticeship in Natural Philosophy."[101]

§ 9. Rarely indeed have those who either theoretically or practically have made a study of education ever acquired sufficient literary skill to catch the ear of the public or (what is at least as difficult) the ear of the teaching

body. And among the eminent writers who have spoken on education, as Rabelais, Montaigne, Milton, Locke, Rousseau, Herbert Spencer, we cannot find one who has given to it more than passing, if not accidental, attention. Schoolmasters are, as I said, conservative, at least in the school-room; and moreover, they seldom find the necessary time, money, or inclination for publishing on the work of their calling. The current thought at any period must then be gathered from books only to be found in our great libraries, books in which writers now long forgotten give hints of what was wanted out of the school-room and grumble at what went on in it.

§ 10. One of the most original of these writers that have come in my way is John Dury, a Puritan, who was at one time Chaplain to the English Company of Merchants at Elbing, and laboured with Comenius and Hartlib to promote unity among the various Christian bodies of the reformed faith (see Masson's *Life of Milton*, vol. iii). About 1649 Dury published *The Reformed Schoole* which gives the scheme of an association for the purpose of educating a number of boys and girls "in a Christian way."

§ 11. That Dury was not himself a schoolmaster is plain from the first of his "rules of education." "The chief rule of the whole work is that nothing be made tedious and grievous to the children, but all the toilsomeness of their business the Governor and Ushers are to take upon themselves; that by diligence and industry all things may be so prepared, methodized and ordered for their apprehension, that this work may unto them be as a delightful recreation by the variety and easiness thereof."

§ 12. "The things to be looked unto in the care of their education," he enumerates in the order of importance: "1. Their advancement in piety; 2. The preservation of their health; 3. The forming of their manners; 4. Their proficiency in learning" (p. 24). "Godliness and bodily health are absolutely necessary," says Dury; "the one for spiritual and the other for their temporal felicitie" (p. 31): so great care is to be taken in "exercising their bodies in husbandry or manufactures or military employments."[102]

§ 13. About instruction we find the usual complaints which like "mother's truth keep constant youth." "Children," says Dury, "are taught to read authors and learn words and sentences before they can have any notion of the things signified by those words and sentences or of the author's strain and wit in setting them together; and they are made to learn by heart the

generall rules, sentences and precepts of Arts before they are furnished with any matter whereunto to apply those rules and precepts" (p. 38). Dury would entirely sweep away the old routine, and in all instruction he would keep in view the following end: "the true end of all human learning is to supply in ourselves and others the defects which proceed from our ignorance of the nature and use of the creatures, and the disorderliness of our natural faculties in using them and reflecting upon them" (p. 41).

§ 14. "Our natural faculties"—here Dury struck a new note, which has now become the keynote in the science of education. He enforces his point with the following ingenious illustration:—"As in a watch one wheel rightly set doth with its teeth take hold of another and sets that a-work towards a third; and so all move one by another when they are in their right places for the end for which the watch is made; so is it with the faculties of the human nature being rightly ordered to the ends for which God hath created them. But contrariwise, if the wheels be not rightly set, or the watch not duly wound up, it is useless to him that hath it. And so it is with the faculties of Man; if his wheels be not rightly ordered and wound up by the ends of sciences in their subordination leading him to employ the same according to his capacity to make use of the creatures for that whereunto God hath made them, he becomes not only useless, but even a burthen and hurtful unto himself and others by the misusing of them" (p. 43).

§ 15. "As in Nature sense is the servant of imagination; imagination of memory; memory of reason; so in teaching arts and sciences we must set these faculties a-work in this order towards their proper objects in everything which is to be taught. Whence this will follow, that as the faculties of Man's soul naturally perfect each other by their mutual subordination; so the Arts which perfect those faculties should be gradually suggested: and the objects wherewith the faculties are to be conversant according to the rules of Art should be offered in that order which is answerable to their proper ends and uses and not otherwise."

§ 16. In this and much else that Dury says we see a firm grasp of the principle that the instruction given should be regulated by the gradual development of the learner's faculties. The three sources of our knowledge, says he, are—1. Sense; 2. Tradition; 3. Reason; and Sense comes first. "Art or sciences which may be learnt by mere sense should not be learnt any other way." "As children's faculties break forth in them by degrees to be

vigorous with their years and the growth of their bodies, so they are to be filled with objects whereof they are capable, and plied with arts; whence followeth that while children are not capable of the acts of reasoning, the method of filling their senses and imaginations with outward objects should be plied. Nor is their memory at this time to be charged further with any objects than their imagination rightly ordered and fixed doth of itself impress the same upon them." After speaking of the common abuse of general rules, he says: "So far as those faculties (viz., sense, imagination, and memory) are started with matters of observation, so far rules may be given to direct the mind in the use of the same, and no further." "The arts and sciences which lead us to reflect upon the use of our own faculties are not to be taught till we are fully acquainted with their proper objects, and the direct acts of the faculties about them." So "it is a very absurd and preposterous course to teach Logick and Metaphysicks before or with other Humane Sciences which depend more upon Sense and Imagination than reasoning" (p. 46).

§ 17. In all this it seems to me that the worthy Puritan, of whom nobody but Dr. Barnard and Professor Masson has ever heard, has truly done more to lay a foundation for the art of teaching than his famous contemporaries Milton and Locke.

§ 18. Another writer of that day better known than Dury and with far more power of expression was Sir William Petty. He is the "W.P.," who in an Epistle "to his honoured friend Master Samuel Hartlib," set down his "thoughts concerning the advancement of real learning" (1647). This letter is to be shown only "to those few that are Reall Friends to the Designe of Realities."[103]

§ 19. Petty sees the need of intercommunication of those who wish to advance any art or science. He complains that "the wits and endeavours of the world are as so many scattered coals or fire-brands, which for want of union are soon quenched, whereas being but laid together they would yield a comfortable light and heat." This is a thought which may well be applied to the bringing up of the young; and the following passage might have been written to secure a training for teachers: "Methinks the present condition of men is like a field where a battle hath been lately fought, where we may see many legs and arms and eyes lying here and there, which for want of a union and a soul to quicken and enliven them are good for nothing but to

feed ravens and infect the air. So we see many wits and ingenuities lying scattered up and down the world, whereof some are now labouring to do what is already done, and puzzling themselves to re-invent what is already invented. Others we see quite stuck fast in difficulties for want of a few directions which some other man (might he be met withal) both could and would most easily give him." I wonder how many young teachers are now wasting their own and their pupils' time in this awkward predicament.

§ 20. "As for ... education," says Petty, "we cannot but hope that those who make it their trade will supply it and render the idea thereof much more perfect." His own contributions to the more perfect idea consist mainly in making the study of "realities" precede literature, and thus announcing the principle which in later times has led to the introduction of "object lessons." The Baconians thought that the good time was at hand, and that they had found the right road at last. By experiments they would learn to interpret Nature. After scheming a "Gymnasium, Mechanicum, or College of Tradesmen," Petty says, "What experiments and stuff would all those shops and operations afford to active and philosophical heads, out of which to extract that interpretation of nature whereof there is so little, and that so bad, as yet extant in the world!"[104] And this study of things was to affect the work of the school-room, and redeem it from the dismal state into which it was fallen. "As for the studies to which children are now-a-days put," says Petty, "they are altogether unfit for want of judgment which is but weak in them, and also for want of will, which is sufficiently seen ... by the difficulty of keeping them at schools and the punishment they will endure rather than be altogether debarred from the pleasure which they take in things."

§ 21. The grand reform required is thus set forth; "Since few children have need of reading before they know or can be acquainted with the things they read of; or of writing before their thoughts are worth the recording or they are able to put them into any form (which we call inditing); much less of learning languages when there be books enough for their present use in their own mother-tongue; our opinion is that those things being withal somewhat above their capacity (as being to be attained by judgment which is weakest in children) be deferred awhile, and others more needful for them, such as are in the order of Nature before those afore-mentioned, and are attainable by the help of memory which is either most strong or

unpreoccupied in children, be studied before them. We wish, therefore, that the educands be taught to observe and remember all sensible objects and actions, whether they be natural or artificial, which the educators must upon all occasions expound unto them."

§ 22. In proposing this great change Petty was influenced not merely by his own delight in the study of things but by something far more important for education, by observation of the children themselves. This study of things instead of "a rabble of words" would be "more easy and pleasant to the young as the more suitable to the natural propensions we observe in them. For we see children do delight in drums, pipes, fiddles, guns made of elder sticks, and bellows' noses, piped keys, &c., painting flags and ensigns with elderberries and cornpoppy, making ships with paper, and setting even nut-shells a-swimming, handling the tools of workmen as soon as they turn their backs and trying to work themselves; fishing, fowling, hunting, setting springes and traps for birds and other animals, making pictures in their writing-books, making tops, gigs and whirligigs, gilting balls, practising divers juggling tricks upon the cards, &c., with a million more besides. And for the females they will be making pies with clay, making their babies' clothes and dressing them therewith; they will spit leaves on sticks as if they were roasting meat; they will imitate all the talk and actions which they observe in their mother and her gossips, and punctually act the comedy or the tragedy (I know not whether to call it) of a woman's lying-in. By all which it is most evident that children do most naturally delight in things and are most capable of learning them, having quick senses to receive them and unpreoccupied memories to retain them" (*ad f.*).

§ 23. In these writers, Dury and Petty, we find a wonderful advance in the theory of instruction. Children are to be taught about *things* and this because their inward constitution determines them towards things. Moreover the subjects of instruction are to be graduated to accord with the development of the learner's faculties. The giving of rules and incomprehensible statements that will come in useful at a future stage is entirely forbidden. All this is excellent, and greatly have children suffered, greatly do they suffer still, from their teachers' neglect of it. There seems to me to have been no important advance on the thought of these men till Pestalozzi and Froebel fixed their attention on the mind of the child, and

valued things not in themselves but simply as the means best fitted for drawing out the child's self-activity.

§ 24. In several other matters we find Sir William Petty's recommendations in advance of the practice of his own time and ours. He advises "that the business of education be not (as now) committed to the worst and unworthiest of men [here at least we have improved] but that it be seriously studied and practised by the best and abler persons." To this standard we have not yet attained.

§ 25. Handwork is to be practised, but its educational value is not clearly perceived. "All children, though of the highest rank, are to be taught some gentle manufacture in their minority." *Ergastula Literaria*, literary workhouses, are to be instituted where children may be taught as well to do something towards their living as to read and write.[105]

§ 26. Education was to be universal, but chiefly with the object of bringing to the front the clever sons of poor parents. The rule he would lay down is "that all children of above seven years old may be presented to this kind of education, none being to be excluded by reason of the poverty and unability of their parents, for hereby it hath come to pass that many are now holding the plough which might have been made fit to steer the state."[106]

§ 27. From these enthusiasts for realities we find a change when we turn to their contemporary, a schoolmaster and author of a Latin Accidence, who was perhaps the most notable Englishman who ever kept a school or published a school-book.

§ 28. Milton was not only a great poet: he was also a great scholar. Everything he said or wrote bore traces of his learning. The world of books then rather than the world of the senses is his world. He has benefited as he says "among old renowned authors" and "his inclination leads him not" to read modern *Januas* and *Didactics*, or apparently the writings of any of his contemporaries including those of his great countryman, Bacon. But, as Professor Laurie reminds us, no man, not even a Milton, however he may ignore the originators of ideas can keep himself outside the influence of the ideas themselves when they are in the air; and so we find Milton using his incomparable power of expression in the service of the Realists.

§ 29. But brief he endeavours to be, and paying the Horatian penalty he becomes obscure. In the "few observations which flowered off and were the burnishing of many studious and contemplative years," Milton touches only on the bringing up of gentlemen's sons between the ages of 12 and 21, and his suggestions do not, like those of Comenius, deal with the education of the people, or of both sexes.[107] This limit of age, sex, and station deprives Milton's plan of much of its interest, as the absence of detail deprives it of much of its value.

§ 30. Still, we find in the *Tractate* a very great advance on the ideas current at the Renascence. Learning is no longer the aim of education but is regarded simply as a means. No finer expression has been given in our literature to the main thesis of the Christian and of the Realist and to the Realist's contempt of verbalism, than this: "The end of learning is to repair the ruins of our first parents by regaining to know God aright, and out of that knowledge to love Him, to imitate Him, to be like Him, as we may the nearest by possessing our souls of true virtue, which being united to the heavenly grace of faith makes up the highest perfection. But because our understanding cannot in this body found itself but on sensible things, nor arrive so clearly to the knowledge of God and things invisible, as by orderly conning over the visible and inferior creature, the same method is necessarily to be followed in all discreet teaching. And seeing every Nation affords not experience and tradition enough for all kind of learning, therefore we are chiefly taught the languages of those people who have at any time been most industrious after wisdom; so that language is but the instrument conveying to us things useful to be known. And though a linguist should pride himself to have all the tongues that Babel cleft the world into, yet, if he have not studied the solid things in them as well as the words and lexicons, he were nothing so much to be esteemed a learned man as any yeoman or tradesman competently wise in his mother-dialect only."

§ 31. The several propositions here implied have thus been "disentangled" by Professor Laurie (*John Milton* in *Addresses*, &c., p. 167).

1. The aim of education is the *knowledge* of God and *likeness* to God.

2. *Likeness* to God we attain by possessing our souls of true virtue and by the Heavenly Grace of Faith.

3. *Knowledge* of God we attain by the study of the visible things of God.

4. Teaching then has for its aim *this* knowledge.

5. Language is merely an instrument or vehicle for the knowledge of things.

6. The linguist may be less *learned* (*i.e.*, educated) in the true sense than a man who can make good use of his mother-tongue though he knows no other.

§ 32. Elsewhere, Milton gives his idea of "a complete and generous education;" it "fits a man to perform justly, skilfully, and magnanimously all the offices both private and public of Peace and War." (Browning's edition, p. 8.) Here and indeed in all that Milton says we feel that "the noble moral glow that pervades the *Tractate on Education*, the mood of magnanimity in which it is conceived and written, and the faith it inculcates in the powers of the young human spirit, if rightly nurtured and directed, are merits everlasting." (Masson iij, p. 252.)

§ 33. But in this moral glow and in an intense hatred of verbalism lie as it seems to me the chief merits of the Tractate. The practical suggestions are either incomprehensible or of doubtful wisdom. The reforming of education was, as Milton says, one of the greatest and noblest designs that could be thought on, but he does not take the right road when he proposes for every city in England a joint school and university for about 120 boarders. The advice to keep boys between 12 and 21 in this barrack life I consider, with Professor Laurie, to be "fundamentally unsound;" and the project of uniting the military training of Sparta with the humanistic training of Athens seems to me a pure chimæra.

§ 34. When we come to instruction we find that Milton after announcing the distinctive principle of the Realists proves to be himself the last survivor of the Verbal Realists. (See *supra*, p. 25.) No doubt

“His daily teachers had been woods and rills,”

but his thoughts had been even more in his books; and for the young he sketches out a purely bookish curriculum. The young are to learn about things, but they are to learn through books; and the only books to which Milton attaches importance are written in Latin, Greek, or Hebrew. He held, probably with good reason, that far too much time “is now bestowed in pure trifling at grammar and sophistry.” “We do amiss,” he says, “to spend 7 or 8 years merely in scraping together so much miserable Latin and Greek as might be learned otherwise easily and delightfully in one year.” Without an explanation of the “otherwise” this statement is a truism, and what Milton says further hardly amounts to an explanation. His plan, if plan it can be called, is as follows: “If after some preparatory grounds of speech by their certain forms got into memory, the boys were led to the praxis thereof in some chosen short book lessoned thoroughly to them, they might then proceed to learn the substance of good things and arts in due order, which would bring the whole language quickly into their power. This,” adds Milton, “I take to be the most rational and most profitable way of learning languages.” It is, however, not the most intelligible.

§ 35. “I doubt not but ye shall have more ado to drive our dullest and laziest youth, our stocks and stubbs, from the infinite desire of such a happy nurture than we have now to hale and drag our choicest and hopefullest wits to that asinine feast of sow thistles and brambles which is commonly set before them as all the food and entertainment of their tenderest and most docible age.” We cannot but wonder whether this belief survived the experience of “the pretty garden-house in Aldersgate.” From the little we are told by his nephew and old pupil Edward Phillips we should infer that Milton was not unsuccessful as a schoolmaster. In this we have a striking proof how much more important is the teacher than the teaching. A character such as Milton’s in which we find the noblest aims united with untiring energy in pursuit of them could not but dominate the impressionable minds of young people brought under its influence. But whatever success he met with could not have been due to the things he taught nor to his method in teaching them. In spite of the “moral glow” about his recommendations they are “not a bow for every [or any] man to shoot in that counts himself a teacher.”

§ 36. Nor did he do much for the science of education. His scheme is vitiated, as Mark Pattison says, by "the information fallacy." In the literary instruction there is no thought of training the faculties of all or the special faculties of the individual. "It requires much observation of young minds to discover that the rapid inculcation of unassimilable information stupefies the faculties instead of training them," says Pattison; and Milton absorbed by his own thoughts and the thoughts of the ancients did not observe the minds of the young, and knew little of the powers of any mind but his own.

For information the youths are not required to observe for themselves but are to be taught "a general compact of physicks." "Also in course might be read to them out of some not tedious writer the Institution of Physick; that they may know the tempers, the humours, the seasons, and how to manage a crudity."

§ 37. Even the study of the classics is advocated by Milton on false grounds. If, like the Port-Royalists, he had recommended the study of the classical authors for the sake of pure Latin and Greek or as models of literary style, the means would have been suited to the end; but it was very different when he directed boys to study Virgil and Columella in order to learn about bees and farming. In after-life they would find these authorities a little out of date; and if they ever attempted to improve tillage, "to recover the bad soil and to remedy the waste that is made of good, which was one of Hercules's praises," they would have found a knowledge of the methods of Hercules about as useful as of the methods of the Romans.

§ 38. Milton was then a reformer "for his own hand;" and notwithstanding his moral and intellectual elevation and his superb power of rhetoric, he seems to me a less useful writer on education than the humble Puritans whom he probably would not deign to read. In his haughty self-reliance, he, like Carlyle with whom Seeley has well compared him (*Lectures and Addresses: Milton*), addressed his contemporaries *de haut en bas*, and though ready to teach could learn only among the old renowned authors with whom he associated himself and we associate him.

§ 39. Judged from our present standpoint the Tractate is found with many weaknesses to be strong in this, that it co-ordinates physical, moral, mental and æsthetic training.

§ 40. But nothing of Milton's can be judged by our ordinary canons. He soars far above them and raises us with him "to mysterious altitudes above the earth" (*supra*, p. 153, *note*). Whatever we little people may say about the suggestions of the Tractate, Milton will remain one of the great educators of mankind.[108]

XIII.

LOCKE.

(1632-1704).

§ 1. When an English University established an examination for future teachers,[109] the "special subjects" first set were "Locke and Dr. Arnold." The selection seems to me a very happy one. Arnold greatly affected the spirit and even the organization of our public schools at a time when the old schools were about to have new life infused into them, and when new schools were to be started on the model of the old. He is perhaps the greatest educator of the English type, *i.e.*, the greatest educator who had accepted the system handed down to him and tried to make the best of it. Locke on the other hand, whose reputation is more European than English, belongs rather to the continental type. Like his disciple Rousseau and like Rousseau's disciples the French Revolutionists, Locke refused the traditional system and appealed from tradition and authority to reason. We English revere Arnold, but so long as the history of education continues to be written, as it has been written hitherto, on the Continent, the only Englishman celebrated in it will be as now not the great schoolmaster but the great philosopher.

§ 2. In order to understand Locke we must always bear in mind what I may call his two main characteristics; 1st, his craving to know and to speak the truth and the whole truth in everything, truth not for a purpose but for itself[110]; 2nd, his perfect trust in the reason as the guide, the only guide, to truth.[111]

§ 3. 1st. Those who have not reflected much on the subject will naturally suppose that the desire to know the truth is common to all men, and the desire to speak the truth common to most. But this is very far from being the case. If we had any earnest desire for truth we should examine things carefully before we admitted them as truths; in other words our opinions would be the growth of long and energetic thought. But instead of this they are formed for the most part quite carelessly and at haphazard, and we value

them not on account of their supposed agreement with fact but because though "poor things" they are "our own" or those of our sect or party. Locke on the other hand was always endeavouring to get at the truth for its own sake. This separated him from men in general. And he brought great powers of mind to bear on the investigation. This raised him above them.

§ 4. 2nd. Locke's second characteristic was his entire reliance on the guidance of reason. "The faculty of reasoning," says he, "seldom or never deceives those who trust to it." Elsewhere, borrowing a metaphor from Solomon (Prov. xx, 27), he speaks of this faculty as "the candle of the Lord set up by Himself in men's minds." (F. B. ij., 129). In a fine passage in the *Conduct of the Understanding* he calls it "the touchstone of truth" (§ iij, Fowler's edition, p. 10). He even goes so far in his correspondence with Molyneux as to maintain that intelligent honest men cannot possibly differ. [112]

But if we consider it from one point of view the treatise on the *Conduct of the Understanding* is itself a witness that human reason is a compass liable to incalculable variations and likely enough to shipwreck those who steer by it alone. In this book Locke shows us that to come to a true result the understanding (1) must be perfectly trained, (2) must not be affected by any feeling in favour of or against any particular result, and (3) must have before it all the data necessary for forming a judgment. In practice these conditions are seldom (if ever) fulfilled; and Locke himself, when he wants an instance of a mind that can acquiesce in the certainty of its conclusions, takes it from "angels and separate spirits who may be endowed with more comprehensive faculties" than we are (C. of U. § iij, 3).

§ 5. It seems to me then that Locke much exaggerates the power of the individual reason for getting at the truth. And to exaggerate the importance of one function of the mind is to unduly diminish the importance of the rest. Thus we find that in Locke's scheme of education little thought is taken for the play of the affections and feelings; and as for the imagination it is treated merely as a source of mischief.

§ 6. Locke, as it has often been pointed out, differs from the schoolmaster in making small account of the knowledge to be acquired by those under education. But it has not been so often remarked that the fundamental difference is much deeper than this and lies in the conception of knowledge

itself. With the ordinary schoolmaster the test of knowledge is the power of reproduction. Whatever pupils can reproduce with difficulty they know imperfectly; whatever they can reproduce with ease they know thoroughly. But Locke's definition of knowledge confines it to a much smaller area. According to him knowledge is "the internal perception of the mind" (Locke to Stillingfleet *v.* F. B. ij, 432). "Knowing is seeing; and if it be so, it is madness to persuade ourselves we do so by another man's eyes, let him use never so many words to tell us that what he asserts is very visible. Till we ourselves see it with our own eyes, and perceive it by our own understandings, we are as much in the dark and as void of knowledge as before, let us believe any learned authors as much as we will" (C. of U. § 24).[113]

§ 7. Here Locke makes no distinction between different classes of truths. But surely very important differences exist.

About some physical facts our knowledge is at once most certain and most definite when we derive it through the evidence of our own senses. "Seeing is believing," says the proverb. It may be believing, but it is not knowing. That certainty which we call knowledge we often arrive at better by the testimony of others than by that of our own senses.

Miss Martineau in her Autobiography tells us that as a child of ten she entirely and unaccountably failed to see a comet which was visible to all other people; but, although her own senses were at fault, the evidence for the comet was so conclusive that she may be said to have *known* there was a comet in the sky.

On sufficient evidence we can know anything, just as we know there is a great water-fall at Niagara though we may never have crossed the Atlantic. But we cannot be so certain simply on the evidence of our senses. If we trusted entirely to them we might take the earth for a plane and "know" that the sun moved round it.

§ 8. But Locke probably considers as the subject of knowledge not so much physical facts as the great body of truths which are ascertained by the intellect. It is the eye of the mind by which alone knowledge is to be gained. Of these truths the purest specimens are the truths of geometry. It may be said that only those who have followed the proofs *know* that the area of the square on the side opposite the right angle in a right-angled triangle is equal

to the sum of the squares on the other sides. But even in pure reasoning like this, the tiro often seems to see what he does not really see; and where his own reason brings him to a conclusion different from the one established he *knows* only that he is mistaken.

§ 9. It must be admitted then that first-hand knowledge, knowledge derived from the vision of the eye or of the mind, is not the only knowledge the young require. Every learner must take things on trust, as even Lord Bacon admits. *Discentem credere oportet.* To use Locke's own words:—"I do not say, to be a good geographer that a man should visit every mountain, river, promontory, and creek upon the face of the earth, view the buildings and survey the land everywhere as if he were going to make a purchase" (C. of U., iij, *ad f.*). So that even according to Locke's own shewing we must use the eyes of others as well as our own, and this is true not in geography only, but in all other branches of knowledge.

§ 10. But are we driven to the alternative of agreeing either with Locke or with the schoolmaster? I do not see that we are. The thought which underlies Locke's system of education is this: true knowledge can be acquired only by the exercise of the reason: in childhood the reasoning power is not strong enough for the pursuit of knowledge: knowledge, therefore, is out of the question at that age, and the only thing to be thought of is the formation of habits. Opposed to this we have the schoolmaster's ideal which is governed by examinations. According to this ideal the object of the school course is to give certain "knowledge," linguistic and other, and to fix it in the memory in such a manner that it can be displayed on the day of examination. "Knowledge" of this kind often makes no demand whatever on the reasoning faculty, or indeed on any faculty but that of remembering and reproducing what the learner has been told; in extreme cases the memory of mere sounds or symbols suffices.

But after all we are not compelled to choose between these two theories. Take, *e.g.*, the subject which Locke has mentioned, geography. The schoolmasters of the olden time began with the use of the globes, a plan which, by the way, Locke himself seems to have winked at. His disciple Molyneux tells him of the performances of the small Molyneux. When he was but just turned five he could read perfectly well, and on the globe could have traced out and pointed at all the noted ports, countries, and cities of the world, both land and sea; by five and a half could perform many of the

plainest problems on the globe, as the longitude and latitude, the Antipodes, the time with them and other countries, &c. (Molyneux to L., 24th August, 1695.) Here we find a child brought up, without any protest from Locke, on mere examination knowledge, which according to Locke himself is not knowledge at all. It is strange that Locke did not at once point out to Molyneux that the child was not really learning what the father supposed him to be learning. When the child turned over the plaster ball and found the word "Paris," the father no doubt attributed to the child much that was in his own mind only. To the child "the Globe" (as Rousseau afterwards said), was nothing but a plaster ball; "Paris" was nothing but some letters marked on that ball. Comenius had already got a notion how children may be given some knowledge of geography. "Children begin geography," said he, "when they get to understand what a hill, a valley, a field, a river, a village, a town is." (*Supra*, p. 145.) When this beginning has been made, geographical knowledge is at once possible to the child, and not before.

Perfect knowledge in geography, as in most other things, is out of every one's reach. Nobody knows, *e.g.*, all that could be known about Paris. The knowledge its inhabitants have of it is very various, but in all cases this knowledge is far greater than that of a visitor. The visitor's knowledge again is far greater than that of strangers who have never seen Paris. Nobody, then, can know everything even about Paris; but a child who knows what a large town is, and can fancy to himself a big town called Paris, which is the biggest and most important town in France has some knowledge about it. This must be maintained against Locke. Against the schoolmaster it may be pointed out that making an Eskimo say the words: —"Paris is the capital of France," would not be giving him any knowledge at all; and the same may be said of many "lessons" in the school-room. If a common sailor were to teach an Eskimo English, he would very likely suppose that when he had taught the sounds "Paris is the capital of France," he had conveyed to his pupil all the ideas which those sounds suggested to his own mind. A common schoolmaster may fall into a similar error.

§ 11. In the most celebrated work which has been affected by the *Thoughts* of Locke, Rousseau's *Emile*, we find childhood treated in a manner altogether different from youth: the child's education is mainly physical, and instruction is not given till the age of twelve. Locke's system on first sight seems very different to this, but there is a deeper connection

between the two than is usually observed. We have seen that Locke allowed nothing to be knowledge that was not acquired by the perception of the intellect. But in children the intellectual power is not yet developed; so according to Locke knowledge properly so-called is not within their reach. What then can the educator do for them? He can prepare them for the age of reason in two ways, by caring first for their physical health, second for the formation of good habits.

§ 12. 1st. On the Continent Locke has always been considered one of the first advocates of physical education, and he does, it is true, give physical education the first place, a feature in his system, which we naturally connect with his study of medicine, and also with the trouble he had all his life with his own health. But care of the body, and especially bodily exercises, were always much thought of in this country, and the main writers on education before Locke, *e.g.*, Sir Thos. Elyot, Mulcaster, Milton, were very emphatic about physical training.

In the autobiography of Lord Herbert of Cherbury, we may see what attention was paid in Locke's own century to this part of education.[114]

§ 13. 2nd. "That, and that only, is educative which moulds forms or modifies the soul or mind." (Mark Pattison in *New Quarterly Magazine*, January, 1880.)

Here we have a proposition which is perhaps seldom denied, but very commonly ignored by those who bring up the young. But Locke seems to have been entirely possessed with this notion, and the greater part of the *Thoughts* is nothing but a long application of it. The principle which lies at the root of most of his advice, he has himself expressed as follows: "That which I cannot too often inculcate is, that whatever the matter be about which it is conversant whether great or small, the main, I had almost said only thing, to be considered in every action of a child is what influence it will have upon his mind; what habit it tends to, and is likely to settle in him: how it will become him when he is bigger, and if it be encouraged, whither it will lead him when he is grown up." (*Thoughts*, § 107, p. 86.)

Here we see that Locke differed widely from the schoolmasters of his time, perhaps of all time. A man must be a philosopher indeed if he can spend his life in teaching boys, and yet always think more about what they will *be* and what they will *do* when their schooling is over than what they

will *know*. And in these days if we stopped to think at all we should be trodden on by the examiner.[115]

In this respect Locke has not been surpassed. Like his predecessor Montaigne he took for his centre not the object, knowledge, but the subject, man.[116]

§ 14. In some other respects he does not seem so happy. He makes little attempt to reach a scientific standpoint and to establish general truths about our common human nature. He thinks not so much of the man as the gentleman, not so much of the common laws of the mind as of the peculiarities of the individual child. He even hints that differences of disposition in children render treatises on education defective if not useless. "There are a thousand other things that may need consideration" he writes "especially if one should take in the various tempers, different inclinations, and particular defaults that are to be found in children and prescribe proper remedies. The variety is so great that it would require a volume, nor would that reach it. Each man's mind has some peculiarity as well as his face, that distinguishes him from all others; and there are possibly scarce two children who can be conducted by exactly the same method: besides that I think a prince, a nobleman, or an ordinary gentleman's son should have different ways of breeding. But having had here only some general views in reference to the main end and aims in education, and those designed for a gentleman's son, whom being then very little I considered only as white paper or wax to be moulded and fashioned as one pleases, I have touched little more than those heads which I judged necessary for the breeding of a young gentleman of his condition in general." (*Thoughts*, § 217, p. 187.)

No language could bring out more clearly the inferiority of Locke's standpoint to that of later thinkers. He makes little account of our common nature and wishes education to be based upon an estimate of the peculiarities of the individual pupil and of his social needs. And no one with an adequate notion of education could ever compare the young child to "white paper or wax." Perhaps the development of an organism was a conception that could not have been formed without a great advance in physical science. Froebel who makes most of it learnt it from the scientific study of trees and from mineralogy. We need not then be surprised that Locke does not say, as Pestalozzi said a hundred years later, "Education instead of merely considering what is to be imparted to children ought to

consider first what they already possess." But if he had read Comenius he would have been saved from comparing the child to wax or white paper in the hands of the educator. Comenius had said: "Nature has implanted within us the seeds of learning, of virtue, and of piety. The object of education is to bring these seeds to perfection." (*Supra*, p. 135.) This seems to me a higher conception than any that I meet with in Locke.

§ 15. But if our philosopher did not learn from Comenius he certainly learnt from Montaigne.[117] Indeed Dr. Arnstädt (*v. supra*, p. 69) has put him into a series of thinkers who have much in common. This succession is as follows: Rabelais, Montaigne, Locke, Rousseau; and, according to Mr. Browning's division, they form a school by themselves. "Thinkers on education," says Mr. Browning,[118] "are 1st those who wish to educate through the study of the classics, or 2nd those who wish to educate through the study of the works of Nature, or 3rd those who aim at an education independent of study and knowledge, and think rather of the training of character and the attaining to the Greek ideal, the man beautiful and good." To the three schools Mr. Browning gives the names Humanist, Realist, and Naturalist, ("nos autres naturalistes," Montaigne says). Locke he considers one of the principal writers of the "naturalistic" school, and says, Locke "has given a powerful bias to naturalistic education both in England and on the Continent for the last 200 years." (*Ed. Theories*, p. 85.)

This use of the word "naturalistic" seems to me somewhat misleading, or at best vague, and it is a word overworked already: so I should prefer to speak of the "developing" or "training" school. The classification itself certainly has its uses but it must be employed with caution. If caught up by those who have only an elementary acquaintance with the subject a class of persons apt to delight in such arrangements as an aid to memory, these divisions may easily prove a hindrance to light.

§ 16. This subject of classification is so important to students that it may be worth while to make a few remarks upon it. The only thoroughly consistent people are the people of fiction. We can know all about *them*. Directly we understand their central thought or peculiarity we may be sure that everything they say and do will be strictly in accordance with it, will indeed be explainable by it. To take a bald and simple instance, directly we know that Mrs. Jellaby in *Bleak House* is absorbed by her interest in an African Mission, we know all that is to be known about her; and everything

she does or omits to do has some reference to Borrioboola Ghar. But in real life not only are people much less easily understood, but when we actually have seized their main idea or peculiarity or interest we must not expect to find them always consistent: and they will say and do much which if not inconsistent with the main idea or peculiarity or interest has at least no connection with it. Suppose, *e.g.*, you can make out with some certainty that Locke belonged to the developing school, you must not expect him to pay little heed to instruction as such. Again, suppose you find that his philosophy was utilitarian; you must not suppose that in everything he says he will be thinking of utility.

Now the historian is tempted to treat real men and women as the writer of fiction treats his puppets. Having fastened, quite correctly let us suppose, on their main peculiarity he considers it necessary to square everything with his theory of them, and whatever will not fall in with it he, if he is unscrupulous, misrepresents, or if he is scrupulous, suppresses.

Again, we are too apt to read into words meanings derived from controversies unknown at the time when the words were uttered. This is a well-known fact in the history of religious thought. We must always consider not merely the words used but the time when they were used. What a man might say quite naturally and orthodoxly at one period would be sufficient to convict him of sympathizing with some terrible heresy if uttered half a century later. We find something like this in the history of education. If anyone nowadays speaks of the pleasure with which as a young man he read Tacitus, he is understood to mean that he is opposed to the introduction of "modern studies" into the school-room. If on the other hand he extols botany, or regrets that he never learned chemistry, this is taken for an assault on classical instruction. But, of course, no such inference could be drawn if we went back to a time when the antithesis between classics and natural science had not been accentuated. In many other instances we have to be on our guard against forcing into language meaning which belongs rather to a later date.

§ 17. With these cautions in mind let us see how far Locke may be said (1) to be a trainer, and (2) how far a utilitarian.

§ 18. I. Mr. Browning attributes to Rabelais, Montaigne, and Locke the desire to bring up a well-developed man rather than a good scholar. But

Rabelais certainly craved for the knowledge of *things*; and if he is to be classed at all I should put him rather with the Realists, albeit he lived before the realistic spirit became powerful. Montaigne went more on the lines of developing rather than teaching, and, shrewd man of the world as he was, he thought a great deal about the art of living. But his ideal was not so much the man as the gentleman. This was true also of Locke; and here we see some explanation why both Montaigne and Locke do not value classical learning.[119] On the Continent classical learning has never been associated with the character of an accomplished gentleman; and, as far as I know, the conception that the highest type of excellence is found in the union of "the scholar and the gentleman" is peculiar to this country. In the society of Locke's day this union does not seem to have been recognized, and Locke observes: "A great part of the learning now in fashion in the schools of Europe, and that goes ordinarily into the round of education, a gentleman may in a good measure be unfurnished with, without any great disparagement to himself or prejudice to his affairs." (*Thoughts*, § 94, p. 74.) So Locke sought as the true essential for the young gentleman "prudence and good breeding." He puts his requisites in the following order of importance:—1, virtue; 2, wisdom; 3, manners; 4, learning; and so "places learning last and least." Here he shews himself far ahead of those who still held to the learned ideal; but his notions of development were cramped by his thinking only of the gentleman and what was requisite for him.

§ 19. II. Was Locke a utilitarian in education? It is the fashion (and in history as in other things fashion is a powerful force), it is the fashion to treat of Locke as a great champion of utilitarianism. We might expect this in the ordinary historians, for "when they do agree their unanimity is" not perhaps very wonderful. But there is one great English authority quite uninfluenced by them who has said the same thing, viz.—Cardinal Newman. The Cardinal, as the champion of authority, is perhaps prejudiced against Locke, who holds that "the faculty of reasoning seldom or never deceived those who trusted to it." Be this as it may, Newman asserts that "the tone of Locke's remarks is condemnatory of any teaching which tends to the general cultivation of the mind." (*Idea of a University.* Discourse vij., § 4; see also § 6.) A very interesting point for us to consider is then, Is this reputation of Locke's for utilitarianism well deserved?

§ 20. First let us be quite certain of our definition.

In learning anything there are two points to be considered; 1st, the advantage we shall find from knowing that subject or having that skill, and 2nd, the effect which the study of that subject or practising for that skill will have on the mind or the body.

These two points are in themselves distinct, though it is open to anyone to maintain that they need not be considered separately. Nature has provided that the bodies of most animals should get the exercise best for them in procuring food. So Mr. Herbert Spencer has come to the conclusion that it would be contrary to "the economy of nature" if one set of occupations were needed as gymnastics and another for utility. In other words he considers that it is in learning the most useful things we get the best training.

The utilitarian view of instruction is that we should teach things useful in themselves and either neglect the result on the mind and body of the learner or assume Mr. Spencer's law of "the economy of nature."

Again, when the subjects are settled the utilitarian thinks how the knowledge or skill may be most speedily acquired, and not how this method or that method of acquisition will affect the faculties.

§ 21. This being utilitarianism in education the question is how far was Locke the utilitarian he is generally considered?

If we take by itself what he says under the head of "Learning" in the *Thoughts concerning Education* no doubt we should pronounce him a utilitarian. He considers each subject of instruction and pronounces for or against it according as it seems likely or unlikely to be useful to a gentleman. And in the methods he suggests he simply points out the quickest route, as if the knowledge were the only thing to be thought of. Hence his utilitarian reputation.

But two very important considerations have been lost sight of.

1st. Learning is with him "the last and least part" in education.

2nd. Intellectual education was not for childhood but for the age when we can teach ourselves. "When a man has got an entrance into any of the sciences," says he, "it will be time then to depend on himself and rely upon

his own understanding and exercise his own faculties, which is the only way to improvement and mastery." (L. to Peterborough, quoted in Camb. edition of *Thoughts*, p. 229.) "So," he says, "the business of education is not, as I think, to make the young perfect in any one of the sciences but so to open and dispose their minds as may best make them capable of any when they shall apply themselves to it." The studies he proposes in the *Conduct of the Understanding* (which is his treatise on intellectual education) have for their object "an increase of the powers and activity of the mind, not an enlargement of its possessions" (*C. of U.* § 19, *ad f.*).

Thus strange to say the supposed leader of the Utilitarians has actually propounded in so many words the doctrine of their opponents.

§ 22. When Locke is more studied it will be found that the *Thoughts* are misleading if we neglect his other works, more particularly the *Conduct of the Understanding*.

§ 23. Towards the end of his days, Locke was conscious of gleams of the "untravelled world" which lay before the generations to come. With great pathos he writes to a friend: "When I consider how much of my life has been trifled away in beaten tracks where I vamped on with others only to follow those who went before me, I cannot but think I have just as much reason to be proud as if I had travelled all England and, if you will, all France too, only to acquaint myself with the roads, and be able to tell how the highways lie wherein those of equipage, and even the common herd too, travel. Now, methinks—and these are often old men's dreams—I see openings to truth and direct paths leading to it, wherein a little application and industry would settle one's mind with satisfaction and leave no darkness or doubt. But this is the end of my day when my sun is setting: and though the prospect it has given me be what I would not for anything be without—there is so much truth, beauty, and consistency in it—yet it is for one of your age, I think I ought to say for yourself, to set about" (L. to Bolde, quoted by Fowler, *Locke*, p. 120). But another 200 years have not sufficed to put us in possession of the Promised Land of which Locke had these Pisgah visions. We still "vamp on," following those who went before us and getting small help from expounders of "Education as a Science." But as it would seem the days of vamping on blindly in the beaten track are drawing to a close. We cannot doubt that if Locke had known the wonderful advance which various sciences have made since his day he would have

seen in them “openings to truth and direct paths leading to it” for many purposes, certainly for education. It is for our age and ages to come to set about applying our scientific knowledge to the bringing up of children; and thinkers such as Froebel will shew us how.

Locke’s *Thoughts concerning Education* and his *Conduct of the Understanding* should be in the hands of all students of education who know the English language. I have therefore not attempted to epitomise what he has said, but have endeavoured to get at the main thoughts which are, so to speak, the taproot of his system. Of the *Thoughts* there is an edition published by the National Society and another by the Pitt Press, Cambridge. The Cambridge edition gives from Fox-Bourne’s Life Locke’s scheme of “Working Schools” and from Lord King’s the essay “Of Study.” Of the *Conduct* there is an edition published by the Clarendon Press. “F.B.” in the references above stands for Fox-Bourne’s *Life of Locke*.

In the above essay I have not treated of Locke as a methodizer; but he advocated teaching foreign languages *without grammar*, and he published “Æsop’s Fables in English and Latin, interlineary. For the benefit of those, who not having a master would learn either of these Tongues.” When I edited the *Thoughts* for Pitt Press I did not know of this book or I should have mentioned it.

XIV.

JEAN-JACQUES ROUSSEAU.

(1712-1778).

§ 1. The great men whom we meet with in the history of education may be divided into two classes, thinkers and doers. There would seem no good reason why the thinker should not be great as a doer or the doer as a thinker; and yet we hardly find any records of men who have been successful both in investigating theory and directing practice. History tells us of first-rate practical schoolmasters like Sturm and the Jesuits; but they did not think out their own theory of their task: they accepted the current theory of their time. On the other hand, men who like Montaigne and Locke rejected the current theory and sought to establish a better by an appeal to reason were not practical schoolmasters. Whenever the thinker tries to turn his thought into action he has cause to be disappointed with the result. We saw this in the disastrous failure of Ratke; and even the books in which Comenius tried to work out his principles, the *Vestibulum, Janua* and the rest, with the exception of the *Orbis Pictus*, were speedily forgotten. In the world of education as elsewhere it takes time to find for great thoughts the practice which gives effect to them. The course of great thoughts is in some ways like the course of great rivers. Most romantic and beautiful near their source, they are not most useful. They must leave the mountains in which they first appeared, and must flow not in cataracts but smoothly along the plain among the dwellings of common men before they can be turned to account in the every-day business of life.

§ 2. The eighteenth century was soon distinguished by boundless activity of thought; and this thought was directed mainly to a great work of destruction. Europe had outgrown the ideas of the Middle Age, and the framework of Society, which the Middle Age had bequeathed, had waxed old and was ready to vanish as soon as any strong force could be found to push it out of the way. As Matthew Arnold has described it—

"It's frame yet stood without a breach
"When blood and warmth were fled;
"And still it spake it's wonted speech—
"But every word was dead."

Here then there was need of some destructive power that should remove and burn up much that had become mere obstacle and incumbrance. This power was found in the writings which appeared in France about the middle of the century; and among the authors of them none spoke with more effect than one who differed from all the rest, a vagabond without family ties or social position of any kind, with no literary training, with little knowledge and in conduct at least, with no morals. The writings of Rousseau and the results produced by them are among the strangest things in history; and especially in matters of education it is more than doubtful if the wise man of the world Montaigne, the Christian philanthropist Comenius, or that "slave of truth and reason" the philosopher Locke, had half as much influence as this depraved serving man.

§ 3. The work by which Rousseau became famous was a prize essay in which he maintained that civilization, the arts and all human institutions were from first to last pernicious in their effects, and that no happiness was possible for the human race without giving them all up and returning to what he called the state of Nature. He glorified the "noble savage." If man had brought himself to a state of misery bordering on despair by following his own many inventions, take away all these inventions and you will have man in his proper condition. The argument seems something of this kind: Man was once happy: Man is now miserable: undo everything that has been done and Man will be happy again.

§ 4. This principle of a so-called "natural" state existing before man's many inventions, Rousseau applied boldly to education, and he deduced this general rule: "Do precisely the opposite to what is usually done, and you will have hit on the right plan." Not reform but revolution was his advice. He took the ordinary school teaching and held it up to ridicule, and certainly he did prove its absurdity. And a most valuable service he thus rendered to teachers. Every employment while it makes us see some things clearly, also provides us with blinkers, so to speak, which prevent our seeing other things at all. The school teacher's blinkers often prevent his

seeing much that is plain enough to other people; and when a writer like Rousseau takes off our blinkers for us and makes us look about us, he does us a great deal of good. But we need more than this: if we have children entrusted to us we must do something with them, and Rousseau's rule of doing the opposite to what is usual will not be found universally applicable. So we consult Rousseau again, and what is his advice?

§ 5. Rousseau would bring everything back to the "natural" state, and unfortunately he never pauses to settle whether he means by this a state of ideal perfection, or of simply savagery. The savage, he says, gets his education without any one's troubling about it, and so he infers that all the trouble taken by the civilized is worse than thrown away. (Girardin's *Rousseau*, ij., 85.) But he does not fall back on *laisser faire*. He urges on parents the duty of *themselves* attending to the bringing up of their children. "Point de mère, point d'enfant—no mother, no child," says he; and he would have the father see to the training of the child whom the mother has suckled.

§ 6. Rousseau's picture of family life is given us where few Englishmen are likely to find it, enveloped in the *Nouvelle Héloïse*. Here we read how Julie always has her children with her, and while seeming to let them do as they like, conceals with the air of apparent carelessness the most vigilant observation. Possessed by the notion that there can be no intellectual education before the age of reason, she proclaims: "La fonction dont je suis chargée n'est pas d'élever mes fils, mais de les préparer pour être élevés: My business is not to educate my sons, but to prepare them for being educated." (*N. Héloïse*, 5th P., Lett. 3.)[120]

§ 7. There is much that is very pleasing in this picture of ideal family life; but when Rousseau comes formally to propound his ideas on education, he gives up family life to attain greater simplicity. "Je m'en tiens à ce qui est plus simple," says he: "What I stick to is the more *simple*." He tries to state everything in its lowest terms, so to speak; and this method is excellent so long as he puts on one side only what is accidental, and retains all the essentials of the problem. But his rage for simplicity sometimes carried him beyond this. There is an old Cambridge story of a problem introducing an elephant "whose weight may be neglected." This is after the manner of Rousseau. In the bringing up of the model child, he "neglects" parents, brothers and sisters, young companions; and though he says that the needful

qualities of a master may be expected only in “un homme de génie,” he hands over Émile to a governor to live an isolated life in the country.

§ 8. This governor is to devote himself, for some years, entirely to imparting to his pupil these difficult arts—the art of being ignorant and of losing time. Till he is twelve years old, Émile is to have no direct instruction whatever. “At that age he shall not know what a book is,” says Rousseau; though elsewhere we are told that he will learn to read of his own accord by the time he is ten, if no attempt is made to teach him. He is to be under no restraint, and is to do nothing but what he sees to be useful.

§ 9. Freedom from restraint is, however, to be apparent, not real. As in ordinary education the child employs all its faculties in duping the master, so in education “according to Nature” the master is to devote himself to duping the child. “Let him always be his own master in appearance, and do you take care to be so in reality. There is no subjection so complete as that which preserves the appearance of liberty; it is by this means even the will is led captive.”

§ 10. “The most critical interval of human nature is that between the hour of our birth and twelve years of age. This is the time wherein vice and error take root without our being possessed of any instrument to destroy them.” (*Ém.* ij., 79.) Throughout this season, the governor is to be at work training the pupil in the art of being ignorant and losing time. “The first education should be purely negative. It consists by no means in teaching virtue or truth, but in securing the heart from vice and the intellect from error. If you could do nothing and let nothing be done, if you could bring on your pupil healthy and strong to the age of 12 without his being able to tell his right hand from his left, from your very first lessons the eyes of his understanding would open to reason. Being without prejudices and without habits he would have nothing in him to thwart the effect of your care; and by beginning with doing nothing you would have made an educational prodigy.”[121]

“Exercise his body, his organs, his senses, his powers; but keep his mind passive as long as possible. Mistrust all his sentiments formed before the judgment which determines their value. Restrain, avoid all foreign impressions, and to prevent the birth of evil be in no hurry to cause good; for good is good only in the light of reason. Look on all delays as so many

advantages: it is a great gain to advance towards the goal without loss: let childhood ripen in children. In short, whatever lesson they may need, be sure not to give it them to-day if you can safely put it off till to-morrow."[122]

"Do not, then, alarm yourself much about this apparent idleness. What would you say of the man, who, in order to make the most of life, should determine never to go to sleep? You would say, The man is mad: he is not enjoying the time; he is depriving himself of it: to avoid sleep he is hurrying towards death. Consider, then, that it is the same here, and that childhood is the sleep of reason."[123]

§ 11. We have now reached the climax (or shall we say the nadir?) in negation. Rousseau has given the *coup de grâce* to the ideal of the Renascence. Comenius was the first to take a comprehensive view of the educator's task and to connect it with man's nature and destiny; but he could not get clear from an over-estimate of the importance of knowledge. According to his ideal, man should know all things; so in practice he thought too much of imparting knowledge. Then came Locke and treated the imparting of knowledge as of trifling importance when compared with the formation of character; but he too in practice hardly went so far as this principle might have led him. He was much under the influence of social distinctions, and could not help thinking of what it was necessary for a gentleman to know. So that Rousseau was the very first to shake himself entirely free from the notion which the Renascence had handed down that man was mainly a *learning* animal. Rousseau has the courage to deny this in the most emphatic manner possible, and to say: "For the first 12 years the educator must teach the child *nothing*."

§ 12. In this reaction against the Renascence Rousseau puts the truth in the form of such a violent paradox that we start back in terror. But it was perhaps necessary thus to sweep away the ordinary schoolroom rubbish before the true nature of the educator's task could be fairly considered. The rubbish having been cleared away what was to take its place? No longer having his mind engrossed by the knowledge he wished to communicate, the educator had now an eye for something else not less worthy of his attention, viz., the child itself. Rousseau was the first to base education entirely on a study of the child to be educated; and by doing this he became, as I believe, one of the greatest of educational Reformers.

§ 13. It was, however, purely as a thinker, or rather as a *voice* giving expression to the general discontent that Rousseau became such a tremendous force in Europe. He has indeed often been called the father of the first French Revolution which he did not live to see. But, as Macaulay has well said, a good deal besides eloquent writing is needed to cause such a convulsion; and we can no more attribute the French Revolution to the writings of Rousseau than we can attribute the shock of an explosion of gunpowder to the lucifer match without which it might never have happened (*v.* Macaulay's *Barrère*). Rousseau did in the world of ideas what the French Revolutionists afterwards did in the world of politics; he made a clean sweep and endeavoured to start afresh.

§ 14. I have already said that as regards education I think his labours in destruction were of very great value. But what shall we say of his efforts at construction? There would not be the least difficulty in showing that most of his proposals are impracticable. It is no more "natural" to treat as a typical case a child brought up in solitude than it would be to write a treatise on the rearing of a bee cut off from the hive.[124] Rousseau requires impossibilities, *e.g.*, he postulates that the child is never to be brought into contact with anyone who might set a bad example. Modern science has shown us that the young are liable to take diseases from impurities in the air they breathe: but as yet no one has proposed that all children should be kept at an elevation of 5,000 feet above the level of the sea. Yet the advice would be about as practicable as the advice of Rousseau. A method which always starts with paradox and not infrequently ends with platitude might seem to have little in its favour; and Rousseau has had far less influence since (in the words of Herman Merivale) "he was dethroned with the fall of his extravagant child, the [First] Republic." No doubt the great exponent of English opinion was right in calling Rousseau "the most un-English stranger who ever landed on our shores" (*Times*, 29 Aug., 1873); and the torch of his eloquence will never cause a conflagration, still less an explosion, here. His disregard for "appearances"—or rather his evident purpose of making an impression by defying "appearances" and saying just the opposite of what is expected, is simply distressing to us. But there is no denying Rousseau's genius. His was one of the original voices that go on sounding and awakening echoes in all lands. Willingly or unwillingly, at first hand or from imperfect echoes, everyone who studies education must study Rousseau.

§ 15. As specimens of Rousseau's teaching I will give a few characteristic passages from the Émile.

"Everything is good as it leaves the hands of the Creator: everything degenerates in the hands of man."[125] These are the first words of the "Émile," and the key-note of Rousseau's philosophy.

§ 16. "We are born weak, we have need of strength; we are born destitute of everything, we have need of assistance; we are born stupid, we have need of understanding. All that we have not at our birth, and which we require when grown up, is bestowed on us by education. This education we receive from nature, from men, or from things. The internal development of our organs and faculties is the education of nature: the use we are taught to make of that development is the education given us by men; and in the acquisitions made by our own experience on the objects that surround us, consists our education from things."[126] "Since the concurrence of these three kinds of education is necessary to their perfection, it is by that one which is entirely independent of us, we must regulate the two others."[127]

§ 17. Now "to live is not merely to breathe; it is to act, it is to make use of our organs, our senses, our faculties, and of all those parts of ourselves which give us the feeling of our existence. The man who has lived most, is not he who has counted the greatest number of years, but he who has most thoroughly felt life."[128]

§ 18. The aim of education, then, must be complete living.

But ordinary education, instead of seeking to develop the life of the child, sacrifices childhood to the acquirement of knowledge, or rather the semblance of knowledge, which it is thought will prove useful to the youth or the man. Rousseau's great merit lies in his having exposed this fundamental error. He says, very truly, "We do not understand childhood, and pursuing false ideas of it our every step takes us further astray. The wisest among us fix upon what it concerns men to know without ever considering what children are capable of learning. They always expect to find the man in the child without thinking of what the child is before it is a man. And this is the study to which I have especially devoted myself, in order that should my entire method be false and visionary, my observations might always turn to account. I may not have seen aright what ought to be

done: but I believe I have seen aright the subject on which we have to act. Begin then by studying your pupils better, for most certainly you do not understand them."[129] "Nature wills that children should be *children* before they are *men*. If we seek to pervert this order we shall produce forward fruits without ripeness or flavour, and tho' not ripe, soon rotten: we shall have young *savans* and old children. Childhood has ways of seeing, thinking, feeling peculiar to itself; nothing is more absurd than to wish to substitute ours in their place."[130] "We never know how to put ourselves in the place of children; we do not enter into their ideas, we attribute to them our own; and following always our own train of thought, even with syllogisms we manage to fill their heads with nothing but extravagance and error."[131] "I wish some discreet person would give us a treatise on the art of observing children—an art which would be of immense value to us, but of which fathers and schoolmasters have not as yet learnt the very first rudiments."[132]

§ 19. In these passages, Rousseau strikes the key-note of true education. The first thing necessary for us is to see aright the subject on which we have to act. Unfortunately, however, this subject has often been the subject most neglected in the schoolroom. Children have been treated as if they were made for their school books, not their school books for them. As education has been thought of as learning, childhood has been treated as unimportant, a necessary stage in existence no doubt, but far more troublesome and hardly more interesting than the state of the chrysalis. If some forms of words, tables, declensions, county towns, and the like can be drummed into children, this is, say educators of the old school, a clear gain. For the rest nothing can be done with them except teaching them to read, write, and say the multiplication table.

But since the publication of the Émile, there has been in the world a very different view of education. According to this view, the importance of childhood is not to be measured by the amount of *our* knowledge, or even the number of *our* words, we can force it to remember. According to this view, in dealing with children we must not think of our knowledge or of our notions at all. We must think not of our own minds, but of the minds of the little ones.[133]

§ 20. The absurd results in which the opposite course has ended, Rousseau exposes with great severity. “All the studies demanded from the poor unfortunates lead to such things as are entirely beyond the range of their ideas, so you may judge what amount of attention they can give to them. Schoolmasters who make a great display of the instruction they give their pupils are paid to differ from me; but we see from what they do that they are entirely of my opinion. For what do they really teach? Words, words, for ever words. Among the various knowledges which they boast of giving, they are careful not to include such as would be of use; because these would involve a knowledge of things, and there they would be sure to fail; but they choose subjects that seem to be known when the terms are known such as heraldry, geography, chronology, languages and the like; all of them studies so foreign to a man, and still more to a child, that it is a great chance if anything of the whole lot ever proves useful to him on a single occasion in his whole life.”[134] “Whatever the study may be, without the idea of the things represented the signs representing them go for nothing. And yet the child is always kept to these signs without our being able to make him comprehend any of the things they represent.”[135] What does a child understand by “the globe”? An old geography book says candidly, that it is a round thing made of plaster; and this is the only notion children have of it. What a fearful waste, and worse than waste, it is to make them learn the signs without the things, when if they ever learn the things, they must at the same time acquire the signs! (Conf. Ruskin *supra* p. 159, *note*.) “No! if Nature gives to the child’s brain this pliability which makes it capable of receiving impressions of every kind, this is not that we may engrave on it the names of kings, dates, the technical words of heraldry, of astronomy, of geography, and all those words meaningless at his age and useless at any age, with which we oppress his sad and sterile childhood; but that all the ideas which he can conceive and which are useful to him, all those which relate to his happiness and will one day make his duty plain to him, may trace themselves there in characters never to be effaced, and may assist him in conducting himself through life in a manner appropriate to his nature and his faculties.”[136]

§ 21. With Rousseau, as afterwards with Froebel, education was a kind of “child-gardening.” “Plants are developed by cultivation,” says he, “men by education: On façonne les plantes par la culture, et les hommes par

l'éducation" (*Ém.* j., 6). The governor, who is the child-gardener, is to aim at three things: first, he is to shield the child from all corrupting influences; second, he is to devote himself to developing in the child a healthy and strong body in which the senses are to be rendered acute by exercise; third, he is, by practice not precept, to cultivate the child's sense of duty.

§ 22. In his study of children Rousseau fixed on their never-resting activity. "The failing energy concentrates itself in the heart of the old man; in the heart of the child energy is overflowing and spreads outwards; he feels in him life enough to animate all his surroundings. Whether he makes or mars it is all one to him: it is enough that he has changed the state of things, and every change is an action. If he seems by preference to destroy, this is not from mischief; but the act of construction is always slow, and the act of destruction being quicker is more suited to his vivacity."[137]

One of the first requisites in the care of the young is then to provide for the expansion of their activity. All restraints such as swaddling clothes for infants and "school" and "lessons" for children are to be entirely done away with.[138] Literary instruction must not be thought of. "There must be no other book than the world," says Rousseau, "no other instruction than facts. The child who reads does not think, he does nothing but read, he gets no instruction; he learns words: Point d'autre livre que le monde, point d'autre instruction que les faits. L'enfant qui lit ne pense pas, il ne fait que lire; il ne s'instruit pas, il apprend les mots." (*Ém.* iij., 181.)[139]

§ 23. If it be objected that, according to Rousseau's plan, there would be a neglect of memory, he replies: "Without the study of books the kind of memory that a child should have will not remain inactive; all he sees, all he hears, strikes him, and he remembers it; he keeps a record in himself of people's actions and people's talk; and all around him makes the book by which without thinking of it he is constantly enriching his memory against the time that his judgment may benefit by it: Sans étudier dans les livres, l'espèce de mémoire que peut avoir un enfant ne reste pas pour cela oisive; tout ce qu'il voit, tout ce qu'il entend le frappe, et il s'en souvient; il tient registre en lui-même des actions, des discours des hommes; et tout ce qui l'environne est le livre, dans lequel, sans y songer, il enrichit continuellement sa mémoire, en attendant que son jugement puisse en profiter." (*Ém.* ij., 106.) We should be most careful not to commit to our

memory anything we do not understand, for if we do, we can never tell what part of our stores really belong to us. (*Ém.* iij., 236.)

§ 24. On the positive side the most striking part of Rousseau's advice relates to the training of the senses. "The first faculties which become strong in us," says he, "are our senses. These then are the first that should be cultivated; they are in fact the only faculties we forget or at least those which we neglect most completely." We find that the young child "wants to touch and handle everything. By no means check this restlessness; it points to a very necessary apprenticeship. Thus it is that the child gets to be conscious of the hotness or coldness, the hardness or softness, the heaviness or lightness of bodies, to judge of their size and shape and all their sensible properties by looking, feeling, listening, especially by comparing sight and touch, and combining the sensations of the eye with those of the fingers."[140] "See a cat enter a room for the first time; she examines round and stares and sniffs about without a moment's rest, she is satisfied with nothing before she has tried it and made it out. This is just what a child does when he begins to walk, and enters, so to say, the chamber of the world. The only difference is that to the sight which is common to the child and the cat the first joins in his observations the hands which nature has given him, and the other animal that subtle sense of smell which has been bestowed upon her. It is this tendency, according as it is well cultivated or the reverse, that makes children either sharp or dull, active or slow, giddy or thoughtful.

"The first natural movements of the child being then to measure himself with his surroundings and to test in everything he sees all its sensible properties which may concern him, his first study is a kind of experimental physics relating to his own preservation; and from this we divert him to speculative studies before he feels himself at home here below. So long as his delicate and flexible organs can adjust themselves to the bodies on which they ought to act, so long as his senses as yet uncorrupted are free from illusion, this is the time to exercise them all in their proper functions; this is the time to learn to understand the sensuous relations which things have with us. As everything that enters the mind finds its way through the senses, the first reason of a human being is a reason of sensations; this it is which forms the basis of the intellectual reason; our first masters in philosophy are our feet, our hands, our eyes. Substituting books for all this

is not teaching us to reason, but simply to use the reason of other people; it teaches us to take a great deal on trust and never to know anything.

"In order to practise an art we must begin by getting the proper implements; and that we may have good use of these implements they must be made strong enough to stand wear and tear. That we may learn to think we must then exercise our members, our senses, our organs, as these are the implements of our intelligence; and that we may make the most of these implements the body which supplies them must be strong and healthy. We see then that far from man's true reason forming itself independently of his body, it is the sound constitution of the body that makes the operations of the mind easy and certain."[141]

§ 25. Rousseau does not confine himself to advising that the senses should be cultivated; he also gives some hints of the *way* in which they should be cultivated, and many modern experiments, such as "object lessons" and the use of actual weights and measures, may be directly traced to him. "As soon as a child begins to distinguish objects, a proper choice should be made in those which are presented to him." Elsewhere he says, "To exercise the senses is not simply to make use of them; it is to learn to judge aright by means of them; it is to learn, so to say, to perceive; for we can only touch and see and hear according as we have learnt how. There is a kind of exercise perfectly natural and mechanical which serves to make the body strong without giving anything for the judgment to lay hold of: swimming, running, jumping, whip-top, stone throwing; all this is capital; but have we nothing but arms and legs? have we not also eyes and ears? and are these organs not needed in our use of the others? Do not then merely exercise the strength but exercise all the senses which direct it; get all you can out of each of them, and then check the impressions of one by the impressions of another. Measure, reckon, weigh, compare."[142]

§ 26. Two subjects there were in which Émile was to receive instruction, viz.: music and drawing. Rousseau's advice about drawing is well worth considering. He says: "Children who are great imitators all try to draw. I should wish my child to cultivate this art, not exactly for the art itself, but to make his eye correct and his hand supple: Les enfants, grands imitateurs, essayent tous de dessiner: je voudrais que le mien cultivât cet art, non précisément pour l'art même, mais pour se rendre l'œil juste et la main flexible." (*Ém.* ij., 149). But Émile is to be kept clear of the ordinary

drawing-master who would put him to imitate imitations; and there is a striking contrast between Rousseau's suggestions and those of the authorities at South Kensington. Technical skill he cares for less than the training of the eye; so Émile is always to draw *from the object*, and, says Rousseau, "my intention is not so much that he should get to *imitate* the objects, as get to *know* them: mon intention n'est pas tant qu'il sache imiter les objets que les connaître." (*Ém.* ij., 150).

§ 27. Before we pass the age of twelve years, at which point, as someone says, Rousseau substitutes another Émile for the one he has hitherto spoken of, let us look at his proposals for moral training. Rousseau is right, beyond question, in desiring that children should be treated as children. But what are children? What can they understand? What is the world in which they live? Is it the material world only, or is the moral world also open to them? (Girardin's *R.*, vol. ij., 136). On the subject of morals Rousseau seems to have admirable instincts,[143] but no principles, and moral as he is "on instinct," there is always some confusion in what he Says. At one time he asserts that "there is only one knowledge to give children, and that is a knowledge of duty: Il n'y a qu'une science à enseigner aux enfants: c'est celle des devoirs de l'homme." (*Ém.* j., 26). Elsewhere he says: "To know right from wrong, to be conscious of the reason of duty is not the business of a child: Connaître le bien et le mal, sentir la raison des devoirs de l'homme, n'est pas l'affaire d'un enfant." (*Ém.* ij., 75).[144] In another place he mounts his hobby that "the most sublime virtues are negative" (*Ém.* ij., 95), and that about the best man who ever lived (till he found Friday?) was Robinson Crusoe. The outcome of all Rousseau's teaching on this subject seems that we should in every way develop the child's animal or physical life, retard his intellectual life, and ignore his life as a spiritual and moral being.

§ 28. A variety of influences had combined, as they combine still, to draw attention away from the importance of physical training; and by placing the child's bodily organs and senses as the first things to be thought of in education, Rousseau did much to save us from the bad tradition of the Renascence. But there were more things in heaven and earth than were dreamt of in his philosophy, and whatever Rousseau might say, Émile could never be restrained from inquiring after them. Every boy will *think*; *i.e.*, he will think *for himself*, however unable he may seem to think in the direction

in which his instructors try to urge him. The wise elders who have charge of him must take this into account, and must endeavour to guide him into thinking modestly and thinking right. Then again, as soon as the child can speak, or before, the world of sensation becomes for him a world, not of sensations only, but also of sentiments, of sympathies, of affections, of consciousness of right and wrong, good and evil. All these feelings, it is true, may be affected by traditional prejudices. The air the child breathes may also contain much that is noxious; but we have no more power to exclude the atmosphere of the moral world than of the physical. All we can do is to take thought for fresh air in both cases. As for Rousseau's notion that we can withdraw the child from the moral atmosphere, we see in it nothing but a proof how little he understood the problems he professed to solve.[145]

§ 29. Although the governor is to devote himself to a single child, Rousseau is careful to protest against over-direction. "You would stupify the child," says he, "if you were constantly directing him, if you were always saying to him, 'Come here! Go there! Stop! Do this! Don't do that!' If your head always directs his arms, his own head becomes useless to him." (*Ém.*, ij., 114). Here we have a warning which should not be neglected by those who maintain the *Lycées* in France, and the ordinary private boarding-schools in England. In these schools a boy is hardly called upon to exercise his will all day long. He rises in the morning when he must; at meals he eats till he is obliged to stop; he is taken out for exercise like a horse; he has all his indoor work prescribed for him both as to time and quantity. In this kind of life he never has occasion to think or act for himself. He is therefore without self-reliance. So much care is taken to prevent his doing wrong, that he gets to think only of checks from without. He is therefore incapable of self-restraint. In the English public schools boys have much less supervision from their elders, and organise a great portion of their lives for themselves. This proves a better preparation for life after the school age; and most public schoolmasters would agree with Rousseau that "the lessons the boys get from each other in the playground are a hundred times more useful to them than the lessons given them in school: les leçons que les écoliers prennent entre eux dans la cour du collège leur sont cent fois plus utiles que tout ce qu'on leur dira jamais dans la classe." (*Ém.* ij., 123.)

§ 30. On questions put by children, Rousseau says: “The art of questioning is not so easy as it may be thought; it is rather the art of the master than of the pupil. We must have learnt a good deal of a thing to be able to ask what we do not know. The learned know and inquire, says an Indian proverb, but the ignorant know not what to inquire about.” And from this he infers that children learn less from asking than from being asked questions. (*N. H.*, 5th p. 490.)

§ 31. At twelve years old Émile is said to be fit for instruction. “Now is the time for labour, for instruction, for study; and observe that it is not I who arbitrarily make this choice; it is pointed out to us by Nature herself.”

§ 32. What novelties await us here? As we have seen Rousseau was determined to recommend nothing that would harmonise with ordinary educational practice; but even a genius, though he may abandon previous practice, cannot keep clear of previous thought, and Rousseau’s plan for instruction is obviously connected with the thoughts of Montaigne and of Locke. But while on the same lines with these great writers Rousseau goes beyond them and is both clearer and bolder than they are.

§ 33. Rousseau’s proposals for instruction have the following main features.

1st. Instruction is to be no longer literary or linguistic. The teaching about words is to disappear, and the young are not to learn by books or about books.

2nd. The subjects to be studied are to be mathematics and physical science.

3rd. The method to be adopted is not the didactic but the method of *self-teaching*.

4th. The hands are to be called into play as a means of learning.

§ 34. 1st. Till quite recently the only learning ever given in schools was book-learning, a fact to which the language of the people still bears witness: when a child does not profit by school instruction he is always said to be “no good at his book.” Now-a-days the tendency is to change the character of the schools so that they may become less and less mere “Ludi Literarii.” In this Rousseau seems to have been a century and more in advance of us; and yet we cannot credit him with any remarkable wisdom or insight about

literature. He himself used books as a means of "collecting a store of ideas, true or false, but at any rate clear" (J. Morley's *Rousseau*, j. chap. 3, p. 85), and he has recorded for us his opinion that "the sensible and interesting conversations of a young woman of merit are more proper to form a young man than all the pedantical philosophy of books" (*Confessions*, quoted by Morley j., 87). After this, whatever we may think of the merit of his suggestions we can sit at the Sage's feet no longer.

§ 35. 2nd. Rousseau had himself little knowledge of mathematics and natural science, but he was strongly in favour of the "study of Nature"; and in his last years his devotion to botany became a passion. His curriculum for Émile is in the air, but the chief thing is to get him to attend to the phenomena of nature, and "to foster his curiosity by being in no hurry to satisfy it."

§ 36. 3rd. About teaching and learning, there is one point on which we find a consensus of great authorities extending from the least learned of writers who was probably Rousseau to the most learned who was probably Friedrich August Wolf. In one form or other these assert that there is no true teaching but *self*-teaching.

Past a doubt the besetting weakness of teachers is "telling." They can hardly resist the tendency to be didactic. They have the knowledge which they desire to find in their pupils, and they cannot help expressing it and endeavouring to pass it on to those who need it, "like wealthy men who care not how they give." But true "teaching," as Jacotot and his disciple Joseph Payne were never tired of testifying, is "causing to learn," and it is seldom that "didactic" teaching has this effect. Rousseau saw this clearly, and clearly pointed out the danger of didacticism. As usual he by exaggeration laid himself open to an answer that seems to refute him, but in spite of this we feel that there is valuable truth underlying what he says. "I like not explanations given in long discourses," says he; "young people pay little attention to them and retain little from them. The things themselves! The things themselves! I shall never repeat often enough that we attach too much importance to words: with our chattering education we make nothing but chatterers."[146] Accordingly Rousseau lays down the rule that Émile is not to learn science but to invent it (qu'il n'apprenne pas la science; qu'il l'invente); and he even expects him to invent geometry. As Émile is not supposed to be a young Pascal but only an ordinary boy with extraordinary

physical development such a requirement is obviously absurd, and Herbart has reckoned it among Rousseau's *Hauptfehler* (*Päd. Schriften*, ij., 242). The training prescribed is in fact the training of the intellectual athlete; and the trainer may put the body through its exercises much more easily than the mind. Of this the practical teacher is only too conscious, and he will accept Rousseau's advice, if at all, only as "counsels of perfection." Rousseau says: "Émile, obliged to learn of himself, makes use of his own reason and not that of others; for to give no weight to opinion, none must be given to authority; and the more part of our mistakes come less from ourselves than from other people. From this constant exercise there should result a vigour of mind like that which the body gets from labour and fatigue. Another advantage is that we advance only in proportion to our strength. The mind like the body carries that only which it can carry. When the understanding makes things its own before they are committed to memory, whatever it afterwards draws forth belongs to it; but if the memory is burdened with what the understanding knows nothing about we are in danger of bringing from it things which the understanding declines to acknowledge."[147] Again he writes: "Beyond contradiction we get much more clear and certain notions of the things we learn thus of ourselves than of those we derive from other people's instruction, and besides not accustoming our reason to bow as a slave before authority, we become more ingenious in finding connexions, in uniting ideas, and in inventing our implements, than when we take all that is given us and let our minds sink into indifference, like the body of a man who always has his clothes put on for him, is waited on by his servants and drawn about by his horses till at length he loses the strength and use of his limbs. Boileau boasted of having taught Racine to find difficulty in rhyming. Among all the admirable methods of shortening the study of the sciences we might have need that some one should give us a way of learning them *with effort*."[148]

§ 37. 4th. However highly we may value our gains from the use of books we must admit that in some ways the use of books tends to the neglect of powers that should not be neglected. As Rousseau wished to see the young brought up without books he naturally looked to other means of learning, especially to learning by the eye and by the hand. Much is now said about using the hand for education, and many will agree with Rousseau: "If instead of making a child stick to his books I employ him in a workshop,

his hands work to the advantage of his intellect: he becomes a philosopher while he thinks he is becoming simply an artisan: Au lieu de coller un enfant sur des livres, si je l'occupe dans un atelier, ses mains travaillent au profit de son esprit: il devient philosophe, et croît n'être qu'un ouvrier." (*Ém.* iij., 193).

§ 38. In these essays I have done what I could to shew the best that each reformer has left us. In Rousseau's case I have been obliged to confine myself to his words. "We attach far too much importance to words," said Rousseau, and yet it is by words and words only that Rousseau still lives; and for the sake of his words we forget his deeds. Of the *Émile* Mr. Morley says: "It is one of the seminal books in the history of literature. It cleared away the accumulation of clogging prejudices and obscure inveterate usage which made education one of the dark formalistic arts; and it admitted floods of light and air into tightly-closed nurseries and schoolrooms" (*Rousseau*, ij., 248). In the region of thought it set us free from the Renascence; and it did more than this, it announced the true nature of the teacher's calling, "*Study the subject you have to act upon.*" In these words we have the starting point of the "New Education." From them the educator gets a fresh conception of his task. We grown people have received innumerable impressions which, forgotten as they are, have left their mark behind in our way of looking at things; and as we advance in life these experiences and associations cluster around everything to which we direct our attention, till in the end the past seems to dominate the present and to us "nothing is but what is not." But to the child the present with its revelations and the future which will be "something more, a bringer of new things," are all engrossing. It is our business as teachers to try to realize how the world looks from the child's point of view. We may know a great many things and be ready to teach them, but we shall have little success unless we get another knowledge which we cannot teach and can learn only by patient observation, a knowledge of "the subject to be acted on," of the mind of our pupils and what goes on there. When we set out on this path, which was first clearly pointed out by Rousseau, teaching becomes a new occupation with boundless possibilities and unceasing interest in it. Every teacher becomes a learner, for we have to study the minds of the young, their way of looking at things, their habits, their difficulties, their likes and dislikes, how they are stimulated to exertion, how they are discouraged, how one mood succeeds another. What we need we may well devote a lifetime to

acquiring; it is a knowledge of the human mind with the object of influencing it.

XV.

BASEDOW AND THE PHILANTHROPINUM.

§ 1. One of the most famous movements ever made in educational reform was started in the last century by John Bernard Basedow. Basedow was born at Hamburg in 1723, the son of a wigmaker. His early years were not spent in the ordinary happiness of childhood. His mother he describes as melancholy, almost to madness, and his father was severe almost to brutality. It was the father's intention to bring up his son to his own business, but the lad ran away, and engaged himself as servant to a gentleman in Holstein. The master soon perceived what had never occurred to the father, viz., that the youth had very extraordinary abilities. Sent home with a letter from his master pointing out this notable discovery, Basedow was allowed to renounce the paternal calling, and to go to the Hamburg Grammar School (*Gymnasium*), where he was under Reimarus, the author of the "Wolfenbüttel Fragment." In due course his friends managed to send him to the University of Leipzig to prepare himself for the least expensive of the learned professions—the clerical. Basedow, however, was not a man to follow the beaten tracks. After an irregular life he left the university too unorthodox to think of being ordained, and in 1749 became private tutor to the children of Herr von Quaalen in Holstein. In this situation his talent for inventing new methods of teaching first showed itself. He knew how to adapt himself to the capacity of the children, and he taught them much by conversation, and in the way of play, connecting his instruction with surrounding objects in the house, garden, and fields. Through Quaalen's influence, he next obtained a professorship at Soroe, in Denmark, where he lectured for eight years, but his unorthodox writings raised a storm of opposition, and the Government finally removed him to the Gymnasium at Altona. Here he still continued his efforts to change the prevailing opinions in religious matters; and so great a stir was made by the publication of his "Philalethia," and his "Methodical Instruction in both Natural and Biblical Religion," that he and his family were refused the Communion at Altona, and his books were excluded, under a heavy penalty, from Lübeck.

§ 2. About this time Basedow, incited by Rousseau's "Emile," turned his attention to a fresh field of activity, in which he was to make as many friends as in theology he had found enemies. A very general dissatisfaction was then felt with the condition of the schools. Physical education was not attempted in them. The mother-tongue was neglected. Instruction in Latin and Greek, which was the only instruction given, was carried on in a mechanical way, without any thought of improvement. The education of the poor and of the middle classes received but little attention. "Youth," says Raumer, "was in those days, for most children, a sadly harassed period. Instruction was hard and heartlessly severe. Grammar was caned into the memory, so were portions of Scripture and poetry. A common school punishment was to learn by heart Psalm cxix. School-rooms were dismally dark. No one conceived it possible that the young could find pleasure in any kind of work, or that they had eyes for aught besides reading and writing. The pernicious age of Louis XIV. had inflicted on the poor children of the upper class, hair curled by the barber and messed with powder and pomade, braided coats, knee breeches, silk stockings, and a dagger by the side—for active, lively children a perfect torture" (*Gesch. d. Pädagogik*, ii. 297). Kant gave expression to a very wide-spread feeling when he said that what was wanted in education was no longer a reform but a revolution. Here, then, was a good scope offered for innovators, and Basedow was a prince of innovators.

§ 3. Having succeeded in interesting the Danish minister, Bernstorff, in his plans, he was permitted to devote himself entirely to a work on the subject of education whilst retaining his income from the Altona Gymnasium. The result was his "Address to Philanthropists and Men of Property on Schools and Studies and their Influence on the Public Weal" (1766), in which he announces the plan of his "Elementary."[149] In this address he calls upon princes, governments, town-councils, dignitaries of the Church, freemasons' lodges, &c., &c., if they loved their fellow-creatures, to come to his assistance in bringing out his book. Nor did he call in vain. When the "Elementary" at length appeared (in 1774), he had to acknowledge contributions from the Emperor Joseph II., from Catherine II. of Russia, from Christian VII. of Denmark, from the Grand Prince Paul, and many other celebrities, the total sum received being over 2,000*l.*

§ 4. While Basedow was travelling about (in 1774) to get subscriptions, he spent some time in Frankfurt, and thence made an excursion to Ems with two distinguished companions, one of them Lavater, and the other a young man of five-and-twenty, already celebrated as the author of "Götz von Berlichingen," and the "Sorrows of Werther." Of Basedow's personal peculiarities at this time Goethe has left us an amusing description in the "Wahrheit und Dichtung;" but we must accept the portrait with caution: the sketch was thrown in as an artistic contrast with that of Lavater, and no doubt exaggerates those features in which the antithesis could be brought out with best effect.

"One could not see," writes Goethe, "a more marked contrast than between Lavater and Basedow. As the lines of Lavater's countenance were free and open to the beholder, so were Basedow's contracted, and as it were drawn inwards, Lavater's eye, clear and benign, under a very wide eye-lid; Basedow's, on the other hand, deep in his head, small, black, sharp, gleaming out from under shaggy eyebrows, whilst Lavater's frontal bone seemed bounded by two arches of the softest brown hair. Basedow's impetuous rough voice, his rapid and sharp utterances, a certain derisive laugh, an abrupt changing of the topic of conversation, and whatever else distinguished him, all were opposed to the peculiarities and the behaviour by which Lavater had been making us over-fastidious."

§ 5. Goethe approved of Basedow's desire to make all instruction lively and natural, and thought that his system would promote mental activity and give the young a fresher view of the world: but he finds fault with the "Elementary," and prefers the "Orbis Pictus" of Comenius, in which subjects are presented in their natural connection. Basedow himself, says Goethe, was not a man either to edify or to lead other people. Although the object of his journey was to interest the public in his philanthropic enterprise, and to open not only hearts but purses, and he was able to speak eloquently and convincingly on the subject of education, he spoilt everything by his tirades against prevalent religious belief, especially on the subject of the Trinity.

§ 6. Goethe found in Basedow's society an opportunity of "exercising, if not enlightening," his mind, so he bore with his personal peculiarities, though apparently with great difficulty. Basedow seems to have delighted in worrying his associates. "He would never see anyone quiet but he provoked

him with mocking irony, in a hoarse voice, or put him to confusion by an unexpected question, and laughed bitterly when he had gained his end; yet he was pleased when the object of his jests was quick enough to collect himself, and answer in the same strain." So far Goethe was his match; but he was nearly routed by Basedow's use of bad tobacco, and of some tinder still worse with which he was constantly lighting his pipe and poisoning the air insufferably. He soon discovered Goethe's dislike to this preparation of his, so he took a malicious pleasure in using it and dilating upon its merits.

§ 7. Here is an odd account of their intercourse. During their stay at Ems Goethe went a great deal into fashionable society. "To make up for these dissipations," he writes, "I always passed a part of the night with Basedow. He never went to bed, but dictated without cessation. Occasionally he cast himself on the couch and slumbered, while his amanuensis sat quietly, pen in hand, ready to continue his work when the half-awakened author should once more give free course to his thoughts. All this took place in a close confined chamber, filled with the fumes of tobacco and the odious tinder. As often as I was disengaged from a dance I hastened up to Basedow, who was ready at once to speak and dispute on any question; and when after a time I hurried again to the ball-room, before I had closed the door behind me he would resume the thread of his essay as composedly as if he had been engaged with nothing else."

§ 8. It was through a friend of Goethe's, Behrisch, whose acquaintance we make in the "Wahrheit und Dichtung," that Basedow became connected with Prince Leopold of Dessau. Behrisch was tutor to the Prince's son, and by him the Prince was so interested in Basedow's plans that he determined to found an Institute in which they should be realised. Basedow was therefore called to Dessau, and under his direction was opened the famous Philanthropinum. Then for the first, and probably for the last time, a school was started in which use and wont were entirely set aside, and everything done on "improved principles." Such a bold enterprise attracted the attention of all interested in education, far and near: but it would seem that few parents considered their own children *vilia corpora* on whom experiments might be made for the public good. When, in May 1776, a number of schoolmasters and others collected from different parts of Germany, and even from beyond Germany, to be present by Basedow's

invitation at an examination of the children, they found only thirteen pupils in the Philanthropinum, including Basedow's own son and daughter.

§ 9. Before we investigate how Basedow's principles were embodied in the Philanthropinum, let us see the form in which he had already announced them. The great work from which all children were to be taught was the "Elementary." As a companion to this was published the "Book of Method" (*Methodenbuch*) for parents and teachers. The "Elementary" is a work in which a great deal of information about things in general is given in the form of dialogue, interspersed with tales and easy poetry. Except in bulk, it does not seem to me to differ very materially from many of the reading-books, which, in late years, have been published in this country. It had the advantage, however, of being accompanied by a set of engravings to which the text referred, though they were too large to be bound up with it. The root-ideas of Basedow put forth in his "Book of Method," and other writings, are those of Rousseau. For example, "You should attend to nature in your children far more than to art. The elegant manners and usages of the world are for the most part unnatural (*Unnatur*). These come of themselves in later years. Treat children like children, that they may remain the longer uncorrupted. A boy whose acutest faculties are his senses, and who has no perception of anything abstract, must first of all be made acquainted with the world as it presents itself to the senses. Let this be shown him in nature herself, or where this is impossible, in faithful drawings or models. Thereby can he, even in play, learn how the various objects are to be named. Comenius alone has pointed out the right road in this matter. By all means reduce the wretched exercises of the memory." Elsewhere he gives instances of the sort of things to which this method should be applied. 1st. Man. Here he would use pictures of foreigners and wild men, also a skeleton, a hand in spirits, and other objects still more appropriate to a surgical museum. 2nd. Animals. Only such animals are to be depicted as it is useful to know about, because there is much that ought to be known, and a good method of instruction must shorten rather than increase the hours of study. Articles of commerce made from the animals may also be exhibited. 3rd. Trees and plants. Only the most important are to be selected. Of these the seeds also must be shown, and cubes formed of the different woods. Gardeners' and farmers' implements are to be explained. 4th. Minerals and chemical substances. 5th. Mathematical instruments for weighing and measuring; also the air-pump, siphon, and the like. The form and motion of

the earth are to be explained with globes and maps. 6th. Trades. The use of various tools is to be taught. 7th. History. This is to be illustrated by engravings of historical events. 8th. Commerce. Samples of commodities may be produced. 9th. The younger children should be shown pictures of familiar objects about the house and its surroundings.

§ 10. We see from this list that Basedow contemplated giving his educational course the charm of variety. Indeed, with that candour in acknowledging mistakes which partly makes amends for the effrontery too common in the trumpetings of his own performances, past, present, and to come, he confesses that when he began the "Elementary" he had exaggerated notions of the amount boys were capable of learning, and that he had subsequently very much contracted his proposed curriculum. And even "the Revolution," which was to introduce so much new learning into the schools, could not afford entirely to neglect the old. However pleased parents might be with the novel acquirements of their children, they were not likely to be satisfied without the usual knowledge of Latin, and still less would they tolerate the neglect of French, which in German polite society of the eighteenth century was the recognised substitute for the vulgar tongue. These, then, must be taught. But the old methods might be abandoned, if not the old subjects. Basedow proposed to teach both French and Latin by *conversation*. Let a cabinet of models, or something of the kind, be shown the children; let them learn the names of the different objects in Latin or French; then let questions be asked in those languages, and the right answers at first put into the children's mouths. When they have in this way acquired some knowledge of the language, they may apply it to the translating of an easy book. Basedow does not claim originality for the conversational method. He appeals to the success with which it had been already used in teaching French. "Are the French governesses," he asks, "who, without vocabularies and grammars, first by conversation, then by reading, teach their language very successfully and very rapidly in schools of from thirty to forty children, better teachers than most masters in our Latin schools?"

§ 11. On the subject of religion the instruction was to be quite as original as in matters of less importance. The teachers were to give an impartial account of all religions, and nothing but "natural religion" was to be inculcated.

§ 12. The key-note of the whole system was to be—*everything according to nature*. The natural desires and inclinations of the children were to be educated and directed aright, but in no case to be suppressed.

§ 13. These, then, were the principles and the methods which, as Basedow believed, were to revolutionise education through the success of the Philanthropinum. Basedow himself, as we might infer from Goethe's description of him, was by no means a model director for the model Institution, but he was fortunate in his assistants. Of these he had three at the time of the public examination, of whom Wolke is said to have been the ablest.

§ 14. A lively description of the examination was afterwards published by Herr Schummel of Magdeburg, under the title of "Fred's Journey to Dessau." It purports to be written by a boy of twelve years old, and to describe what took place without attempting criticism. A few extracts will give us a notion of the instruction carried on in the Philanthropin.

"I have just come from a visit with my father to the Philanthropinum, where I saw Herr Basedow, Herr Wolke, Herr Simon, Herr Schweighäuser, and the little Philanthropinists. I am delighted with all that I have seen, and hardly know where to begin my description of it. There are two large white houses, and near them a field with trees. A pupil—not one of the regular scholars, but of those they call Famulants (a poorer class, who were servitors)—received us at the door, and asked if we wished to see Herr Basedow. We said 'Yes,' and he took us into the other house, where we found Herr Basedow in a dressing-gown, writing at a desk. We came at an inconvenient time, and Herr Basedow said he was very busy. He was very friendly, however, and promised to visit us in the evening. We then went into the other house, and enquired for Herr Wolke." By him they were taken to the scholars. "They have," says Fred, "their hair cut very short, and no wig-maker is employed. Their throats are quite open, and their shirt-collars fall back over their coats." Further on he describes the examination. "The little ones have gone through the oddest performances. They play at 'word of command.' Eight or ten stand in a line like soldiers, and Herr Wolke is officer. He gives the word in Latin, and they must do whatever he says. For instance, when he says *Claudite oculos*, they all shut their eyes; when he says *Circumspicite*, they look about them; *Imitamini sartorem*, they all sew like tailors; *Imitamini sutorem*, they draw the waxed thread like the

cobblers. Herr Wolke gives a thousand different commands in the drollest fashion. Another game, 'the hiding game,' I will also teach you. Some one writes a name, and hides it from the children—the name of some part of the body, or of a plant, or animal, or metal—and the children guess what it is. Whoever guesses right gets an apple or a piece of cake. One of the visitors wrote *Intestina*, and told the children it was a part of the body. Then the guessing began. One guessed *caput*, another *nasus*, another *os*, another *manus*, *pes*, *digiti*, *pectus*, and so forth, for a long time; but one of them hit it at last. Next Herr Wolke wrote the name of a beast, a quadruped. Then came the guesses: *leo*, *ursus*, *camelus*, *elephas*, and so on, till one guessed right—it was *mus*. Then a town was written, and they guessed Lisbon, Madrid, Paris, London, till a child won with St. Petersburg. They had another game, which was this: Herr Wolke gave the command in Latin, and they imitated the noises of different animals, and made us laugh till we were tired. They roared like lions, crowed like cocks, mewed like cats, just as they were bid."

§ 15. The subject that was next handled had also the effect of making the strangers laugh, till a severe reproof from Herr Wolke restored their gravity. A picture was brought, in which was represented a sad-looking woman, whose person indicated the approaching arrival of another subject for education. From one part of the picture it also appeared that the prospective mother, with a prodigality of forethought, had got ready clothing for both a boy and a girl. After a warning from Herr Wolke, that this was a most serious and important subject, the children were questioned on the topics the picture suggested. They were further taught the debt of gratitude they owed to their mothers, and the German fiction about the stork was dismissed with due contempt.

§ 16. Next came the examination in arithmetic. Here there seems to have been nothing remarkable, except that all the rules were worked *vivâ voce*. From the arithmetic Herr Wolke went on to an "Attempt at various small drawings." He asked the children what he should draw. Some one answered *leonem*. He then pretended he was drawing a lion, but put a beak to it; whereupon the children shouted *Non est Leo—leones non habent rostrum!* He went on to other subjects, as the children directed him, sometimes going wrong that the children might put him right. In the next exercise dice were introduced, and the children threw to see who should give an account of an

engraving. The engravings represented workmen at their different trades, and the child had to explain the process, the tools, &c. A lesson on ploughing and harrowing was given in French, and another, on Alexander's expedition to India, in Latin. Four of the pupils translated passages from Curtius and from Castalio's Bible, which were read to them. "These children," said the teacher, "knew not a word of Latin a year ago." "The listeners were well pleased with the Latin," writes Fred, "except two or three, whom I heard grumbling that this was all child's play, and that if Cicero, Livy, and Horace were introduced, it would soon be seen what was the value of Philanthropinist Latin." After the examination, two comedies were acted by the children, one in French, the other in German.

Most of the strangers seem to have left Dessau with a favourable impression of the Philanthropin. They were especially struck with the brightness and animation of the children.

§ 17. How far did the Philanthropinum really deserve their good opinion? The conclusion to which we are driven by Fred's narrative is, that Basedow carried to excess his principle—"Treat children as children, that they may remain the longer uncorrupted;" and that the Philanthropinum was, in fact, nothing but a good infant-school. Surely none of the thirteen children who were the subjects of Basedow's experiments could have been more than ten years old. But if we consider Basedow's system to have been intended for *children*, say between the ages of six and ten, we must allow that it possessed great merits. At the very beginning of a boy's learning, it has always been too much the custom to make him hate the sight of a book, and escape at every opportunity from school-work, by giving him difficult tasks, and neglecting his acutest faculties. "Children love motion and noise," says Basedow: "here is a hint from nature." Yet the youngest children in most schools are expected to keep quiet and to sit at their books for as many hours as the youths of seventeen or eighteen. Their vivacity is repressed with the cane. Their delight in exercising their hands and eyes and ears is taken no notice of; and they are required to keep their attention fixed on subjects often beyond their comprehension, and almost always beyond the range of their interests. Everyone who has had experience in teaching boys knows how hard it is to get them to throw themselves heartily into any task whatever; and probably this difficulty arises in many cases, from the habits of inattention and of shirking school-work, which the boys have acquired

almost necessarily from the dreariness of their earliest lessons.[150] Basedow determined to change all this; and in the Philanthropin no doubt he succeeded. We have already seen some of the expedients by which he sought to render school-work pleasurable. He appealed, wherever it was possible, to the children's senses; and these, especially the sight, were trained with great care by exercises, such as drawing, shooting at a mark, &c. One of these exercises, intended to give quick perception, bears a curious likeness to what has since been practised in a very different educational system. A picture, with a somewhat varied subject, was exhibited for a short time and removed. The boys had then, either verbally or on paper, to give an account of it, naming the different objects in proper order. Houdin, if I rightly remember, tells us that the young thieves of Paris are required by their masters to make a mental inventory of the contents of a shop window, which they see only as they walk rapidly by. Other exercises of the Philanthropinum connected the pupils with more honourable callings. They became acquainted with both skilled and unskilled manual labour. Every boy was taught a handicraft, such as carpentering and turning, and was put to such tasks as threshing corn. Basedow's division of the twenty-four hours was the following: Eight hours for sleep, eight for food and amusement, and, for the children of the rich, six hours of school-work, and two of manual labour. In the case of the children of the poor, he would have the division of the last eight hours inverted, and would give for school-work two, and for manual labour six. The development of the body was specially cared for in the Philanthropinum. Gymnastics were now first introduced into modern schools; and the boys were taken long expeditions on foot—the commencement, I believe, of a practice now common throughout Germany.

§ 18. As I have already said, Basedow proved a very unfit person to be at the head of the model Institution. Many of his friends agreed with Herder, that he was not fit to have calves entrusted to him, much less children. He soon resigned his post; and was succeeded by Campe, who had been one of the visitors at the public examination. Campe did not remain long at the Philanthropinum; but left it to set up a school, on like principles, at Hamburg. His fame now rests on his writings for the young; one of which —"Robinson Crusoe the Younger"—is still a general favourite.

Other distinguished men became connected with the Philanthropin—among them Salzmann, and Matthison the poet—and the number of pupils rose to over fifty; gathered we are told, from all parts of Europe between Riga and Lisbon. But this number is by no means a fair measure of the interest, nay, enthusiasm, which the experiment excited. We find Pastor Oberlin raising money on his wife's earrings to send a donation. We find the philosopher Kant prophesying that quite another race of men would grow up, now that education according to Nature had been introduced.

§ 19. These hopes were disappointed. Kant confesses as much in the following passage in his treatise "On Pædagogy":—

"One fancies, indeed, that experiments in education would not be necessary; and that we might judge by the understanding whether any plan would turn out well or ill. But this is a great mistake. Experience shows that often in our experiments we get quite opposite results from what we had anticipated. We see, too, that since experiments are necessary, it is not in the power of one generation to form a complete plan of education. The only experimental school which, to some extent, made a beginning in clearing the road, was the Institute at Dessau. This praise at least must be allowed it, notwithstanding the many faults which could be brought up against it—faults which are sure to show themselves when we come to the results of our experiments, and which merely prove that fresh experiments are necessary. It was the only School in which the teachers had liberty to work according to their own methods and schemes, and where they were in free communication both among themselves and with all learned men throughout Germany."

§ 20. We observe here, that Kant speaks of the Philanthropinum as a thing of the past. It was finally closed in 1793. But even from Kant we learn that the experiment had been by no means a useless one. The conservatives, of course, did not neglect to point out that young Philanthropinists, when they left school, were not in all respects the superiors of their fellow-creatures. But, although no one could pretend that the Philanthropinum had effected a tithe of what Basedow promised, and the "friends of humanity" throughout Europe expected, it had introduced many new ideas, which in time had their influence, even in the schools of the opposite party. Moreover, teachers who had been connected with the Philanthropinum founded schools on similar principles in different parts of Germany and

Switzerland, as Bahrd's at Heidesheim, and Salzmann's celebrated school at Schnepfenthal, which is, I believe, still thriving. Their doctrines, too, made converts among other masters, the most celebrated of whom was Meierotto of Berlin.

§ 21. Little remains to be said of Basedow. He lived chiefly at Dessau, earning his subsistence by private tuition, but giving offence by his irregularities. In 1790, when visiting Magdeburg, he died, after a short illness, in his sixty-seventh year. His last words were, "I wish my body to be dissected for the good of my fellow-creatures."

Basedow has a posthumous connexion with this country as the great-grandfather of Professor Max Müller. Basedow's son became "Regierungs Präsident," in Dessau. The President's daughter, born in 1800, became the wife of the poet Wilhelm Müller, and the mother of Max Müller. Max Müller has contributed a life of his great-grandfather to the *Allgemeine Deutsche Biographie*.

Those who read German and care about either Basedow or Comenius should get *Die Didaktik Basedows im Vergleiche zur Didaktik des Comenius von* Dr. Petru Garbovicianu (Bucarest, C. Gobl), 1887. This is a very good piece of work; it is printed in roman type, and the price is only 1*s.* 6*d.*

Since the above was in type I have got an important book, *L'Education en Allemagne au Dix-huitième Siècle: Basedow et le Philanthropinisme*, by A. Pinloche (Paris, A. Colin, 1889.)

XVI.

PESTALOZZI.

1746-1827.

§ 1. *Qui facit per alium facit per se.* It is thus the law holds us accountable for the action of others which we direct. By the extension of this rule we immensely increase the personality of great writers and may credit them with vast spheres of action which never come within their consciousness. No man gains and suffers more from this consideration than Rousseau. On the one hand, we may attribute to him the crimes of Robespierre and Saint-Just; on the other Pestalozzi was instigated by him to turn to farming and—education.

In treating of Rousseau as an educational reformer I passed over a life in which almost every incident tends to weaken the effect of his words. With Pestalozzi we must turn to his life for the true source of his writings and the best comment on them.

§ 2. John Henry Pestalozzi was born at Zurich in 1746. His father dying when he was five years old, he was brought up with a brother and sister by a pious and self-denying mother and by a faithful servant "Babeli," who had comforted the father in his last hours by promising to stay with his family. Thus Pestalozzi had an advantage denied to Rousseau and denied as it would seem to Locke; there was scope for his home affections, and the head was not developed before the heart. When he was sent to a day-school he became to some extent the laughing stock of his companions who dubbed him Harry Oddity of Foolborough; but he gained their good-will by his unselfishness. It was remembered that on the shock of an earthquake when teachers and taught fled from the school building Harry Oddity was induced to go back and bring away what his companions considered precious. His holidays he spent with his grandfather the pastor of a village some three miles from Zurich, where the lad learnt the condition of the rural poor and saw what a good man could do for them. He always looked back to these visits as an important element in his education. "The best way for a child to

acquire the fear of God," he wrote, "is for him to see and hear a true Christian." The grandfather's example so affected him that he wished to follow in his steps, and he became a student of theology.[151]

§ 3. Even as a student Pestalozzi proved that he was no ordinary man. In his time there was great intellectual and moral enthusiasm among the students of the little Swiss University. Some distinguished professors, especially Bodmer, had awakened a craving for the old Swiss virtues of plain living and high thinking; and a band of students, among whom Lavater was leader and Pestalozzi played a prominent part, became eager reformers. The citizens of the great towns like Geneva and Zurich had become in effect privileged classes; and as their spokesmen the Geneva magistrates condemned the *Contrat Social* and the *Emile*. This raised the indignation of the reforming students at Zurich; and though their organ, a periodical called the *Memorial*, kept clear of politics, one Muller wrote a paper which contained some strong language, and this was held to be proof of a conspiracy. Muller fled and was banished. Pestalozzi and some other of his friends were imprisoned. The *Memorial* was suppressed.

§ 4. It is in this *Memorial*, a weekly paper edited by Lavater who was five years Pestalozzi's senior that we have Pestalozzi's earliest writing. We find him coming forward as "a man of aspirations." No one he says can object to his expressing his wishes. And "wishes" with a man of 19 are usually hopes. Among other wishes he says: "I would that some one would draw up in a simple manner a few principles of education intelligible to everybody; that some generous people would then share the expense of printing, so that the pamphlet might be given to the public for nothing or next to nothing. I would then have clergymen distribute it to all fathers and mothers, so that they might bring up their children in a rational and Christian manner. But," he adds, "perhaps this is asking too much at a time."

The *Memorial* was suppressed because "the privileged classes" knew that it was in the hands of their opponents. Pestalozzi then and always felt keenly the oppression to which the peasants were exposed; and he spoke of "the privileged" as men on stilts who must descend among the people before they could secure a natural and firm position. He also satirises them in some of his fables, as, *e.g.*, that of the "Fishes and the Pike." "The fishes in a pond brought an accusation against the pike who were making great

ravages among them. The judge, an old pike, said that their complaint was well founded, and that the defendants, to make amends, should allow two ordinary fish every year to become pike."

§ 5. By this time Pestalozzi had given up theology and had taken to the law. Now under the influence of Rousseau, or rather of the craving for a simple "natural" life which found its most eloquent expression in Rousseau's writing, Pestalozzi made a bonfire of his MSS. and decided on becoming a farmer.

§ 6. There was another person concerned in this decision. In his childhood he had one day ventured into the shop of one of the leading tradesmen, Herr Schulthess, bent on procuring for his farthings some object of delight; but he found there a little shop-keeper, Anna Schulthess, seven years his senior, who discouraged his extravagance and persuaded him to keep his money. Anna and he since those days had become engaged—not at all to the satisfaction of her parents. Their intimacy had been strengthened by their concern for a common friend, a young man named Bluntschli, who died of consumption. This friend, three years older than Pestalozzi, seems to have understood him thoroughly; and in the parting advice he gave him there was a warning which happily for the general good was in after years neglected. "I am going," said Bluntschli, "and you will be left alone. Avoid any career in which you might become the victim of your own goodness and trust, and choose some quiet life in which you will run no risk. Above all, do not take part in any important undertaking without having at your side a man who by his cool judgment, knowledge of men and things, and unshakable fidelity may be able to protect you from the dangers to which you will be exposed."

§ 7. When the friendship with Anna Schulthess had ripened into a betrothal Pestalozzi spent a year in the neighbourhood of Bern learning farming under a man then famous for his innovations. His new ideas Pestalozzi absorbed very readily. "I had come to him," he says, "a political visionary, though with many profound and correct attainments, views, and anticipations in matters political. I went away from him just as great an agricultural visionary, though with many enlarged and correct ideas and intentions with regard to agriculture."

§ 8. During his “learning year” he kept up a correspondence with his betrothed, and the letters of both, which have been preserved, differ very widely from love-letters in general. Of himself Pestalozzi gives an account which shows that in part at least he could see himself as others saw him. “Dearest,” he writes, “those of my faults which appear to me most important in relation to the situation in which I may be placed in after-life are improvidence, incautiousness, and a want of presence of mind to meet unexpected changes in my prospects.... Of my great, and indeed very reprehensible negligence in all matters of etiquette, and generally in all matters which are not in themselves of importance, I need not speak; anyone may see them at first sight of me. I also owe you the open confession, my dear, that I shall always consider my duties toward my beloved partner subordinate to my duties towards my country; and that, although I shall be the tenderest husband, nevertheless, I hold myself bound to be inexorable to the tears of my wife if she should ever attempt to restrain me by them from the direct performance of my duties as a citizen, whatever this must lead to. My wife shall be the confidante of my heart, the partner of all my most secret counsels. A great and honest simplicity shall reign in my house. And one thing more. My life will not pass without important and very critical undertakings. I shall not forget ... my first resolutions to devote myself wholly to my country. I shall never, from fear of man, refrain from speaking when I see that the good of my country calls upon me to speak. My whole heart is my country’s: I will risk all to alleviate the need and misery of my fellow-countrymen. What consequences may the undertakings to which I feel myself urged on draw after them! how unequal to them am I! and how imperative is my duty to show you the possibility of the great dangers which they may bring upon me! My dear, my beloved friend, I have now spoken candidly of my character and my aspirations. Reflect upon everything. If the traits which it was my duty to mention diminish your respect for me, you will still esteem my sincerity, and you will not think less highly of me, that I did not take advantage of your want of acquaintance with my character for the attainment of my inmost wishes.”

§ 9. The young lady addressed was worthy of her lover. “Such nobleness, such elevation of character, reach my very soul,” said she. With equal nobleness she encouraged Pestalozzi in his schemes and took the consequences without a murmur during their long married life of 46 years.

§ 10. Full of new ideas about farming Pestalozzi now thought he saw his way to making a fortune. He took some poor land near Birr not far from Zurich, and persuaded a banking firm to advance money with which he proposed to cultivate vegetables and madder. In September, 1769, he was married, and six months later the pair settled in a new house, "Neuhof," which Pestalozzi had built on his land.

§ 11. But in spite of his excellent ideas and great industry, his speculation failed. The bankers soon withdrew their money. Pestalozzi was not cautious enough for them. However, his wife's friends prevented an immediate collapse.

§ 12. But before he had any reason to doubt the success of his speculation Pestalozzi had begun to reproach himself with being engrossed by it. What had become of all his thoughts for the people? Was he not spending his strength entirely to gain the prosperity of himself and his household? These thoughts came to him with all the more force when a son was born to him; and at this time they naturally connected themselves with education. He had now seen a good deal of the degraded state of the peasantry. How were they to be raised out of it?

§ 13. To Pestalozzi there seemed one answer and one only. This was *by education*. To many people in the present day it might seem that "education," when quite successful, would qualify labourers to become clerks. This was not the notion of Pestalozzi. Rousseau had completely freed him from bondage to the Renascence, and education did not mean to him a training in the use of books. He looked at the children of the lowest class of the peasants and asked himself what they needed to raise them. Knowledge would not do it. "The thing was not that they should know what they did not know, but that they should behave as they did not behave" (*supra*, p. 169); and the road to right action lay through right feeling. If they could be made conscious that they were loved and cared for, their hearts would open and give back love and respect in return. More than this, they must be taught not only to respect their elders but also themselves. They must be taught to help themselves and contribute to their own maintenance. So Pestalozzi resolved to take into his own house some of the very poorest children, to bring them up in an atmosphere of love, and to instruct them in field-work and spinning which would soon partly (as Pestalozzi hoped, wholly) pay for their keep. Thus, just at the time when the experiment for

himself failed he began for others an experiment that seemed likely to add indefinitely to his difficulties.

§ 14. In the winter of 1774 the first children were taken into Neuhof. The consequences to his wife and to his little son only four years old might have vanquished the courage of a less ardent philanthropist. “Our position entailed much suffering on my wife;” he writes, “but nothing could shake us in our resolve to devote our time, strength and remaining fortune to the simplification of the instruction and domestic education of the people.”

§ 15. These children, at first not more than 20 in number, Pestalozzi treated as his own. They worked with him in the summer in the garden and fields, in winter in the house. Very little time was given to separate lessons, the children often learning while they worked with their hands. Pestalozzi held that talking should come before reading and writing; and he practised them in conversation on subjects taken from their every day life. They also repeated passages from the Bible till they knew them by heart.

§ 16. In a few months, as we are told, the appearance of these poor little creatures had entirely changed; though fed only on bread and vegetables they looked strong and hearty, and their faces gained an expression of cheerfulness, frankness and intelligence which till then had been totally wanting. They made good progress with their manual work as well as with the associated lessons, and took pleasure in both. In all they said and did, they seemed to show their consciousness of their benefactor’s kind care of them.

§ 17. This experiment naturally drew much attention to it, and when it had gone on over a year Pestalozzi was induced by his friend Iselin of Basel to insert in the *Ephemerides* (a paper of which Iselin was editor), an “appeal ... for an institution intended to provide education and work for poor country children.” In this appeal Pestalozzi narrates his experience. “I have proved,” says he, “that it is not regular work that stops the development of so many poor children, but the turmoil and irregularity of their lives, the privations they endure, the excesses they indulge in when opportunity offers, the wild rebellious passions so seldom restrained, and the hopelessness to which they are so often a prey. I have proved that children after having lost health, strength and courage in a life of idleness and mendicity have, when once set to regular work quickly recovered their

health and spirits and grown rapidly. I have found that when taken out of their abject condition they soon become kindly, trustful and sympathetic; that even the most degraded of them are touched by kindness, and that the eyes of the child who has been steeped in misery, grow bright with pleasure and surprise, when, after years of hardship, he sees a gentle friendly hand stretched out to help him; and I am convinced that *when a child's heart has been touched the consequences will be great for his development and entire moral character*."

Pestalozzi therefore would have the very poorest children brought up in private establishments where agriculture and industry were combined, and where they would learn to work steadily and carefully with their hands, the chief part of their time being devoted to this manual work, and their instruction and education being associated with it. And he asks for support in greatly increasing the establishment he has already begun.

§ 18. Encouraged by the support he received and still more by his love for the children and his own too sanguine disposition Pestalozzi enlarged his undertaking. The consequence was bankruptcy. Several causes conspired to bring about this result. Whatever he might do for the children, he could not educate the parents, and these were many of them beggars with the ordinary vices of their class. With the usual discernment of such people they soon came to the conclusion that Pestalozzi was making a fortune out of their children's labour; so they haunted Neuhof, treated Pestalozzi with the greatest insolence, and often induced their children to run away in their new clothes. This would account for much, but there was another cause of failure that accounted for a great deal more. This was Pestalozzi's extreme incapacity as an administrator. Even his industrial experiment he carried on in such a way that it proved a source of expense rather than of profit. He says himself, that, contrary to his own principles, which should have led him to begin at the beginning and lay a good foundation in teaching, he put the children to work that was too difficult for them, wanted them to spin fine thread before their hands got steadiness and skill by exercise on the coarser kind, and to manufacture muslin before they could turn out well-made cotton goods. "Before I was aware of it," he adds, "I was deeply involved in debt, and the greater part of my dear wife's property and expectations had, as it were, in an instant gone up in smoke."

§ 19. The precise arrangement made with the creditors we do not know. The bare facts remain that the children were sent away, and that the land was let for the creditors' benefit; but Pestalozzi remained in the house. This was settled in 1780.

§ 20. We have now come to the most gloomy period in Pestalozzi's history, a period of eighteen years, and those the best years in a man's life, which Pestalozzi spent in great distress from poverty without and doubt and despondency within. When he got into difficulties, his friends, he tells us, loved him without hope: "in the whole surrounding district it was everywhere said that I was a lost man, that nothing more could be done for me." "In his only too elegant country house," we are told, "he often wanted money, bread, fuel, to protect himself against hunger and cold." "Eighteen years!—what a time for a soul like his to wait! History passes lightly over such a period. Ten, twenty, thirty years—it makes but a cipher difference if nothing great happens in them. But with what agony must he have seen day after day, year after year gliding by, who in his fervent soul longed to labour for the good of mankind and yet looked in vain for the opportunity!" (Palmer.)

§ 21. But he who was always ready to sacrifice himself for others now found someone, and that a stranger, ready to make a great sacrifice for him. A servant, named Elizabeth Naef, heard of the disaster and distress at Neuhof, and her master having just died she resolved to go to the rescue. At first Pestalozzi refused her help. He did not wish her to share the poverty of his household, and he felt himself out of sympathy with her "evangelical" form of piety. But Elizabeth declared she had come to stay, and when Pestalozzi found he could not shake her determination he consented, saying, "Well, you will find after all that God is in our house also."

§ 22. To this pious sensible but illiterate peasant woman Pestalozzi was fond of tracing many of his ideas. She was the original of his *Gertrude*, and it was of her he wrote: "God's sun pursues its path from morning to evening; yet your eye detects no movement, your ear no sound. Even when it goes down, you know that it will rise again and continue to ripen the fruits of the earth. Extreme as it may seem, I am not ashamed to say that this is an image of Gertrude as of every woman who makes her house a temple of the living God and wins heaven for her husband and children." (*Leonard and Gertrude*). She was invaluable at Neuhof and restored

comfort to the household. In after years she managed the establishment at Yverdun and married one of the Krüsis who were Pestalozzi's assistants.

§ 23. Writing of the gloomy years at Neuhof Pestalozzi afterwards said; "My head was grey, yet I was still a child. With a heart in which all the foundations of life were shaken, I still pursued in those stormy times my favourite object, but my way was one of prejudice, of passion and of error." But with Pestalozzi self-depreciation had "almost grown the habit of his soul," and in his writings at Neuhof at this period we find no traces of this prejudice, passion and error from which he supposes himself to have suffered. He certainly did not abandon his love of humanity; and in his sacrifice for it he sought a religious basis. In these Neuhof days he wrote: "Christ teaches us by His example and doctrine to sacrifice not only our possessions but ourselves for the good of others, and shews us that nothing we have received is absolutely ours but is merely entrusted to us by God to be piously employed in the service of charity." (Quoted by Guimps. R's trans. 72.) Whatever were his doubts and difficulties, he never swerved from pursuing the great object of his life, and nothing could cloud his mind as to the true method of attaining that object. As he afterwards wrote to Gessner (*Wie Gertrud* u.s.w.), "Even while I was the sport of men who condemned me I never lost sight for a moment of the object I had in view, which was the removal of the causes of the misery that I saw on all sides of me. My strength too kept on increasing, and my own misfortunes taught me valuable truths. I knew the people as no one else did. What deceived no one else always deceived me, but what deceived everybody else deceived me no longer.... My own sufferings have enabled me to understand the sufferings of the people and their causes as no man without suffering can understand them. I suffered what the people suffered and saw them as no one else saw them; and strange as it may seem, I was never more profoundly convinced of the fundamental truths on which I had based my undertaking than when I saw that I had failed." (R's. Guimps 74.)

§ 24. Pestalozzi still had a few friends who did not despise the dreamer of dreams. Among them was the editor of the *Ephemerides*, Iselin. This friend encouraged him to write, and there soon appeared in the *Ephemerides* a series of reflexions under the title of "The Evening Hour of a Hermit." Not many editors would have printed these aphorisms, and they attracted little or no attention at the time, but they have proved worth attending to. "The

fruit of Pestalozzi's past years, they are," says Raumer, "at the same time the seed-corn of the years that were to come, the plan and key to his action in pedagogy.... The drawing of the architect of genius contains his work, even though the architect himself has not skill enough to carry out his own design." (Quoted by Otto Fischer).[152]

§ 25. What was the connexion between Pestalozzi's belief at this season and complete belief in dogmatic Christianity? The question is one that will always be asked and can never, I think, be fully answered. In the days preceding the French Revolution it was a proof of wisdom to "Cleave ever to the sunnier side of doubt, and cling to Faith," even though the Faith were "beyond the forms of Faith" (see Tennyson's *Ancient Sage*). But Pestalozzi did far more than this. He traced all virtue and strength in the people to belief in the Fatherhood of God; and he saw in unbelief the severance of all the bonds of society. The "Hermit" does not indeed use the phrases common among "evangelical" Christians, but that he was indeed a Christian is established not only by the general tone of his aphorisms but still more clearly by his last words: "The Man of God, who with his sufferings and death has restored to humanity the lost feeling of the child's disposition towards God is the Redeemer of the world; he is the sacrificed Priest of the Lord; he is the Mediator between God and God-forgetting mankind. His teaching is pure justice, educating philosophy of the people; it is the revelation of God the Father to the lost race of his children."

§ 26. The "Evening Hour" remaining almost unnoticed, Pestalozzi's friends urged him to write something in a more popular form. So he set to work on a tale which should depict the life of the peasantry and shew the causes of their degradation and the cure. With extraordinary rapidity he wrote between the lines of an old account book the first part of his "Leonard and Gertrude." The book, which was complete in itself, and through the good offices of Iselin (of the *Ephemerides*), soon found a publisher, suddenly sprang into immense popularity, a popularity of which nothing but the "continuations" could ever have deprived it. In the works of a great artist we see natural objects represented with perfect fidelity and yet with a life breathed into them by genius, which is wanting or at least is not visible to common eyes in the originals. Just so do we find Swiss peasant life depicted by Pestalozzi. The delineation is evidently true to nature; and, at the same time, shows Nature as she reveals herself to genius. But for this

work something more than genius was necessary, viz., sympathy and love. In the preface to the first edition, he says, “In that which I here relate, and which I have, for the most part, seen and heard myself in the course of an active life, I have taken care not once to add my own opinion to what I saw and heard the people themselves saying, feeling; believing, judging, and attempting.” In a later edition (1800) he says, “I desired nothing then, and I desire nothing else now, as the object of my life, but the welfare of the people, whom I love, and whom I feel to be miserable as few feel them to be miserable, because I have with them borne their sufferings as few have borne them.”

§ 27. Wherever German was read this book excited vast interest, and though it seemed to most people only a good tale, it met with some more discerning readers. The Bern Agricultural Society sent the author their thanks and a gold medal, and Pestalozzi was at once recognised as a man who understood the peasantry and had good ideas for raising them. The book is and must remain a classic, but Pestalozzi in his zeal to spread the truth added again and again “continuations,” and these became less and less popular in the method of exposition.[153]

§ 28. Here and there we get glimpses of the trials Pestalozzi had gone through in his industrial experiment. “The love and patience,” he writes, “with which Gertrude bore with the disorderly and untrained little ones was almost past belief. Their eyes were often anywhere but on their yarn, so that this would now be too thick, and now too thin. When they had spoiled it, they would watch for a moment when Gertrude was not looking, and throw it out of the window by the handful, until they found that she discovered the trick when she weighed their work at night.” (E. C’s. trans., p. 122.) And in this connexion Pestalozzi preached his doctrine of perfect attainment. “‘What you can’t do blindfold,’” said Harry, “‘you can’t do at all.’” (*ib.*)

§ 29. “Gertrude,” we are told, “seemed quite unable to explain her method in words;” and here no doubt Pestalozzi was speaking of himself; but like Gertrude he “would let fall some significant remark which went to the root of the whole matter of education.” As an instance we may take what Gertrude said to the schoolmaster: “You should do for the children what their parents fail to do for them. The reading, writing, and arithmetic are not after all what they most need. It is all well and good for them to learn something, but the really important thing for them is to *be*

something." When this truth is fully realized by teachers and school managers there will be some hope for national education.

§ 30. "Although Gertrude exerted herself to develop very early the manual dexterity of her children, she was in no haste for them to learn to read and write; but she took pains to teach them early how to speak: for, as she said, 'Of what use is it for a person to be able to read and write if he cannot speak, since reading and writing are only an artificial sort of speech.' ... She did not adopt the tone of an instructor towards the children ... and her verbal instruction seemed to vanish in the spirit of her real activity, in which it always had its source. The result of her system was that each child was skilful, intelligent, and active to the full extent that its age and development allowed." (*Ib.* p. 130.)

§ 31. In this book we see that knowledge is treated as valueless unless it has a basis in action. "The pastor was soon convinced that all verbal instruction in so far as it aims at true human wisdom and at the highest goal of this wisdom, true religion, ought to be subordinated to a constant training in practical domestic labour.... So he strove to lead the children without many words to a quiet industrious life, and thus to lay the foundations of a silent worship of God and love of humanity. To this end he connected every word of his brief religious teachings with their actual every-day experience, so that when he spoke of God and eternity, it seemed to them as if he were speaking of father and mother, house and home; in short of the things with which they were most familiar" (p. 156). Thus he built on the foundation laid by the schoolmaster, who "cared for the children's heads as he did for their hearts, and demanded that whatever entered them should be plain and clear as the silent moon in the sky. To insure this he taught them to see and hear with accuracy, and cultivated their powers of attention" (p. 157).

§ 32. With all his love for the children, an element of severity was not wanting. Pestalozzi maintained that "love was only useful in the education of men when in conjunction with fear: for they must learn to root out thorns and thistles, which they never do of their own accord, but only under compulsion and in consequence of training" (p. 157).

§ 33. Just at the end of the book "the Duke" appoints a commission to report on the success of the Bonal experiment, and Pestalozzi makes him give the following order: "To insure thoroughness there must be among the

examiners men skilled in law and finance, merchants, clergymen, government officials, schoolmasters, and physicians, *besides women of different ranks and conditions of life* who shall view the matter with their woman's eyes and be sure there is nothing visionary in the background" (p. 180). In this respect Pestalozzi is in advance of us still. No woman has yet sat on an educational commission.

§ 34. Thus we find Pestalozzi at the age of thirty-five turning author, and for the next six or seven years he worked indefatigably with his pen. Most men of genius have some leading purpose which unites their varied activities, and this was specially true of Pestalozzi. He never lost sight of his one object, which was the elevation of the people; and this he held to be attainable only by means of education properly so called. The success of the first part of *Leonard and Gertrude* he now endeavoured to turn to account in spreading true ideas of education. With this intent he published *Christopher and Eliza: My Second Book for the People* (1782), which was a kind of commentary on *Leonard and Gertrude*. But the public wished to be amused, not taught; and the book was a failure. He was thus driven into the attempt already mentioned to catch the public ear by continuing *Leonard and Gertrude*, thus endangering his first and, as it proved, his only great success in literature.

§ 35. To gain circulation for his ideas he also started a weekly paper called the *Swiss Journal*, and issued it regularly throughout the year 1782; but the subscribers were so few that he was then obliged to give it up. I have not the smallest doubt that it was, as Guimps says, full of wisdom, but not the kind of wisdom that readers of periodicals are likely to care for.[154]

§ 36. In the *Swiss Journal* we get a hint of the analogy between the development of the plant and of the man. This analogy, often as it had been observed before, was never before so fruitful as it became in the hands of Pestalozzi and Froebel. The passage quoted by Guimps is this: "Teach me, summer day, that man formed from the dust of the earth, grows and ripens like the plant rooted in the soil."

§ 37. Between the close of the year 1787 and 1797 Pestalozzi did not publish anything. Though he had become famous, had made the acquaintance of the greatest men in Germany, such as Goethe, Wieland, Herder, and Fichte, and had been declared a "Citizen of the French

Republic," together with Bentham, Tom Payne, Wilberforce, Clarkson, Washington, Madison, Klopstock, Kozciusko, &c., he was nearly starving, and, naturally enough in that state of affairs both private and public, he was in great despondency. As we have seen, his whole life and work were founded on religion and on the only religion possible for us, the Christian religion; but carried away by his political radicalism he seems at this time to have doubted whether Christianity was more than the highest human wisdom. In October, 1793, he wrote to a friend in Berlin: "I doubt, not because I look on doubt as the truth, but because the sum of the impressions of my life has driven faith with its blessings from my soul. Thus impelled by my fate I see nothing more in Christianity but the purest and noblest teaching of the victory of the spirit over the flesh, the one possible means of raising our nature to its true nobility, or in other words of establishing the empire of the reason over the senses by the development of the purest feelings of the heart." If this was the lowest point to which Pestalozzi's faith sank in the days of the Revolution, it remained for practical purposes higher than the faith of most professing Christians then and since.

§ 38. At this time we find him complaining: "My agriculture swallows up all my time. I am longing for winter with its leisure. My time passes like a shadow." He was then forty-six years of age and seemed to himself to have done nothing.

§ 39. Another five years he had to wait before he found an opportunity for action. During this time, impelled by Fichte, he endeavoured to give his ideas philosophic completeness, and after labouring for three years with almost incredible toil he published in 1797 his "Inquiry into the Course of Nature in the Development of the Human Race." This book is pronounced even by his biographer Guimps to be "prolix and obscure," and, says Pestalozzi, "nobody understood me." But even in this book there was much wisdom, had the world cared to learn; but the world had then no place for Pestalozzi, and as he says at the end of this book, "without even asking whether the fault was his or another's, it crushed him with its iron hammer as the mason crushes a useless stone." He was, however, not actually crushed, and a place was in time found for him.

§ 40. The world might be pardoned for neglecting an *Inquiry* which even a biographer finds "prolix and obscure." But why could it see nothing in another book which Pestalozzi published in the same year, "Figures to my

ABC Book," or according to its later title, "Fables," a series of apologues as witty and wise as those of Lessing.[155]

§ 41. As I have said already (*supra* p. 239) there seems a marked distinction between thinkers and doers, at least in education, and we seldom find a man great in both. But with all his weakness as a practical man Pestalozzi proved great both as a thinker and a doer. He not only thought out what should be done, but he also made splendid efforts to do it. His first attempt at Neuhof was, as we have seen, all his own; so was the next at Stanz; but afterwards he had to work with others, and the work would have come to a standstill if he had not gained the co-operation of the magistrates, the parents of the children, and his own assistants. So he never again had the free hand, or at least the free thought which bore such good fruit in his enforced cessation from practice in the years between 1780 and 1798. It is well then to ask, as his biographer Guimps has asked, what was the main outcome of Pestalozzi's thought before he plunged into action a second time in 1798.

§ 42. Pestalozzi set himself to find a means of rescuing the people from their poverty and degradation. This he held would last as long as their moral and intellectual poverty lasted; so there was no hope except in an education that should make them better and more intelligent. In studying the children even of the most degraded parents he found the seeds, as it were, of a wealth of faculties, sentiments, tastes, and capabilities, which, if developed, might make them reasonable and upright human beings. But what was called education did nothing of the kind. Instead of developing the noblest part of the child's nature it neglected this entirely, and bringing to the child the knowledge, ideas, and feelings of others, it tried to make him "learn" them. So "education" did little beyond stifling the child's individuality under a mass of borrowed ideas. The schoolmaster worked, as it were, from without to within. This Pestalozzi would change, and make education begin in the child and work from within outwards. Acting on this principle he sought for some means of developing the child's inborn faculties, and he found as he says: "Nature develops all the powers of humanity by exercising them; they increase with use." (*Evening Hour*, Aph. 22.) No means can be found of exercising the higher faculties which can be compared with the actual relations of daily life; so Pestalozzi declares: "The pure sentiment of truth and wisdom is formed in the narrow circle of the

relationships which affect us, the circumstances which suggest our actions, and the common knowledge which we cannot do without." And taking as his starting-point the needs, desires, and connexions of actual life he was naturally led to associate the work of the body with that of the mind, to develop industry and study side by side, to combine the workshop and the school. With regard to instruction he was never tired of insisting on the importance of thorough mastery in the first elements, and there was to be no advance till this mastery was attained. (See what "Harry" says, *supra* p. 306.) "The schools," he says (*E. H.*, No. 28), "hastily substitute an artificial method of words for the truer method of Nature which knows no hurry but waits."

§ 43. In this account of Pestalozzi's doctrine before 1798 I have as usual followed M. Guimps. According to him Pestalozzi had discovered "a principle which settles the law of man's development, and is the fundamental principle of education." This principle M. Guimps briefly states as follows: "All the real knowledge, useful powers, and noble sentiments that a man can acquire are but the extension of his individuality by the development of the powers and faculties that God has put in him, and by their assimilation of the elements supplied by the outer world. There exists for this development and the work of assimilation a natural and necessary order, an order which the school mostly sets at nought."

§ 44. Now we come to the period of Pestalozzi's practical activity. In 1798 Switzerland was overrun by the French. Everything was remodelled after the French pattern; and in conformity with the existing phase in the model country the government of Switzerland was declared to be in the hands of five "Directors." Pestalozzi was a Radical, and he at once set to work to serve the new government with his pen. The Directors gladly welcomed such an ally as the author of *Leonard and Gertrude*, and they made him editor of a newspaper intended to diffuse the revolutionary principles among the people. Naturally enough they supposed that he, like other people, "wanted" something; but when asked what he wanted he replied simply that he wished to be a schoolmaster. The Directors, especially Le Grand, took a genuine interest in education, and were quite willing that Pestalozzi should be allowed a free hand in his "new departure." They therefore agreed to find the funds with which Pestalozzi might open a new Institution in Aargau.

§ 45. But the editorship and the plans for the new Institution came to an abrupt ending. The Catholic cantons did not acquiesce in giving up their local liberties and being subjected to a new government in the hands of men whom they regarded as heretics and even atheists. Consequently those missionaries of enlightenment, the French troops, at once fell upon them and slaughtered many without distinction of age or sex. The French, we are told, did not expect to meet with resistance; so their light became lightning and struck dead the stupid people who could not or would not see. "Our soldiers" (it is Michelet who speaks) "were ferocious at Stanz." (*Nos Fils*, 217). This ferocity at Stanz in September, 1798, was in secret disapproved of by the Directors, who were nominally responsible for it. But all they could do was to provide in a measure for the "111 infirm old people, the 169 orphans, and 237 other children," who were left totally destitute. Le Grand proposed to Pestalozzi that he should, for the present, give up his other plans and go to Stanz (which is on the Lake of Lucerne) to take charge of the orphan and destitute children. Pestalozzi was not the man to refuse such a task as this. He at once set out. Some buildings connected with an Ursuline convent were, without the consent of the nuns, made over to him. Workmen were employed upon them, and as soon as a single room could be inhabited Pestalozzi received forty children into it. This was in January, 1799, in the middle of a remarkably cold winter.

§ 46. Thus under circumstances perhaps less unfavourable than they seemed began the five months' trial of pure Pestalozzianism. The physical difficulties were immense. At first Pestalozzi and all the children were shut up day and night in a single room. He had throughout no helper of any kind but one female servant, and he had to do everything for the children, even what was most menial and disgusting. As soon as possible the number was increased, and before long was nearly eighty, some of the children having to go out to sleep. But great as were the material difficulties, those arising from the opposition and hatred of the people he came to succour were still worse. To them he seemed no philanthropist, but only a servant of the devil, an agent of the wicked government which had sent its ferocious soldiers and slaughtered the parents of these poor children, a Protestant who came to complete the work by destroying their souls. Pestalozzi, who was making heroic efforts in their behalf, seems to have wondered at the animosity shown him by the people of Stanz; but on looking back we must admit that in the circumstances it was only natural.

§ 47. And yet in spite of enormous difficulties of every kind Pestalozzi triumphed. Within the five months he spent with them he attached to him the hearts of the children, and produced in them a marvellous physical, intellectual, and moral change. “If ever there was a miracle,” says Michelet, “it was here. It was the reward of a strong faith, of a wonderful expansion of heart. He believed, he willed, he succeeded.” (*Nos Fils* 223.)

What was the great act of faith by which Pestalozzi triumphed? According to M. Michelet he stood before these vicious and degraded children and said, “Man is good.” Pestalozzi does not tell us this himself; and as a benighted believer in Christianity, I venture to differ from the enlightened Michelet. As far as I can judge from Pestalozzi’s own teaching the source of his strength was his belief in the goodness not of Man but of God.

§ 48. But encouraged and rewarded as he was by the result, Pestalozzi could not long have maintained this fearful exertion. He was over fifty years of age, and he must soon have succumbed; indeed he was already spitting blood when in June, 1799, the French soldiers, whose action had brought him to Stanz, drove him away again. Falling back before the Austrians they had need of a hospital in Stanz, and demanded the buildings occupied by Pestalozzi and the children. So almost all the children had to be sent away, and then at last Pestalozzi took thought for his own health and retired to some baths in the mountains. But most of his peculiarities in teaching may be said to date from the experience at Stanz; and I will therefore give this experience in his own words.

§ 49. The following is the account given in his letter to his friend Gessner. (I have in part availed myself of Mr. Russell’s translation of Guimps, pp. 149 *ff.*)

“My friend, once more I awake from a dream; once more I see my work destroyed, and my failing strength wasted.

“But, however weak and unfortunate my attempt, a friend of humanity will not grudge a few moments to consider the reasons which convince me that some day a more fortunate posterity will certainly take up the thread of my hopes at the place where it is now broken....

“I once more made known, as well as I could, my old wishes for the education of the people. In particular, I laid my whole scheme before Legrand (then one of the Directors), who not only took a warm interest in it, but agreed with me that the Republic stood in urgent need of a reform of public education. He also agreed with me that much might be done for the regeneration of the people by giving a certain number of the poorest children an education which should be complete, but which, far from lifting them out of their proper sphere, would but attach them the more strongly to it.

“I limited my desires to this one point, Legrand helping me in every possible way. He even thought my views so important that he once said to me: ‘I shall not willingly give up my present post till you have begun your work.’ ...

“It was my intention to try to find near Zurich or in Aargau a place where I should be able to join industry and agriculture to the other means of instruction, and so give my establishment all the development necessary to its complete success. But the Unterwalden disaster (September, 1798) left me no further choice in the matter. The Government felt the urgent need of sending help to this unfortunate district, and begged me for this once to make an attempt to put my plans into execution in a place where almost everything that could have made it a success was wanting.

“I went there gladly. I felt that the innocence of the people would make up for what was wanting, and that their distress

would, at any rate, make them grateful.

“My eagerness to realise at last the great dream of my life would have led me to work on the very highest peaks of the Alps, and, so to speak, without fire or water.

“For a house, the Government made over to me the new part of the Ursuline convent at Stanz, but when I arrived it was still uncompleted, and not in any way fitted to receive a large number of children. Before anything else could be done, then, the house itself had to be got ready. The Government gave the necessary orders, and Rengger pushed on the work with much zeal and useful activity. I was never indeed allowed to want for money.

“In spite, however, of the admirable support I received, all this preparation took time, and time was precisely what we could least afford, since it was of the highest importance that a number of children, whom the war had left homeless and destitute, should be received at once.

“I was still without everything but money when the children crowded in; neither kitchen, rooms, nor beds were ready to receive them. At first this was a source of inconceivable confusion. For the first few weeks I was shut up in a very small room; the weather was bad, and the alterations, which made a great dust and filled the corridors with rubbish, rendered the air very unhealthy.

“The want of beds compelled me at first to send some of the poor children home at night; these children generally came back the next day covered with vermin. Most of them on their arrival were very degenerated specimens of humanity. Many of them had a sort of chronic skin-disease, which almost prevented their walking, or sores on their heads, or rags full of vermin; many were almost skeletons, with haggard, careworn faces, and shrinking looks; some brazen, accustomed to begging, hypocrisy, and all sorts of deceit; others broken by misfortune, patient, suspicious, timid, and entirely devoid of affection. There were also some

spoilt children amongst them who had known the sweets of comfort, and were therefore full of pretensions. These kept to themselves, affected to despise the little beggars their comrades, and to suffer from this equality, and seemed to find it impossible to adapt themselves to the ways of the house, which differed too much from their old habits. But what was common to them all was a persistent idleness, resulting from their want of physical and mental activity. Out of every ten children there was hardly one who knew his A B C; as for any other knowledge, it was, of course, out of the question.

"The entire absence of school learning was what troubled me least, for I trusted in the natural powers that God bestows on even the poorest and most neglected children. I had observed for a long time that behind their coarseness, shyness, and apparent incapacity, are hidden the finest faculties, the most precious powers; and now, even amongst these poor creatures by whom I was surrounded at Stanz, marked natural abilities soon began to show themselves. I knew how useful the common needs of life are in teaching men the relations of things, in bringing out their natural intelligence, in forming their judgment, and in arousing faculties which, buried, as it were, beneath the coarser elements of their nature, cannot become active and useful till they are set free. It was my object then to set free these faculties, and bring them to bear on the pure and simple circumstances of domestic life, for I was convinced this was all that was wanting, and these natural faculties would shew themselves capable of raising the hearts and minds of my pupils to all that I could desire.

"I saw then how my wishes might be carried out; and I was persuaded that my affection would change the state of my children just as quickly as the spring sun would awake to new life the earth that winter had benumbed. I was not deceiving myself: before the spring sun melted the snow of our mountains my children were hardly to be recognised.

“But I must not anticipate. Just as in the evening I often mark the quick growth of the gourd by the side of the house, so I want you to mark the growth of my plant; and, my friend, I will not hide from you the worm which sometimes fastens on the leaves, sometimes even on the heart.

“I opened the establishment with no other helper but a woman-servant. I had not only to teach the children, but to look after their physical needs. I preferred being alone, and, unfortunately, it was the only way to reach my end. No one in the world would have cared to enter into my views for the education of children, and at that time I knew scarcely any one even capable of it.

“In proportion as the men whom I might have called to my aid were highly educated just so far they failed to understand me, and were incapable of confining themselves even in theory to the simple starting-points which I sought to come back to. All their views about the organisation and requirements of the enterprise differed entirely from mine. What they specially objected to was the notion that the enterprise might be carried out without the aid of any artificial means, and simply by the influence of nature in the environment of the children, and by the activity aroused in them by the needs of their daily life.

“And yet it was precisely upon this idea that I based all my hope of success; it was, as it were, a basis for innumerable other points of view.

“Experienced teachers, then, could not help me; still less boorish, ignorant men. I had nothing to put into the hands of assistants to guide them, nor any results or apparatus by which I could make my ideas clearer to them. Thus, whether I would or no, I had first to make my experiment alone, and collect facts to illustrate the essential features of my system before I could venture to look for outside help. Indeed, in my then position, nobody could help me. I knew that I must help myself and shaped my plans accordingly.

“I wanted to prove by my experiment that if public education is to have any real value for humanity, it must imitate the means which make the merit of domestic education; for it is my opinion that if school teaching does not take into consideration the circumstances of family life, and everything else that bears on a man’s general education, it can only lead to an artificial and methodical dwarfing of humanity.

“In any good education, the mother must be able to judge daily, nay hourly, from the child’s eyes, lips, and face, of the slightest change in his soul. The power of the educator, too, must be that of a father, quickened by the general circumstances of domestic life.

“Such was the foundation upon which I built. I determined that there should not be a minute in the day when my children should not be aware from my face and my lips that my heart was theirs, that their happiness was my happiness, and their pleasures my pleasures.

“Man readily accepts what is good, and the child readily listens to it; but it is not for you that he wants it, master and educator, but for himself. The good to which you would lead him must not depend on your capricious humour or passion; it must be a good which is good in itself and by the nature of things, and which the child can recognize as good. He must feel the necessity of your will in things which concern his comfort before he can be expected to obey it.

“Whatever he does gladly, whatever gains him credit, whatever tends to accomplish his great hopes, whatever awakens his powers and enables him truly to say *I can*, all this he *wills*.

“But this will is not aroused by words; it is aroused only by a kind of complete culture which gives feelings and powers. Words do not give the thing itself, but only an expression, a clear picture, of the thing which we already have in our minds.

> “Before all things I was bound to gain the confidence and the love of the children. I was sure that if I succeeded in this all the rest would come of itself. Friend, only think how I was placed, and how great were the prejudices of the people and of the children themselves, and you will comprehend what difficulties I had to overcome.”

After narrating what we already know he goes on:

> “Think, my friend, of this temper of the people, of my weakness, of my poor appearance, of the ill-will to which I was almost publicly exposed, and then judge how much I had to endure for the sake of carrying on my work.
>
> “And yet, however painful this want of help and support was to me, it was favourable to the success of my undertaking, for it compelled me to be always everything for my children. I was alone with them from morning till night. It was from me that they received all that could do them good, soul and body. All needful help, consolation, and instruction they received direct from me. Their hands were in mine, my eyes were fixed on theirs.
>
> “We wept and smiled together. They forgot the world and Stanz; they only knew that they were with me and I with them. We shared our food and drink. I had about me neither family, friends, nor servants; nothing but them. I was with them in sickness, and in health, and when they slept. I was the last to go to bed, and the first to get up. In the bedroom I prayed with them, and, at their own request, taught them till they fell asleep. Their clothes and bodies were intolerably filthy, but I looked after both myself, and was thus constantly exposed to the risk of contagion.
>
> “This is how it was that these children gradually became so attached to me, some indeed so deeply that they contradicted their parents and friends when they heard evil things said about me. They felt that I was being treated

unfairly, and loved me, I think, the more for it. But of what avail is it for the young nestlings to love their mother when the bird of prey that is bent on destroying them is constantly hovering near?

“However, the first results of these principles and of this line of action were not always satisfactory, nor, indeed, could they be so. The children did not always understand my love. Accustomed to idleness, unbounded liberty, and the fortuitous and lawless pleasures of an almost wild life, they had come to the convent in the expectation of being well fed, and of having nothing to do. Some of them soon discovered that they had been there long enough, and wanted to go away again; they talked of the school fever that attacks children when they are kept employed all day long. This dissatisfaction, which showed itself during the first months, resulted principally from the fact that many of them were ill, the consequence either of the sudden change of diet and habits, or of the severity of the weather and the dampness of the building in which we lived. We all coughed a great deal, and several children were seized with a peculiar sort of fever. This fever, which always began with sickness, was very general in the district. Cases of sickness, however, not followed by fever, were not at all rare, and were an almost natural consequence of the change of food. Many people attributed the fever to bad food, but the facts soon showed them to be wrong, for not a single child succumbed.

“On the return of spring it was evident to everybody that the children were all doing well, growing rapidly, and gaining colour. Certain magistrates and ecclesiastics, who saw them some time afterwards, stated that they had improved almost beyond recognition....

“Months passed before I had the satisfaction of having my hand grasped by a single grateful parent. But the children were won over much sooner. They even wept sometimes when their parents met me or left me without a word of salutation. Many of them were perfectly happy, and used to

say to their mothers: ‘I am better here than at home.’ At home, indeed, as they readily told me when we talked alone, they had been ill-used and beaten, and had often had neither bread to eat nor bed to lie down upon. And yet these same children would sometimes go off with their mothers the very next morning.

“A good many others, however, soon saw that by staying with me they might both learn something and become something, and these never failed in their zeal and attachment. Before very long their conduct was imitated by others who had not altogether the same feelings.

“Those who ran away were the worst in character and the least capable. But they were not incited to go till they were free of their vermin and their rags. Several were sent to me with no other purpose than that of being taken away again as soon as they were clean and well clothed.

“But after a time their better judgment overcame the defiant hostility with which they arrived. In 1799[156] I had nearly eighty children. Most of them were bright and intelligent, some even remarkably so.

“For most of them study was something entirely new. As soon as they found that they could learn, their zeal was indefatigable, and in a few weeks children who had never before opened a book, and could hardly repeat a *Pater Noster* or an *Ave*, would study the whole day long with the keenest interest. Even after supper, when I used to say to them, ‘Children, will you go to bed, or learn something?’ they would generally answer, especially in the first month or two, ‘Learn something.’ It is true that afterwards, when they had to get up very early, it was not quite the same.

“But this first eagerness did much towards starting the establishment on the right lines, and making the studies the success they ultimately were, a success indeed, which far surpassed my expectations. And yet great beyond expression

were my difficulties. I did not as yet find it possible to organise the studies properly.

“Neither my trust nor my zeal had been able to overcome either the intractability of individuals or the want of coherence in the whole experiment. The general order of the establishment, I felt, must be based upon order of a higher character. As this higher order did not yet exist, I had to attempt to create it; for without this foundation I could not hope to organise properly either the teaching or the general management of the place, nor should I have wished to do so. I wanted everything to result not from a preconceived plan, but from my relations with the children. The high principles and educating forces I was seeking, I looked for from the harmonious common life of my children, from their common attention, activity, and needs. It was not, then, from any external organisation that I looked for the regeneration of which they stood so much in need. If I had employed constraint, regulations, and lectures, I should, instead of winning and ennobling my children’s hearts, have repelled them and made them bitter, and thus been farther than ever from my aim. First of all, I had to arouse in them pure, moral, and noble feelings, so that afterwards, in external things, I might be sure of their ready attention, activity, and obedience. I had, in short, to follow the high precept of Jesus Christ, ‘Cleanse first that which is within, that the outside may be clean also; and if ever the truth of this precept was made manifest, it was made manifest then.

“My one aim was to make their new life in common, and their new powers, awaken a feeling of brotherhood amongst the children, and make them affectionate, just, and considerate.

“I was successful in gaining my aims. Amongst these seventy wild beggar-children there soon existed such peace, friendship, and cordial relations as are rare even between actual brothers and sisters.

“The principle to which I endeavoured to conform all my conduct was as follows: Endeavour, first, to broaden your children’s sympathies, and, by satisfying their daily needs, to bring love and kindness into such unceasing contact with their impressions and their activity, that these sentiments may be engrafted in their hearts; then try to give them such judgment and tact as will enable them to make a wise, sure, and abundant use of these virtues in the circle which surrounds them. In the last place, do not hesitate to touch on the difficult questions of good and evil, and the words connected with them. And you must do this especially in connection with the ordinary events of every day, upon which your whole teaching in these matters must be founded, so that the children may be reminded of their own feelings, and supplied, as it were, with solid facts upon which to base their conception of the beauty and justice of the moral life. Even though you should have to spend whole nights in trying to express in two words what others say in twenty, never regret the loss of sleep.

“I gave my children very few explanations; I taught them neither morality nor religion. But sometimes, when they were perfectly quiet, I used to say to them, ‘Do you not think that you are better and more reasonable when you are like this than when you are making a noise?’ When they clung round my neck and called me their father, I used to say, ‘My children, would it be right to deceive your father? After kissing me like this, would you like to do anything behind my back to vex me?’ When our talk turned on the misery of the country, and they were feeling glad at the thought of their own happier lot, I would say, ‘How good God is to have given man a compassionate heart!’ ... They perfectly understood that all they did was but a preparation for their future activity, and they looked forward to happiness as the certain result of their perseverance. That is why steady application soon became easy to them, its object being in perfect accordance with their wishes and their hopes. Virtue, my friend, is developed by this agreement,

just as the young plant thrives when the soil suits its nature, and supplies the needs of its tender shoots.

“I witnessed the growth of an inward strength in my children, which, in its general development, far surpassed my expectations, and in its particular manifestations not only often surprised me, but touched me deeply.

“When the neighbouring town of Altdorf was burnt down, I gathered the children round me, and said, ‘Altdorf has been burnt down; perhaps, at this very moment, there are a hundred children there without home, food, or clothes; will you not ask our good Government to let twenty of them come and live with us?’ I still seem to see the emotion with which they answered, ‘Oh, yes, yes!’ ‘But, my children,’ I said, ‘think well of what you are asking! Even now we have scarcely money enough, and it is not at all certain that if these poor children came to us, the Government would give us any more than they do at present, so that you might have to work harder, and share your clothes with these children, and sometimes perhaps go without food. Do not say, then, that you would like them to come unless you are quite prepared for all these consequences.’ After having spoken to them in this way as seriously as I could, I made them repeat all I had said, to be quite sure that they had thoroughly understood what the consequences of their request would be. But they were not in the least shaken in their decision, and all repeated, ‘Yes, yes, we are quite ready to work harder, eat less, and share our clothes, for we want them to come.’

“Some refugees from the Grisons having given me a few crowns for my poor children, I at once called them and said, ‘These men are obliged to leave their country; they hardly know where they will find a home to-morrow, yet, in spite of their trouble, they have given me this for you. Come and thank them.’ And the emotion of the children brought tears to the eyes of the refugees.

“It was in this way that I strove to awaken the feeling of each virtue before talking about it, for I thought it unwise to talk to children on subjects which would compel them to speak without thoroughly understanding what they were saying.

“I followed up this awakening of the sentiments by exercises intended to teach the children self-control, so that all that was good in them might be applied to the practical questions of every-day life.

“It will easily be understood that, in this respect, it was not possible to organise any system of discipline for the establishment; that could only come slowly, as the general work developed.

“Silence, as an aid to application, is perhaps the great secret of such an institution. I found it very useful to insist on silence when I was teaching, and also to pay particular attention to the attitude of my children. I succeeded so well that the moment I asked for silence, I could teach in quite a low voice. The children repeated my words all together; and as there was no other sound, I was able to detect the slightest mistakes of pronunciation. It is true that this was not always so. Sometimes, whilst they repeated sentences after me, I would ask them as if in fun to keep their eyes fixed on their middle fingers. It is hardly credible how useful simple things of this sort sometimes are as means to the very highest ends.

“One young girl, for instance, who had been little better than a savage, by keeping her head and body upright, and not looking about, made more progress in her moral education than any one would have believed possible.

“These experiences have shown me that the mere habit of carrying oneself well does much more for the education of the moral sentiments than any amount of teaching and lectures in which this simple fact is ignored.

“Thanks to the application of these principles, my children soon became more open, more contented and more susceptible to every good and noble influence than any one could possibly have foreseen when they first came to me, so utterly devoid were they of ideas, good feelings, and moral principles. As a matter of fact, this lack of previous instruction was not a serious obstacle to me; indeed, it hardly troubled me at all. I am inclined even to say that, in the simple method I was following, it was often an advantage, for I had incomparably less trouble to develop those children whose minds were still blank, than those who had already acquired inaccurate ideas. The former, too, were much more open than the latter to the influence of all pure and simple sentiments.

“But when the children were obdurate and churlish, then I was severe, and made use of corporal punishment.

“My dear friend, the pedagogical principle which says that we must win the hearts and minds of our children by words alone without having recourse to corporal punishment, is certainly good, and applicable under favourable conditions and circumstances; but with children of such widely different ages as mine, children for the most part beggars, and all full of deeply-rooted faults, a certain amount of corporal punishment was inevitable, especially as I was anxious to arrive surely, speedily, and by the simplest means, at gaining an influence over them all, for the sake of putting them all in the right road. I was compelled to punish them, but it would be a mistake to suppose that I thereby, in any way, lost the confidence of my pupils.

“It is not the rare and isolated actions that form the opinions and feelings of children, but the impressions of every day and every hour. From such impressions they judge whether we are kindly disposed towards them or not, and this settles their general attitude towards us. Their judgment of isolated actions depends upon this general attitude.

“This is how it is that punishments inflicted by parents rarely make a bad impression. But it is quite different with schoolmasters and teachers who are not with their children night and day, and have none of those relations with them which result from life in common.

“My punishments never produced obstinacy; the children I had beaten were quite satisfied if a moment afterwards I gave them my hand and kissed them, and I could read in their eyes that the final effect of my blows was really joy. The following is a striking instance of the effect this sort of punishment sometimes had. One day one of the children I liked best, taking advantage of my affection, unjustly threatened one of his companions. I was very indignant, and my hand did not spare him. He seemed at first almost broken-hearted, and cried bitterly for at least a quarter of an hour. When I had gone out, however, he got up, and going to the boy he had ill-treated, begged his pardon, and thanked him for having spoken about his bad conduct. My friend, this was no comedy; the child had never seen anything like it before.

“It was impossible that this sort of treatment should produce a bad impression on my children, because all day long I was giving them proofs of my affection and devotion. They could not misread my heart, and so they did not misjudge my actions. It was not the same with the parents, friends, strangers, and teachers who visited us; but that was natural. But I cared nothing for the opinion of the whole world, provided my children understood me.

“I always did my best, therefore, to make them clearly understand the motives of my actions in all matters likely to excite their attention and interest. This, my friend, brings me to the consideration of the moral means to be employed in a truly domestic education.

“Elementary moral education, considered as a whole, includes three distinct parts: the children’s moral sense must

first be aroused by their feelings being made active and pure; then they must be exercised in self-control, so that they may give themselves to that which is right and good; finally they must be brought to form for themselves, by reflection and comparison, a just notion of the moral rights and duties which are theirs by reason of their position and surroundings.

"So far, I have pointed out some of the means I employed to reach the first two of these ends. They were just as simple for the third; for I still made use of the impressions and experiences of their daily life to give my children a true and exact idea of right and duty. When, for instance, they made a noise, I appealed to their own judgment, and asked them if it was possible to learn under such conditions. I shall never forget how strong and true I generally found their sense of justice and reason, and how this sense increased and, as it were, established their good will.

"I appealed to them in all matters that concerned the establishment. It was generally in the quiet evening hours that I appealed to their free judgment. When, for instance, it was reported in the village that they had not enough to eat, I said to them, 'Tell me, my children, if you are not better fed than you were at home? Think, and tell me yourselves, whether it would be well to keep you here in such a way as would make it impossible for you afterwards, in spite of all your application and hard work, to procure what you had become accustomed to. Do you lack anything that is really necessary? Do you think that I could reasonably and justly do more for you? Would you have me spend all the money that is entrusted to me on thirty or forty children instead of on eighty as at present? Would that be just?'

"In the same way, when I heard that it was reported that I punished them too severely, I said to them: 'You know how I love you, my children; but tell me would you like me to stop punishing you? Do you think that in any other way I can free you from your deeply-rooted bad habits, or make you

always mind what I say?' You were there, my friend, and saw with your own eyes the sincere emotion with which they answered, 'We don't complain about your hitting us. We wish we never deserved it. But we want to be punished when we do wrong.'

"Many things that make no difference in a small household could not be tolerated where the numbers were so great. I tried to make my children feel this, always leaving them to decide what could or could not be allowed. It is true that in my intercourse with them I never spoke of liberty or equality; but, at the same time, I encouraged them as far as possible to be free and unconstrained in my presence, with the result that every day I marked more and more that clear open look in their eyes which, in my experience, is the sign of a really liberal education. I could not bear the thought of betraying the trust in me which I saw shining in their eyes; I strove constantly to strengthen it and at the same time their free individuality, that nothing might happen to trouble those angel-eyes, the sight of which caused me the most intense delight. But I could not endure frowns and anxious looks; I myself smoothed away the frowns; then the children smiled, and even among themselves they took care not to shew frowning faces.

"By reason of their great number, I had occasion nearly every day to point out the difference between good and evil, justice and injustice. Good and evil are equally contagious amongst so many children, so that, according as the good or bad sentiments spread, the establishment was likely to become either much better or much worse than if it had only contained a smaller number. About this, too, I talked to them frankly. I shall never forget the impression that my words produced when, in speaking of a certain disturbance that had taken place among them, I said, 'My children, it is the same with us as with every other household; when the children are numerous, and each gives way to his bad habits, the disorder becomes such that the weakest mother is driven to take

sensible measures in bringing up her children, and make them submit to what is just and right. And that is what I must do now. If you do not willingly assist in the maintenance of order, our establishment cannot go on, you will fall back into your former condition, and your misery—now that you have been accustomed to a good home, clean clothes, and regular food—will be greater than ever. In this world, my children, necessity and conviction alone can teach a man to behave; when both fail him, he is hateful. Think for a moment what you would become if you were safe from want and cared nothing for right, justice, or goodness. At home there was always some one who looked after you, and poverty itself forced you to many a right action; but with convictions and reason to guide you, you will rise far higher than by following necessity alone.'

"I often spoke to them in this way without troubling in the least whether they each understood every word, feeling quite sure that they all caught the general sense of what I said....

"Here are a few more thoughts which produced a great impression on my children: 'Do you know anything greater or nobler than to give counsel to the poor, and comfort to the unfortunate? But if you remain ignorant and incapable, you will be obliged, in spite of your good heart, to let things take their course; whereas, if you acquire knowledge and power, you will be able to give good advice, and save many a man from misery.'

"I have generally found that great, noble, and high thoughts are indispensable for developing wisdom and firmness of character.

"Such an instruction must be complete in the sense that it must take account of all our aptitudes and all our circumstances; it must be conducted, too, in a truly psychological spirit, that is to say, simply, lovingly, energetically, and calmly. Then, by its very nature, it produces an enlightened and delicate feeling for everything

true and good, and brings to light a number of accessory and dependent truths, which are forthwith accepted and assimilated by the human soul, even in the case of those who could not express these truths in words.

“I believe that the first development of thought in the child is very much disturbed by a wordy system of teaching, which is not adapted either to his faculties or the circumstances of his life. According to my experience, success depends upon whether what is taught to children commends itself to them as true through being closely connected with their own personal observation and experience....

“I knew no other order, method, or art, but that which resulted naturally from my children’s conviction of my love for them, nor did I care to know any other.

“Thus I subordinated the instruction of my children to a higher aim, which was to arouse and strengthen their best sentiments by the relations of every-day life as they existed between themselves and me....

“As a general rule I attached little importance to the study of words, even when explanations of the ideas they represented were given.

“I tried to connect study with manual labour, the school with the workshop, and make one thing of them. But I was the less able to do this as staff, material, and tools were all wanting. A short time only before the close of the establishment, a few children had begun to spin; and I saw clearly that, before any fusion could be effected, the two parts must be firmly established separately—study, that is, on the one hand, and labour on the other.

“But in the work of the children I was already inclined to care less for the immediate gain than for the physical training which, by developing their strength and skill, was bound to supply them later with a means of livelihood. In

the same way I considered that what is generally called the instruction of children should be merely an exercise of the faculties, and I felt it important to exercise the attention, observation, and memory first, so as to strengthen these faculties before calling into play the art of judging and reasoning; this, in my opinion, was the best way to avoid turning out that sort of superficial and presumptuous talker, whose false judgments are often more fatal to the happiness and progress of humanity than the ignorance of simple people of good sense.

“Guided by these principles, I sought less at first to teach my children to spell, read, and write than to make use of these exercises for the purpose of giving their minds as full and as varied a development as possible....

“In natural history they were very quick in corroborating what I taught them by their own personal observations on plants and animals. I am quite sure that, by continuing in this way, I should soon have been able not only to give them such a general acquaintance with the subject as would have been useful in any vocation, but also to put them in a position to carry on their education themselves by means of their daily observations and experiences; and I should have been able to do all this without going outside the very restricted sphere to which they were confined by the actual circumstances of their lives. I hold it to be extremely important that men should be encouraged to learn by themselves and allowed to develop freely. It is in this way alone that the diversity of individual talent is produced and made evident.

“I always made the children learn perfectly even the least important things, and I never allowed them to lose ground; a word once learnt, for instance, was never to be forgotten, and a letter once well written never to be written badly again. I was very patient with all who were weak or slow, but very severe with those who did anything less well than they had done it before.

"The number and inequality of my children rendered my task easier. Just as in a family the eldest and cleverest child readily shows what he knows to his younger brothers and sisters, and feels proud and happy to be able to take his mother's place for a moment, so my children were delighted when they knew something that they could teach others. A sentiment of honour awoke in them, and they learned twice as well by making the younger ones repeat their words. In this way I soon had helpers and collaborators amongst the children themselves. When I was teaching them to spell difficult words by heart, I used to allow any child who succeeded in saying one properly to teach it to the others. These child-helpers, whom I had formed from the very outset, and who had followed my method step by step, were certainly much more useful to me than any regular schoolmasters could have been.

"I myself learned with the children. Our whole system was so simple and so natural that I should have had difficulty in finding a master who would not have thought it undignified to learn and teach as I was doing....

"You will hardly believe that it was the Capuchin friars and the nuns of the convent that showed the greatest sympathy with my work. Few people, except Truttman, took any active interest in it. Those from whom I had hoped most were too deeply engrossed with their high political affairs to think of our little institution as having the least degree of importance.

"Such were my dreams; but at the very moment that I seemed to be on the point of realizing them, I had to leave Stanz."

§ 50. Heroic efforts rise above the measurement of time. As Byron has said, "A thought is capable of years," and it seldom happens that the nobleness of any human action depends on the time it lasts. Pestalozzi's five months' experiment at Stanz proved one of the most memorable events in

the history of education. He was now completely satisfied that he saw his way to giving children a right education and “thus raising the beggar out of the dung-hill”; and seeing the right course he was urged by his love of the people into taking it. But how was he to set to work? His notions of school instruction differed entirely from those of the teaching profession; and even in the revolutionary age they had some reason for looking askance at this revolutionist. “He had everything against him,” we read, “thick, indistinct speech, bad writing, ignorance of drawing, scorn of grammatical learning. He had studied various branches of natural history, but without any particular attention either to classification or terminology. He was conversant with the ordinary operations in arithmetic, but he would have had difficulty in getting through a really long sum in multiplication or division; and he probably had never tried to work out a problem in geometry. For years this dreamer had read no books. But instead of the usual knowledge that any young man of ordinary talent can acquire in a year or two, he understood thoroughly what most masters were entirely ignorant of—the mind of man and the laws of its development, human affections and the art of arousing and ennobling them. He seemed to have almost an intuitive insight into the development of human nature, and was never tired of contemplating it.” (C. Monnard in R.’s Guimps, p. 174.)[157]

§ 51. This man wished to be a schoolmaster, but who would venture to entrust him with a school? No one seemed willing to do this; and he would have been at a loss where to turn had he not had influential friends at Burgdorf, a town not far from Bern. These got for him permission to teach, not indeed the children of burgesses but the children of non-burgesses, seventy-three of whom used to assemble under a shoemaker in his house in the suburbs. With this arrangement, however, the shoemaker and the parents of the children were by no means satisfied. “If the burgesses like the new method,” they said very reasonably, “let them try it on their own children.” Their grumbling was heard, and permission to teach was withdrawn from Pestalozzi.

§ 52. The check, however, was only temporary. His friends were wiser than the shoemaker, and they procured for him admission into the lowest class of the school for burghers’ children. In this class there were about 25 children, boys and girls between the ages of 5 and 8. Here he proved that he was vastly different from a mere dreamer. After teaching these children in

his own way for eight months he received the first official recognition of the merits of his system. The Burgdorf School Commission after the usual examination, wrote a public letter to Pestalozzi, in which they said: “The surprising progress of your little scholars of various capacities shews plainly that every one is good for something, if the teacher knows how to get at his abilities and develop them according to the laws of psychology. By your method of teaching you have proved how to lay the groundwork of instruction in such a way that it may afterwards support what is built on it.... Between the ages of 5 and 8, a period in which according to the system of torture enforced hitherto, children have learnt to know their letters, to spell and read, your scholars have not only accomplished all this with a success as yet unknown, but the best of them have already distinguished themselves by their good writing, drawing, and calculating. In them all you have been able so to arouse and excite a liking for history, natural history, mensuration, geography, &c., that thus future teachers must find their task a far easier one if they only know how to make good use of the preparatory stage the children have gone through with you” (Morf, Pt. I, p. 223).

§ 53. In consequence of this report, Pestalozzi in June 1800 was made master of the second school of Burgdorf, a school numbering about 70 boys and girls from 10 to 16 years old. With them Pestalozzi did not get on so well. Ramsauer, a poor boy of 10 who afterwards helped Pestalozzi at Yverdun and became one of his best teachers, has left us his remembrances. Two things seemed clear to the child’s mind: 1st, that their teacher was very kind but very unhappy; 2nd, that the pupils did not learn anything and behaved very badly. Many schoolmasters have smiled in derision at this account of Pestalozzi’s actual teaching; but in reading it several things should be borne in mind. First Ramsauer as a child would have a keen eye and good memory for the master’s eccentricities; but how far the teaching succeeded he could not judge, for he did not know what it aimed at. Then again he saw that Pestalozzi’s zeal was for the whole school, not for individual scholars. But the child who knew of nothing beyond Burgdorf could not tell that Pestalozzi was thinking not so much of the children of Burgdorf as of the children of Europe. For Burgdorf—whether it was pleased to honour or to dismiss Pestalozzi—could not contain him. His aims extended beyond the town, beyond canton Bern, beyond Switzerland even; and he was consumed with zeal to bring about a radical change in

elementary education throughout Europe. The truth which was burning within him he has himself expressed as follows:

"If we desire to aid the poor man, the very lowest among the people, this can be done in one way only, that is, *by changing his schools into true places of education, in which the moral, intellectual, and physical powers which God has put into our nature may be drawn out*, so that the man may be enabled to live a life such as a man should live, contented in himself and satisfying other people. Thus and only thus does the man, whom in God's wide world nobody helps and nobody can help, learn to help himself." "The public common school-coach throughout Europe must not simply be better horsed, but still more it must be *turned round and be brought on to an entirely new road*." (Quoted by Morf, P. I, p. 211.)

§ 54. Pestalozzi was now working heart and soul at the engineering of this "new road." His grand successes hitherto had been gained more by the heart than by the head; but the school course must draw out the faculties of the head as well as of the heart. Pestalozzi made all instruction start from what children observed for themselves. "I laid special stress," he says, "on just what usually affected their senses. And as I dwelt much on elementary knowledge, I wanted to know when the child receives its first lesson, and I soon came to the conviction that the first hour of learning dates from birth. From the very moment that the child's senses open to the impressions of nature, nature teaches it. Its new life is but the faculty, now come to maturity, of receiving impressions; it is the awakening of the germs now perfect which will go on using all their forces and energies to secure the development of their proper organisation; it is the awakening of the animal now complete which will and shall become a man. So the sole instruction given to the human being consists merely in the art of giving a helping hand to this natural tendency towards its proper development; and this art consists essentially in the means of putting the child's impressions in connexion and harmony with the precise degree of development the child has reached. There must be then in the impressions to be given him by instruction, a regular gradation; and the beginning and the progress of his various knowledges must exactly correspond with the beginning and increase in his powers as they are developed. From this I soon saw that this gradation must be ascertained for all the branches of human knowledge, especially for those fundamental notions from which our thinking power

takes its rise. On such principles and no others is it possible to construct real school books and books about teaching" (*Wie Gertrud*, &c., Letter I.).

§ 55. In endeavouring to put teaching, as he said, "on a psychological basis," Pestalozzi compared it to a mechanism. On one occasion when expounding his views, he was interrupted by the exclamation, "Vous voulez mécaniser l'éducation!" Pestalozzi was weak in French, and he took these words to mean, "You wish to get at the mechanism of education." He accordingly assented, and was in his turn misunderstood. Soon afterwards he endeavoured to express the new thing by a new word and said, "Ich will den menschlichen Unterricht psychologisieren; I wish to psychologise instruction," and this he explains to mean that he sought to make instruction fall in with the eternal laws which govern the development of the human intellect (Morf, I, p. 227). But this was a task which no one man could accomplish, not even Pestalozzi. The eternal laws which govern the development of mind have not been completely ascertained even after investigations carried on during thousands of years; and Pestalozzi did not know what had been established by previous thinkers. He made a gigantic effort to find both the laws and their application, but if he had continued to stand alone he could have done but little. Happily he attracted to him some young and vigorous assistants, who caught his enthusiasm and worked in his spirit. They did much, but there was one thing the Master could not communicate—his genius.

§ 56. Just at this time, before Pestalozzi found associates in his work, he drew up for a "Society of Friends of Education" an account of his method; and this begins with the words I have already quoted, "I want to psychologise education." Basing all instruction on *Anschauung* (which is nearly equivalent to the child's own observation), he explains how this may be used for a series of exercises, and he takes as the general elements of culture the following: language, drawing, writing, arithmetic, and the art of measuring. In the education of the poor he would lay special stress on the importance of two things, then and since much neglected, viz., singing and the sense of the beautiful. The mother's cradle song should begin a series leading up to hymns of praise to God. Education should develop in all a sense of the beauties of Nature. "Nature is full of lovely sights, yet Europe has done nothing either to awaken in the poor a sense for these beauties, or to arrange them in such a way as to produce a series of impressions capable

of developing this sense.... If ever popular education should cease to be the barbarous absurdity it now is, and put itself into harmony with the real needs of our nature, this want will be supplied." (R.'s Guimps, 186.)

§ 57. In the last year of the eighteenth century (1800) Pestalozzi was toiling away, constant to his purpose but not clearly seeing the road before him. In March, 1800, he wrote to Zschokke: "For thirty years my life has been a well-nigh hopeless struggle against the most frightful poverty.... For thirty years I have had to forego many of the barest necessaries of life, and have had to shun the society of my fellow-men from sheer lack of decent clothes. Many and many a time have I gone without a dinner and eaten in bitterness a dry crust of bread on the road at a time when even the poorest were seated round a table. All this I have suffered and am still suffering to-day, and with no other object than the realization of my plans for helping the poor" (R.'s Guimps, 189). It was clear that he could not help others till he himself got help; and he now did get just the help he wanted, an assistant who though a schoolmaster was, strange to say, perfectly ready to learn, and to throw himself into carrying out another man's ideas. This was Hermann Kruesi, a man twenty-five years old, who from the age of 18 had been master of the village school at Gais in Appenzell. In consequence of the war between the French and Austrians, Appenzell was now reduced to a state of famine, and bands of children were sent off to other cantons to escape starvation. Fischer, a friend of Pestalozzi's, and himself an educationist taught by Salzmann (*supra* 289), wrote from Burgdorf to the pastor of Gais, offering to get thirty children taken in by the people of Burgdorf, and asking that they might be sent with some one who would look after them in the day-time and teach them. In answer to this invitation Kruesi, after a week's march, entered Burgdorf with a troop of little ones. The children were drawn up in an open place, and benevolent people chose which they would adopt. Kruesi was taken into the Castle which the Government had made over partly to Fischer, partly to Pestalozzi. In it Kruesi opened a day-school. Fischer soon afterwards died; and Pestalozzi proposed to Kruesi, who had become entirely converted to his views, that they should unite and together carry on the school in the Castle. By a decree of 23rd July, 1800, the Executive Council granted to Pestalozzi the gratuitous use of as much of the Castle and garden as he needed, and thus was established Pestalozzi's celebrated Institute at Burgdorf.

§ 58. Very soon Kruesi enlisted other helpers who had read *Leonard and Gertrude*, viz., Tobler and Buss, and this is his account of the party: “Our society thus consisted of four very different men ... the founder, whose chief reputation was that of a dreamy writer, incapable in practical life, and three young men, one [Tobler] a private tutor whose youth had been much neglected, who had begun to study late, and whose pedagogic efforts had never produced the results his character and talents seemed to promise; another [Buss], a bookbinder, who devoted his leisure to singing and drawing; and a third [Kruesi himself], a village schoolmaster who carried out the duties of his office as best he could without having been in any way prepared for them. Those who looked on this group of men, scarce one of them with a home of his own, naturally formed but a small opinion of their capabilities. And yet our work succeeded, and won the public confidence beyond the expectations of those who knew us, and even beyond our own” (R.’s Guimps, 304).

§ 59. With assistance from the Government there was added to the united schools of Pestalozzi and Kruesi a training class for teachers; and elementary teachers were sent to spend a month at Burgdorf and learn of Pestalozzi, as years afterwards they were sent to the same town to learn of Froebel. This Institute opened in January, 1801, and had nearly three years of complete success. In it was carried out Pestalozzi’s notion that there should be “no gulf between the home and the school.” On one occasion a parent visiting the establishment exclaimed, “Why, this is not a school but a family!” and Pestalozzi declared that this was the highest praise he could give it. The bond which united them all, both teachers and scholars, was love of “Father Pestalozzi.” Want of space kept the number of children below a hundred, and these enjoyed great freedom and worked away without rewards and almost without punishments. Both public reports and private speak very highly of the results. In June, 1802, the President of the Council of Public Education in Bern declares: “Pestalozzi has discovered the real and universal laws of all elementary teaching.” A visitor, Charles Victor von Bonstetten, writes: “The children know little, but what they know, they know well.... They are very happy and evidently take great pleasure in their lessons, which says a great deal for the method.... As it will be long before there is another Pestalozzi, I fear that the rich harvest his discovery seems to promise will be reserved for future ages.”

The success of the method was specially conspicuous in arithmetic. A Nürnberg merchant who came prejudiced against Pestalozzi was much impressed and has acknowledged: “I was amazed when I saw these children treating the most complicated calculations of fractions as the simplest thing in the world.”

§ 60. Up to this point Pestalozzi may be said to have gained by the disposition to “reform” or revolutionise everything, which had prevailed in Switzerland since 1798. But from the reaction which now set in he suffered more than he had gained. Switzerland sent deputies to Paris to discuss under the direction of the First Consul Bonaparte what should be their future form of Government. Among these deputies Pestalozzi was elected, and he set off thinking more of the future of the schools than of the future of the Government. At Paris he asked for an interview with Bonaparte, but destruction being in his opinion a much higher art than instruction, the First Consul said he could not be bothered about questions of A, B, C. He, however, deputed Monge to hear what Pestalozzi had to say, but the mathematician seems to have agreed with some English authorities that “there was nothing in Pestalozzi.”[158] On his return to Switzerland Pestalozzi was asked by Buss, “Did you see Bonaparte?” “No,” replied Pestalozzi, “I did not see Bonaparte and Bonaparte did not see me.” His presumption in thus putting himself on an equality with the great conqueror seems to have taken away the breath of his contemporaries: but “the whirligig of time brings in his revenges,” and before the close of the century Europe already thinks more in amount, and immeasurably more in respect, of Pestalozzi than of Bonaparte.

§ 61. As a result of the reaction the Government of United Switzerland ceased to exist, and the Cantons were restored. This destroyed Pestalozzi’s hopes of Government support, and even turned his Institute out of doors. The Castle of Burgdorf was at once demanded for the Prefect of the District; but Pestalozzi was offered an old convent at Münchenbuchsee near Bern, and thither he was forced to migrate.

§ 62. Close to Münchenbuchsee was Hofwyl where was the agricultural institution of Emmanuel Fellenberg. Fellenberg and Pestalozzi were old friends and correspondents, and as they had much regard for each other and Fellenberg was as great in administration as Pestalozzi in ideas, there seemed a chance of their benefiting by co-operation; but this could not be.

The teachers desired that the administration should be put into the hands of Fellenberg, and this was done accordingly, “not without my consent,” says Pestalozzi, “but to my profound mortification.” He could not work with this “man of iron,” as he calls Fellenberg; so he left Münchenbuchsee and accepting one of several invitations he settled in the Castle of Yverdun near the lake of Neuchatel. Within a twelvemonth he was followed by his old assistants, who had found government by Fellenberg less to their taste than no-government by Pestalozzi.

§ 63. Thus arose the most celebrated Institute of which we read in the history of education. For some years its success seemed prodigious. Teachers came from all quarters, many of them sent by the Governments of the countries to which they belonged, that they might get initiated into the Pestalozzian system. Children too were sent from great distances, some of them being intrusted to Pestalozzi, some of them living with their own tutor in Yverdun and only attending the Institute during the day. The wave of enthusiasm for the new ideas seemed to carry everything before it; but there is nothing stable in a wave, and when the enthusiasm has subsided disappointment follows. This was the case at Yverdun, and Pestalozzi outlived his Institute. But the principles on which he worked and the spirit in which he worked could not pass away; and, at least in Germany, all elementary schoolmasters acknowledge how much they are indebted to his teaching.

§ 64. Of the state of things in the early days of the Institute we have a very lively account written for his own children by Professor Vuillemin, who entered it in 1805 as a child of eight, and was in it for two years. From this I extract the following portrait of Pestalozzi: “Imagine, my children, a very ugly man with rough bristling hair, his face scarred with small-pox and covered with freckles, an untidy beard, no neck-tie, his breeches not properly buttoned and coming down to his stockings, which in their turn descended on to his great thick shoes; fancy him panting and jerking as he walked; then his eyes which at one time opened wide to send a flash of lightning, at another were half closed as if engaged on what was going on within; his features now expressing a profound sadness and now again the most peaceful happiness; his speech either slow or hurried, either soft and melodious or bursting forth like thunder; imagine the man and you have him whom we used to call our Father Pestalozzi. Such as I have sketched

him for you we loved him; we all loved him, for he loved us all; we loved him so warmly that when some time passed without our seeing him, we were quite troubled about it, and when he again appeared we could not take our eyes off him" (Guimps, 315).

§ 65. At this time he was no less loved by his assistants, who put up with any quarters that could be found for them, and received no salary. We read that the money paid by the scholars was kept in the room of "the head of the family"; every master could get the key, and when they required clothes they took from these funds just the sum requisite. This system, or want of system, went on for some time without abuse. As Vuillemin says, it was like a return to the early days of the Christian Church.

§ 66. We have seen that the first Emperor Napoleon "could not be bothered about questions of A, B, C." His was the pride that goes before a fall. On the other hand the Prussian Government which he brought to the dust in the battle of Jena (1806) had the wisdom to perceive that children will become men, and that the nature of the instruction they receive will in a great measure determine what kind of men they turn out. How was Prussia again to raise its head? Its rulers decided that it was by the education of the people. "We have lost in territory," said the king; "our power and our credit abroad have fallen; but we must and will go to work to gain in power and in credit at home. It is for this reason that I desire above everything that the greatest attention be paid to the education of the people" (Guimps, 319). About the same time the Queen (Louisa) wrote in her private diary, "I am reading *Leonard and Gertrude*, and I delight in being transported into the Swiss village. If I could do as I liked I should take a carriage and start for Switzerland to see Pestalozzi; I should warmly shake him by the hand, and my eyes filled with tears would speak my gratitude.... With what goodness, with what zeal, he labours for the welfare of his fellow-creatures! Yes, in the name of humanity, I thank him with my whole heart."

So in the day of humiliation Prussia seriously went to work at the education of the people, and this she did on the lines pointed out by Pestalozzi. To him they were directed by their philosopher Fichte, who in his *Addresses to the German Nation* (delivered at Berlin 1807-8) declared that education was the only means of raising a nation, and that all sound reform of public instruction must be based on the principles of Pestalozzi.

To bring these principles to bear on popular education, the Prussian Government sent seventeen young men for a three years' course to Pestalozzi's Institute, "where," as the Minister said in a letter to Pestalozzi, "they will be prepared not only in mind and judgment, but also in heart, for the noble vocation which they are to follow, and will be filled with a sense of the holiness of their task, and with new zeal for the work to which you have devoted your life."

§ 67. Among the eminent men who were drawn to Yverdun were some who afterwards did great things in education, as *e.g.*, Karl Ritter, Karl von Raumer the historian of education, the philosopher Herbart, and a man who was destined to have more influence than anyone, except perhaps Pestalozzi himself—I mean Friedrich Froebel. Ritter's testimony is especially striking. "I have seen," says he, "more than the Paradise of Switzerland, for I have seen Pestalozzi, and recognised how great his heart is, and how great his genius; never have I been so filled with a sense of the sacredness of my vocation and the dignity of human nature as in the days I spent with this noble man.... Pestalozzi knew less geography than a child in one of our primary schools, yet it was from him that I gained my chief knowledge of this science; for it was in listening to him that I first conceived the idea of the natural method. It was he who opened the way to me, and I take pleasure in attributing whatever value my work may have entirely to him."

§ 68. At this time we read glowing accounts of the healthy and happy life of the children; and throughout Pestalozzi never lost a single pupil by illness. With a body of very able assistants, instruction was carried on for ten hours out of the twenty-four; but in these hours there was reckoned the time spent in drill, gymnastics, hand-work, and singing. The monotony of school-life was also broken by frequent "festivals."

§ 69. And yet the Institute had taken into it the seeds of its own ruin. There were several causes of failure, though these were not visible till the house was divided against itself.

§ 70. First, Pestalozzi based the morality and discipline of the school on the relations of family life. He would be the "father" of all the children. At Burgdorf this relation seemed a reality, but it completely failed at Yverdun when the Institute became, from the number of the pupils and their differences in language, habits, and antecedents, a little world. The pupils

still called him “Father Pestalozzi,” but he could no longer know them as a father should know his children. Thus the discipline of affection slowly disappeared, and there was no school discipline to take its place.

§ 71. Next, we can see that even at Burgdorf, and still more at Yverdun, Pestalozzi was attempting to do impossibilities. According to his system, the faculties of the child were to be developed in a natural unbroken order, and the first exercises were to give the child the power of surmounting later difficulties by its own exertions. But this education could not be started at any age, and yet children of every age and every country were received into the Institution. It was not likely that the fresh comers could be made to understand that they “knew nothing,” and must start over again on a totally different road. The teachers might take such pupils to the water of “sense-impressions,” but they could not inspire the inclination to drink, nor induce the lad to learn what he supposed himself to know already. (*Cfr. supra* p. 64, § 4.)

§ 72. But there was a greater mischief at work than either of these. In his discourse to the members of the Institution on New Year’s Day, 1808, Pestalozzi surprised them all by his gloom. He had had a coffin brought in, and he stood beside it. “This work,” said he, “was founded by love, but love has disappeared from our midst.” This was only too true, and the discord was more deeply rooted than at first appeared. Among the brood of Pestalozzians there was a Catholic shepherd lad from Tyrol, Joseph Schmid by name, and he, in the end, proved a veritable cuckoo. As he shewed very marked ability in mathematics, he became one of the assistant masters; and a good deal of the fame of the Institution rested on the performances of his pupils. But his ideas differed totally from those of his colleagues, especially from those of Niederer, a clergyman with a turn for philosophy, who had become Pestalozzi’s chief exponent.

§ 73. After Pestalozzi’s gloomy speech, the masters, with the exception of Schmid, urged Pestalozzi to apply for a Government inquiry into the state of the Institution. This Pestalozzi did, and Commissioners were appointed, among them an educationist, Père Girard of Freiburg, by whom the Report was drawn up. The Report was not favourable. Père Girard was by no means inclined to sit at the feet of Pestalozzi, as he had principles of his own. Pestalozzi, he thought, laid far too much stress on mathematics, and he drew from him a statement that everything taught to a child should

seem as certain as that two and two made four. “Then,” said Girard, “if I had thirty children I would not intrust you with one of them. You could not teach him that I was his father.” Thus the Report, though very friendly in tone, was by no means friendly in spirit. The Commissioners simply compared the performances of the scholars with what pupils of the same age could do in good schools of the ordinary type, and Père Girard stated, though not in the Report, that the Institution was inferior to the Cantonal School of Aargau. But the comparison of these incommensurables only shews that Girard was not capable of understanding what was going on at Yverdun. Indeed, he asserts “not only that the mother-tongue was neglected,” but also that the children, “though they had reached a high pitch of excellence in abstract mathematics, were inconceivably weak in all ordinary practical calculations.” This is absurd. In Pestalozzian teaching the abstract never went before ordinary practical calculations. The good Father evidently blunders, and takes “head-reckoning” for abstract, and pen or pencil arithmetic for practical work. Reckoning with slate or paper is no doubt “ordinary,” but a distinction has often to be drawn between what is ordinary and what is practical.

§ 74. Soon after this the disputes between Schmid and his colleagues waxed so fierce that Schmid was virtually driven away. In 1810 he left Yverdun, and declared the Institution “a disgrace to humanity.” Great was the disorder into which the Institution now fell from having over it only a genius with “an unrivalled incapacity to govern.” The days which “remind us of the early Church” were no more, and financial difficulties naturally followed them. For the next five years things went from bad to worse, and the masters were then driven to the desperate, and, as it proved, the fatal step of inviting the able and strong-willed Schmid back again. He came in 1815, he acquired entire control over Pestalozzi, and drove from him all his most faithful adherents, among them not only Niederer, who had invited the return of his rival, but even Kruesi and the faithful servant, Elizabeth Naef, now Mrs. Kruesi, the widow of Kruesi’s brother. Pestalozzi’s grandson married Schmid’s sister, and thus united with him by family ties, Schmid took entire possession of the old man and kept it till the end. His former colleagues seem to have been deceived in their estimate both of Schmid’s integrity and ability. He completed the ruin of the Institution, and he was finally expelled from Yverdun by the Magistrates.

§ 75. But while Pestalozzi seemed falling lower and lower to the eyes of the inhabitants of Yverdun, and so had little honour in his own country, his fame was spreading all over Europe. Of this Yverdun was to reap the benefit. In 1813-14, Austrian troops marched across Switzerland to invade France. In January, 1814, the Castle and other buildings in Yverdun were "requisitioned" for a military hospital, many of the Austrian soldiers being down with typhus fever. In a great fright the Municipality sent off two deputies to headquarters, then at Basel, to petition that this order might be withdrawn. As the order threatened the destruction of his Institution, Pestalozzi went with them, and it was entirely to him they owed their success. On their return they reported that "no military hospital would be established at Yverdun, and that M. Pestalozzi had been received with most extraordinary favour."

§ 75. On this occasion Pestalozzi took the opportunity of preaching to the Emperor Alexander on the necessity of establishing good schools and of emancipating the serfs. The Emperor took the lecture in good part, and allowed the philanthropist to drive him into a corner and "button-hole" him.

§ 76. In 1815 Pestalozzi received a visit from an Englishman, or more accurately Scotsman—Dr. Bell, who, however, like most of our compatriots, could find nothing in Pestalozzi. Whatever we may think of Bell as an educationist, he was certainly a poor prophet. On leaving Yverdun he said, "In another twelve years mutual instruction will be adopted by the whole world and Pestalozzi's method will be forgotten."[159]

§ 77. In December, 1815, Pestalozzi was thrown more completely into the power of Schmid by losing the only companion from whom nothing but death could separate him—his wife. At the funeral Pestalozzi, standing by the coffin, and as if heard by her whose earthly remains were in it, ran over the disasters and trials they had passed through together, and the sacrifices she had made for him. "What in those days of affliction," said he, "gave us strength to bear our troubles and recover hope?" and taking up a Bible he went on, "*This* is the source whence you drew, whence we both drew courage, strength, and peace."

§ 78. The "death agony of the Institution," as Guimps calls it, lasted for some years, but in this gloomy period there are only two incidents I will mention. The first is the publication of Pestalozzi's writings, for which

Schmid and Pestalozzi sought subscriptions; and the appeal was so cordially answered that Pestalozzi received £2,000. This sum he wished to devote to the carrying out of a plan he had always cherished of an orphanage at Neuhof; but the money seems to have melted we do not know how.

§ 79. The other incident is that of Pestalozzi's last success. In spite of Schmid he would open a school for twelve neglected children at Clindy, a hamlet near Yverdun. Here he produced results like those which had crowned his first efforts at Neuhof, Stanz, and Burgdorf. Old, absent-minded, and incapable as he seemed in ordinary affairs, he, as though by enchantment, gained the attention and the affection of the children, and bent them entirely to his will. In a few months the number of children had risen to thirty, and wonderful progress had been made. Clindy at once became celebrated. Pestalozzi was induced to admit some children whose friends paid for them, and Schmid then persuaded the old man to remove the school into the Castle.

§ 80. In 1824 the Institution, which had lasted for twenty years, was finally closed, and Pestalozzi went to spend his remaining days (nearly three years as it proved) at Neuhof, which was then in the hands of his grandson. The year before his death he visited an orphanage conducted on his principles by Zeller at Beuggen near Rheinfelden. The children sang a poem of Goethe's quoted in *Leonard and Gertrude*, and had a crown of oak ready to put on the old man's head; but this he declined. "I am not worthy of it," said he, "keep it for innocence."

§ 81. On 17th February, 1827, at the age of eighty-one, Pestalozzi fell asleep.

§ 82. "The reform needed," said Pestalozzi, "is not that the school-coach should be better horsed, but that it should be turned right round and started on a new track." This may seem a violent metaphor, but perhaps it is not more violent than the change that was (and in this country still is) necessary. Let us try to ascertain what is the right road according to Pestalozzi, and then see on what road the school-coach is now travelling.

§ 83. The grand change advocated by Pestalozzi was a change of *object*. The main object of the school should not be to *teach* but to *develop*.

§ 84. This change of object naturally brings many changes with it. Measured by their capacity for acquiring school knowledge and skill young children may be considered, as one of H.M. Inspectors considered them, "the fag-end of the school." But if the school exists not to teach but to develop, young children, instead of being the "fag-end," become the most important part of all. In the development of all organisms more depends on the earlier than on the later stages; and there is no reason to doubt that this law holds in the case of human beings. On this account, from the days of Pestalozzi educational science has been greatly, I may say mainly, concerned with young children. For the dominating thought has been that the young human being is an undeveloped organism, and that in education that organism is developed. So the essence of Pestalozzianism lies not so much in its method as in its aim, not more in what it does than in what it endeavours to do.

§ 85. And thus it was that Pestalozzi (in Raumer's words) "compelled the scholastic world to revise the whole of their task, to reflect on the nature and destiny of man, and also on the proper way of leading him from his youth towards that destiny." And it was his love of his fellow-creatures that raised him to this standpoint. He was moved by "the enthusiasm of humanity." Consumed with grief for the degradation of the Swiss peasantry, he never lost faith in their true dignity as men, and in the possibility of raising them to a condition worthy of it. He cast about for the best means of thus raising them, and decided that it could be effected, not by any improvement in their outward circumstances, but by an education which should make them what their Creator intended them to be, and should give them the use and the consciousness of all their inborn faculties. "From my youth up," he says, "I felt what a high and indispensable human duty it is to labour for the poor and miserable; ... that he may attain to a consciousness of his own dignity through his feeling of the universal powers and endowments which he possesses awakened within him; that he may not only learn to gabble over by rote the religious maxim that 'man is created in the image of God, and is bound to live and die as a child of God,' but may himself experience its truth by virtue of the Divine power within him, so that he may be raised, not only above the ploughing oxen, but also above the man in purple and silk who lives unworthily of his high destiny" (Quoted in Barnard, p. 13).

Again he says (and I quote at length on the point, as it is indeed the key to Pestalozzianism), “Why have I insisted so strongly on attention to early physical and intellectual education? Because I consider these as merely leading to a higher aim, to qualify the human being for the free and full use of all the faculties implanted by the Creator, and to direct all these faculties towards the perfection of the whole being of man, that he may be enabled to act in his peculiar station as an instrument of that All-wise and Almighty Power that has called him into life” (To Greaves, p. 160).

§ 86. Believing in this high aim of education, Pestalozzi required a proper early training for all alike. “Every human being,” said he, “has a claim to a judicious development of his faculties by those to whom the care of his infancy is confided” (*Ib.* p. 163).

§ 87. Pestalozzi therefore most earnestly addressed himself to mothers, to convince them of the power placed in their hands, and to teach them how to use it. “The mother is qualified, and qualified by the Creator Himself, to become the principal agent in the development of her child; ... and what is demanded of her is—a *thinking love*.... God has given to thy child all the faculties of our nature, but the grand point remains undecided—how shall this heart, this head, these hands, be employed? to whose service shall they be dedicated? A question the answer to which involves a futurity of happiness or misery to a life so dear to thee.... It is recorded that God opened the heavens to the patriarch of old, and showed him a ladder leading thither. This ladder is let down to every descendant of Adam; it is offered to thy child. But he must be taught to climb it. And let him not attempt it by the cold calculations of the head, or the mere impulse of the heart; but let all these powers combine, and the noble enterprise will be crowned with success. These powers are already bestowed on him, but to thee it is given to assist in calling them forth” (To Greaves, p. 21). “Maternal love is the first agent in education.... Through it the child is led to love and trust his Creator and his Redeemer.”

§ 88. From the theory of development which lay at the root of Pestalozzi’s views of education, it followed that the imparting of knowledge and the training for special pursuits held only a subordinate position in his scheme. “Education, instead of merely considering what is to be imparted to children, ought to consider first what they may be said already to possess, if not as a developed, at least as an involved faculty capable of development.

Or if, instead of speaking thus in the abstract, we will but recollect that it is to the great Author of life that man owes the possession, and is responsible for the use, of his innate faculties, education should not simply decide what is to be made of a child, but rather inquire what it was intended that he should become. What is his destiny as a created and responsible being? What are his faculties as a rational and moral being? What are the means for their perfection, and the end held out as the highest object of their efforts by the Almighty Father of all, both in creation and in the page of revelation?"

§ 89. Education, then, must consist "in *a continual benevolent superintendence*, with the object of calling forth all the faculties which Providence has implanted; and its province, thus enlarged, will yet be with less difficulty surveyed from one point of view, and will have more of a systematic and truly philosophical character, than an incoherent mass of 'lessons'—arranged without unity of principle, and gone through without interest—which too often usurps its name."

The educator's task then is to superintend and promote the child's development, morally, intellectually, and physically.

§ 90. "The essential principle of education is not teaching," said Pestalozzi; "it is love" (R.'s G., 289). Again he says, "The child loves and believes before it thinks and acts" (*Ib.* 378). And in a very striking passage (*Ib.* 329), where he compares the development of the various powers of a human being to the development of a tree, he says, "These forces of the heart—faith and love—are in the formation of immortal man what the root is for the tree." So, according to Pestalozzi, a child without faith and love can no more grow up to be what he should be than a tree can grow without a root. Apart from this vital truth there can be no such thing as Pestalozzianism.

"Ah yet when all is thought and said
The heart still overrules the head."

It is our hearts and affections that lead us right or wrong far more than our intellects. In advocating the training of the minds of the people, Lord Derby once remarked that as Chairman of Quarter Sessions he had found most of the culprits brought before him were stupid and ignorant. It certainly cannot be denied that the commonest kind of criminal is bad in every way. He has

his body ruined by debauchery, his intellect almost in abeyance, and his heart and affections set on what is vile and degrading. If you could cultivate his intellect you would certainly raise him out of the lowest and by far the largest of the criminal classes. But he might become a criminal of a type less disgusting in externals, but in reality far more dangerous. The most atrocious miscreant of our time, if not of all time, was a man who contrived a machine to sink ships in mid-ocean, his only object being to gain a sum of money on a false insurance. This man was a type of the *élite* of criminals, had received an intellectual training, and could not have been described by Lord Derby as ignorant or stupid.

§ 91. Pestalozzi then, much as he valued the development of the intellect, put first the moral and religious influence of education; and with him moral and religious were one and the same. He protested against the ordinary routine of elementary education, because "everywhere in it the flesh predominated over the spirit, everywhere the divine element was cast into the shade, everywhere selfishness and the passions were taken as the motives of action, everywhere mechanical habits usurped the place of intelligent spontaneity" (R.'s G., 470). Education for the people must be different to this. "Man does not live by bread alone; every child needs a religious development; every child needs to know how to pray to God in all simplicity, but with faith and love" (R.'s G., 378). "If the religious element does not run through the whole of education, this element will have little influence on the life; it remains formal or isolated"[160] (*Ib.* 381). And Pestalozzi sums up the essentials of popular education in the words: "The child accustomed from his earliest years to pray, to think, and to work, is already more than half educated" (*Ib.* 381).

§ 92. Here we see the main requisites. First the child must pray with faith and love. Next he must *think*.

"The child must think!" exclaims the schoolmaster: "Must he not learn?" To which Pestalozzi would have replied, "Most certainly he must." Learning was not in Pestalozzi's estimation as in Locke's, the "last and least" thing, but learning was with him something very different from the learning imparted by the ordinary schoolmaster. Pestalozzi was very imperfectly acquainted with the thoughts and efforts of his predecessors, but the one book on education which he had studied had freed him from the "idols" of the schoolroom. This book was the *Emile* of Rousseau, and from

it he came no less than Rousseau himself to despise the learning of the schoolmaster. But when he had to face the problem of organizing a course of education for the people, Pestalozzi did not agree with Rousseau that the first twelve years should be spent in "losing time." No, the children must learn, but they must learn in such a way as to develop all the powers of the mind. And so Pestalozzi was led to what he considered his great discovery, viz., that all instruction must be based on "Anschauung."

§ 93. The Germans, who have devoted so much thought and care and effort to education, greatly honour Pestalozzi,[161] and as his disciples aim at making all elementary instruction "anschaulich." We English have troubled ourselves so little about Pestalozzi, or, I might say, about the theory of education, that we have not cared to get equivalent words for *Anschauung* and *anschaulich*. For *Anschauung* "sense-impression" has lately been tried; but this is in two ways defective; for (1) there may be "Anschauungen" beyond the range of the senses, and (2) there is in an "Anschauung" an active as well as a passive element, and this the word "impression" does not convey. The active part is brought out better by "observation"—the word used by Joseph Payne and James MacAlister; but this seems hardly wide enough. Other writers of English borrow words straight from the French, and talk about "intuition" and "intuitive," words which were taken (first I believe by Kant) from the Latin *intueri*, "to look at *with attention and reflection*."

§ 94. I think we shall be wise in following these writers. On good authority I have heard of a German professor who when asked if he had read some large work recently published in the distressing type of his nation, replied that he had not; he was waiting for a French translation. If the Germans find that the French express their thoughts more clearly than they can themselves, we may think ourselves fortunate when the French will act as interpreters. I therefore gladly turn to M. Buisson and translate what he says about "intuition."

"Intuition is just the most natural and most spontaneous action of human intelligence, the action by which the mind seizes a reality without effort, hesitation, or go-between. It is a 'direct apperception,' made as it were at a glance. If it has to do with some matter within the province of the senses, the senses perceive it at once. Here we have the simplest case of all, the most common, the most easily noted. If the thing concerned is an idea, a

reality, that is, beyond the reach of the senses, we still say that we seize it by intuition when all that is necessary is that it present itself to the mind, and the mind at once grasps it and is satisfied with it without any need of proof or investigation. We advance by intuition whenever our mind, acting by the senses, or by the judgment, or by the conscience, knows things with the same amount of evidence and the same amount of speed that a distinct view of an object affords the eye. So intuition is no separate faculty; it is nothing strange or new in the mind of man. It is just the mind itself 'intuitively' recognising what exists in it or around it" (*Les Conférences Péd. faites aux Instituteurs*, Delagrave, 1879, p. 331). So the "intuitive method" (to keep the French name for it) is of very wide application. "It appeals to this force *sui generis*, to this glance of the mind, to this spontaneous spring of the intelligence towards truth." It sets the pupil's mind to work in following his own intellectual instincts. If in our teaching we can use it, we shall have gained, as M. Buisson says, the best helper in the world, viz., the pupil. If he can be got to take an active part in the instruction all difficulty vanishes at once. Instead of having to drag him along, you will see him delighted to keep you company.

§ 95. According to M. Buisson there are three kinds of intuition—sensuous, intellectual, and moral. Similarly M. Jullien (*Esprit de Pestalozzi*, 1812, vol. j, p. 152) says that there are "intuitions" of the "internal senses" as well as of the external: the "internal senses" are four in number: first, the sense for the true; second, the sense for the beautiful; third, the sense for the good; fourth, the sense for the infinite.

§ 96. Without settling whether this analysis is complete we shall have no difficulty in admitting that both body and mind have faculties by means of which we apprehend, lay hold of, what is true and right; and it is on the use of these faculties that Pestalozzi bases instruction. No Englishman may have found a good word to indicate *Anschauung*, but one Englishman at least had the idea of it long before Pestalozzi. More than a century earlier Locke had called knowledge "the internal perception of the mind." "Knowing is seeing," said he; "and if it be so, it is madness to persuade ourselves we do so by another man's eyes, let him use never so many words to tell us that what he asserts is very visible" (*Supra* p. 222).

§ 97. Thus in theory Pestalozzi was, however unconsciously, a follower of Locke. But in practice they went far asunder. Locke's thoughts were

constantly occupied with philosophical investigations, and he seems to have made small account of the intellectual power of children, and to have supposed that they cannot "see" anything at all. So he cared little what was taught them, and till they reached the age of reason the tutor might give such lessons as would be useful to "young gentlemen," the avowed object being to "keep them from sauntering." His follower Rousseau preferred that the child's mind should not be filled with the traditional lore of the schoolroom, and that the instructor, when the youth reached the age of twelve, should find "an unfurnished apartment to let." Then came Pestalozzi, and he saw that at whatever age the instructor began to teach the child, he would not find an unfurnished apartment, seeing that every child learns continuously from the hour of its birth. And how does the child learn? Not by repeating words which express the thoughts, feelings, and experiences of other people,[162] but by his own experiences and feelings, and by the thoughts which these suggest to him.

§ 98. Elementary education then on its intellectual side is teaching the child to think. The proper subjects of thought for children Pestalozzi held to be the children's surroundings, the realities of their own lives, the things that affect them and arouse their feelings and interests. Perhaps he did not emphasize *interest* as much as Herbart has done since; but clearly an *Anschauung* or "intuition" is only possible when the child is interested in the thing observed.

§ 99. The art of teaching in Pestalozzi's system consists in analyzing the knowledge that the children should acquire about their surroundings, arranging it in a regular sequence, and bringing it to the children's consciousness gradually and in the way in which their minds will act upon it. In this way they learn slowly, but all they learn is their own. They are not like the crow drest up in peacock's feathers, for they have not appropriated any *dead* knowledge ("*angelernte todte Begriffe*," as Diesterweg has it), and it cannot be said of them, "They know about much, but *know* nothing (*Sie kennen viel und wissen nichts*)." Their knowledge is actual knowledge, for they are taught not *what* to think but *to think*, and to exercise their powers of observation and draw conclusions from their own experience. The teacher simply furnishes materials and occasions for this exercise in observing, and as it goes on gives his benevolent superintendence.

§ 100. They learn slowly for another reason. According to Pestalozzi the first conceptions must be dwelt upon till they are distinct and firmly fixed. Buss tells us that when he first joined Pestalozzi at Burgdorf the delay over the prime elements seemed to him a waste of time, but that afterwards he was convinced of its being the right plan, and felt that the failure of his own education was due to its incoherent and desultory character. "Not only," says Pestalozzi, "have the first elements of knowledge in every subject the most important bearing on its complete outline, but the child's confidence and interest are gained by perfect attainment even in the lowest stage of instruction."[163]

§ 101. We have seen that Pestalozzi would have children learn to pray, to think, and to *work*. In schools for the *soi-disant* "upper classes" the parents or friends of a boy sometimes say, "There is no need for him to work he will be very well off." From this kind of demoralization Pestalozzi's pupils were free. They would have to work, and Pestalozzi wished them to learn to work as soon as possible. In this way he sought to increase their self-respect, and to unite their school-life with their life beyond it.[164]

§ 102. Pestalozzi was tremendously in earnest, and he wished the children also to take instruction seriously. He was totally opposed to the notion which had found favour with many great authorities as *e.g.*, Locke and Basedow, that instruction should always be given in the guise of amusement. "I am convinced," says he, "that such a notion will for ever preclude solidity of knowledge, and, for want of sufficient exertions on the part of the pupils, will lead to that very result which I wish to avoid by my principle of a constant employment of the thinking powers. A child must very early in life be taught the lesson that exertion is indispensable for the attainment of knowledge"[165] (To G., xxiv, p. 117). But he should be taught at the same time that exertion is not an evil, and he should be encouraged, not frightened, into it. Healthy exertion, whether of body or mind, is always attended with a feeling of satisfaction amounting to pleasure, and where this pleasure is absent the instructor has failed in producing proper exertion. As Pestalozzi says, "Whenever children are inattentive and apparently take no interest in a lesson, the teacher should always first look to himself for the reason"[166] (*Ib.*).

§ 103. But though he took so serious a view of instruction, he made instruction include and indeed give a prominent place to the arts of singing and drawing. In the Pestalozzian schools singing found immense favour with both the masters and the pupils, and the collection of songs by Nägeli, a master at Yverdun, became famous. Drawing too was practised by all. As Pestalozzi writes to Greaves (xxiv, 117), "A person who is in the habit of drawing, especially from nature, will easily perceive many circumstances which are commonly overlooked, and will form a much more correct impression even of such objects as he does not stop to examine minutely, than one who has never been taught to look upon what he sees with an intention of reproducing a likeness of it. The attention to the exact shape of the whole and the proportion of the parts, which is requisite for the taking of an adequate sketch, is converted into a habit, and becomes productive both of instruction and amusement."

§ 104. I have now endeavoured to point out the main features of Pestalozzianism. The following is the summing up of these features given by Morf in his Contribution to Pestalozzi's Biography:—

> 1. Instruction must be based on the learner's own experience. (Das Fundament des Unterrichts ist die Anschauung.)
>
> 2. What the learner experiences and observes must be connected with language.
>
> 3. The time for learning is not the time for judging, not the time for criticism.
>
> 4. In every department instruction must begin with the simplest elements, and starting from these must be carried on step by step according to the development of the child, that is, it must be brought into psychological sequence.
>
> 5. At each point the instructor shall not go forward till that part of the subject has become the proper intellectual possession of the learner.
>
> 6. Instruction must follow the path of development, not the path of lecturing, teaching, or telling.

7. To the educator the individuality of the child must be sacred.

8. Not the acquisition of knowledge or skill is the main object of elementary instruction, but the development and strengthening of the powers of the mind.

9. With knowledge (*Wissen*) must come power (*Können*), with information (*Kenntniss*) skill (*Fertigkeit*).

10. Intercourse between educator and pupil, and school discipline especially, must be based on and controlled by love.

11. Instruction shall be subordinated to the aim of *education*.

12. The ground of moral-religious bringing up lies in the relation of mother and child.[167]

§ 105. Having now seen in which direction Pestalozzi would start the school-coach, let us examine (with reference to England only) the direction in which it is travelling at present.

§ 106. For educational purposes we may, with Lord Beaconsfield, regard the English as composed of two nations, the rich and the poor. Let us consider these separately.

In the case of the rich we find that the worst part of our educational course—the part most wrong in theory and pernicious in practice—is the schooling of young children, say between six and twelve years old. Before the age of six some few are fortunate enough to attend a good Kindergarten; but the opportunity of doing this is at present rare, and for most children of well-to-do parents there is, up to six years old, little or no organised instruction. Pestalozzi would have every mother made capable of giving such instruction. Froebel would have every child sent to a skilled "Kindergärtnerin." It seems to me beyond question that children gain immensely from joining a properly-managed Kindergarten; but where this is impossible, perhaps the mother may leave the child to the series of impressions which come to its senses without any regular order. According to the first Lord Lytton, the mother's interference might remind us of the

man who thought his bees would make honey faster if, instead of going in search of flowers, they were shut up and had flowers brought to them. The way in which young children turn from object to object, like the bees from flower to flower, seems to show that at this stage their intellectual training goes on whether we help it or not. There is no doubt an education for children however young, and the mother is the teacher, but the lessons have more to do with the heart than the head.

§ 107. But the time for regular teaching comes at last, and what is to be done then? Let us consider briefly what *is* done.

Hitherto, the only defence ever made of our school-course leading up to residence at a University, has been that it aims not at giving knowledge but at training the mind. Youths then are supposed to be engaged, not in gaining knowledge, but in training their faculties for adult life. But when we come to provide for the "education" of children, we never think of training their faculties for youth, but endeavour solely to inculcate what will then come in useful. We see clearly enough that it would be absurd to cram the mind of a youth with laws of science or art or commerce which he could not understand, on the ground that the getting-up of these things might save him trouble in after-life. But we do not hesitate to sacrifice childhood to the learning by heart of grammar rules, Latin declensions, historical dates, and the like, with no thought whatever of the child's faculties, but simply with a view of giving him knowledge (so-called) that will come in useful five or six years afterwards. We do not treat youths thus, probably because we have more sympathy with them, or at least understand them better. The intellectual life to which the senses and the imagination are subordinated in the man has already begun in the youth. In an inferior degree he can do what the man can do, and understand what the man can understand. He has already some notion of reasoning, and abstraction, and generalisation. But with the child it is very different. His active faculties may be said almost to differ in kind from a man's. He has a feeling for the sensuous world which he will lose as he grows up. His strong imagination, under no control of the reason, is constantly at work building castles in the air, and investing the doll or the puppet-show with all the properties of the things they represent. His feelings and affections, easily excited, find an object to love or dislike in every person and thing he meets with. On the other hand, he has only

vague notions of the abstract, and has no interest except in actual known persons, animals, and things.

§ 108. There is, then, between the child of eight or nine and the youth of fourteen or fifteen a greater difference than between the youth and the man of twenty; and this demands a corresponding difference in their studies. And yet, as matters are carried on now, the child is too often kept to the drudgery of learning by rote mere collections of hard words, perhaps, too, in a foreign language: and absorbed in the present, he is not much comforted by the teacher's assurance that "some day" these things will come in useful.

§ 109. How to educate the child is doubtless the most difficult problem of all, and it is generally allotted to those who are the least likely to find a satisfactory solution.

The earliest educator of the children of many rich parents is the nursemaid—a person not usually distinguished by either intellectual or moral excellence.[168] At an early age this educator is superseded by the Preparatory School. Taken as a body, the ladies who open "establishments for young gentlemen" cannot be said to hold enlarged views, or, indeed, any views whatever, on the subject of education. Their intention is not so much to cultivate the children's faculties as to make a livelihood, and to hear no complaints that pupils who have left them have been found deficient in the expected knowledge by the master of the next school. If anyone would investigate the sort of teaching which is considered adapted to the capacity of children at this stage, let him look into a standard work still in vogue ("Mangnall's Questions"), from which the young of both sexes acquire a great quantity and variety of learning; the whole of ancient and modern history and biography, together with the heathen mythology, the planetary system, and the names of all the constellations, lying very compactly in about 300 pages.[169]

Unfortunately, moreover, from the gentility of these ladies, their scholars' bodies are often treated in preparatory schools no less injuriously than their minds. It may be natural in a child to use his lungs and delight in noise, but this can hardly be considered *genteel*, so the tendency is, as far as possible, suppressed. It is found, too, that if children are allowed to run about they get dirty and spoil their clothes, and do not look like "young gentlemen," so

they are made to take exercise in a much more genteel fashion, walking slowly two-and-two, *with gloves on*.[170]

§ 110. At nine or ten years old, boys are commonly put to a school taught by masters. Here they lose sight of their gloves, and learn the use of their limbs; but their minds are not so fortunate as their bodies. The studies of the school have been arranged without any thought of their peculiar needs. The youngest class is generally the largest, often much the largest, and it is handed over to the least competent and worst paid master on the staff of teachers. The reason is, that little boys are found to learn the tasks imposed upon them very slowly. A youth or a man who came fresh to the Latin grammar would learn in a morning as much as the master, with great labour, can get into children in a week. It is thought, therefore, that the best teaching should be applied where it will have the most obvious results. If anyone were to say to the manager of a school, "The master who takes the lowest form teaches badly, and the children learn nothing"; he would perhaps say, "Very likely; but if I paid a much higher salary, and got a better man, they would learn but little." The only thing the school-manager thinks of is, How much do the little boys learn of what is taught in the higher forms? How their faculties are being developed, or whether they have any faculties except for reading, writing, and arithmetic, and for getting grammar-rules, &c. by heart, he is not so "unpractical" as to enquire.

§ 111. With reference to the education of the first of our "two nations," it seems then pretty clear that Pestalozzi would require that the school-coach should be turned and started in a totally different direction.

§ 112. What about the education of the other "nation," a nation of which the verb "to rule" has for many centuries been used in the passive voice, but can be used in that voice no longer? A century ago, with the partial exception of Scotland and Massachusetts, there was no such thing as school education for the people to be found anywhere in Europe or America. But from 1789 onwards power has been passing more and more from the few to the many; and as a natural consequence folk-schools (for which we have not yet found a name) have become of vast importance everywhere. The Germans, as we have seen, have been the disciples of Pestalozzi, and their elementary education in everything bears traces of his ideas. The English have organised a great system of elementary education in total ignorance of Pestalozzi. As usual, we seem to have supposed that the right system would

come to us “in sleep.” But has it come? The children of the poor are now compelled by the law to attend an elementary school. What sort of an education has the law there provided for them? The Education Department professes to measure everything by results. Let us do the same. Suppose that on his leaving school we wished to forecast a lad’s future. What should we try to find out about him? No doubt we should ask what he knew; but this would not be by any means the main thing. His skill would interest us, and still more would his state of health. But what we should ask first and foremost is this, Whom does he love? Whom does he admire and imitate? What does he care about? What interests him? It is only when the answers to these questions are satisfactory, that we can think hopefully of his future; and it is only in so far as the school-course has tended to make the answers satisfactory, that it deserves our approval. Schools such as Pestalozzi designed would have thus deserved our approval; but we cannot say this of the schools into which the children of the English poor are now driven. In these schools the heart and the affections are not thought of, the powers of neither mind nor body are developed by exercise, and the children do not acquire any interests that will raise or benefit them.

§ 113. An advocate of our system would not deny this, but would probably say, “The question for us to consider is, not what is the best that in the most favourable circumstances might be attempted, but what is the best that in very restricted and by no means favourable circumstances, we are likely to get. The teachers in our schools are not self-devoting Pestalozzis, but only ordinary men and women, and still worse, ordinary boys and girls. [171] It would be of no use talking to our teachers (still less our pupil-teachers) about developing the affections and the mental or bodily powers of the children. All such talk could end in nothing but silly cant. As for character, we expect the school to cultivate in the children habits of order, neatness, industry. Beyond this we cannot go.”

And yet, though this seems reasonable, we feel that it is not quite satisfactory. If so much depends in all of us on “admiration, hope, and love,” we can hardly consider a system of education that entirely ignores them to be well adapted to the needs of human nature. If Pestalozzi was right, we must be wrong. We have never supposed the object of the school to be the development of the faculties of heart, of head, and of hand, but we have thought of nothing but learning—learning first of all to read, write,

and cipher, and then in “good” schools, one or more “extra subjects” may be taken up, and a grant obtained for them. The sole object, both of managers and teachers, is to prepare for the Inspector, who comes once a year, and from an examination of five hours or so, pronounces on what the children have learnt.

§ 114. The engineer most concerned in the construction of this machine, the Right Hon. Robert Lowe, announced that there could be “no such thing as a science of education;” and as when we have no opinion of our own we always adopt the opinion of some positive person, we took his word for it. But what if the confident Mr. Lowe was mistaken? What if there *is* such a science, and the aim of it is that children should grow up not so much to *know* something as to *be* something? In this case we shall be obliged sooner or later to give up Mr. Lowe and to come round to Pestalozzi.[172] Science is correct inferences drawn from the facts of the universe; and where such science exists, confident assertions that it does not and cannot exist are dangerous for the confident persons and for those who follow them. Even if “there is no such thing as a science of education,” such a thing as *education* there is; and this is just what Mr. Lowe, and we may say the English, practically deny. They make arrangements for instruction and mete out “the grant” according to the results obtained, but they totally fail to conceive of the existence of *education*, education which has instruction among its various agents.

§ 115. In one respect the analogy between the educator and child and the gardener and plant, an analogy in which Pestalozzi no less than Froebel delighted, entirely breaks down. The gardener has to study the conditions necessary for the health and development of the plant, but these conditions lie outside his own life and are independent of it. With the educator it is different. Like the gardener he can create nothing in the child, but unlike the gardener he can further the development only of that which exists in himself. He *draws out* in the young the intelligence and the sense of what is just, the love of what is beautiful, the admiration of what is noble, but this he can do only by his own intelligence and his own enthusiasm for what is just and beautiful and noble. Even industry is in many cases *caught* from the teacher. In a volume of essays (originally published in the *Forum*), in which some men, distinguished as scholars or in literature in the United States, have given an account of their early years, we find that almost in

every case they date their intellectual industry and growth from the time when they came under the influence of some inspiring teacher. Thus even for instruction and still more for education, the great force is *the teacher*. This is a truth which all our "parties" overlook. They wage their controversies and have their triumphs and defeats about unessentials, and leave the essentials to "crotchety educationists." In such questions as whether the Church Catechism shall or shall not be taught, whether natural science shall or shall not figure in the time-table (without scientific teachers it can figure nowhere else), whether the parents or the Government shall pay for each child twopence or threepence a week, whether the ratepayers shall or shall not be "represented" among the Managers in "voluntary" schools, in all questions of this kind *education* is not concerned; and yet these are the only questions that we think about. In the end it will perhaps dawn upon us that in every school what is important for education is not the time-table but the teacher, and that so far as pupil-teachers are employed education is impossible. Elsewhere (*infra* p. 476) I have told of a man in the prime of life (he seemed between 40 and 50 years old) whose time was entirely taken up in teaching a large class of children, boys and girls, of six or seven years. He most certainly could and did educate them both in heart and mind. He made their lessons a delightful occupation to them, and he exercised over them the influence of a good and wise father. Here was the right system seen at its best. I do not say that all or even most adult teachers would have exercised so good an influence as this gentleman; but so far as they come up to what they ought to be and might be they do exercise such an influence. And this of course can be said of no *pupil*-teacher.

§ 116. As regards schools then, schools for the rich and schools for the poor, the great educating force is the personality of the teacher. Before we can have Pestalozzian schools we must have Pestalozzian teachers. Teachers must catch something of Pestalozzi's spirit and enter into his conception of their task. Perhaps some of them will feel inclined to say: "Fine words, no doubt, and in a sense very true, that education should be the unfolding of the faculties according to the Divine idea; but between this high poetical theory and the dull prose of actual school-teaching, there is a great gulf fixed, and we cannot attend to both at the same time." I know full well the difference there is between theories and plans of education as they seem to us when we are at leisure and can think of them without reference to particular pupils, and when all our energy is taxed to get through our

day's teaching, and our animal spirits jaded by having to keep order and exact attention among veritable schoolboys who do not answer in all respects to "the young" of the theorists. But whilst admitting most heartily the difference here, as elsewhere, between the actual and the ideal, I think that the dull prose of school-teaching would be less dull and less prosaic if our aim was higher, and if we did not contentedly assume that our present performances are as good as the nature of the case will admit of. Many teachers (perhaps I may say most) are discontented with the greater number of their pupils, but it is not so usual for teachers to be discontented with themselves. And yet even those who are most averse from theoretical views, which they call unpractical, would admit, as practical men, that their methods are probably susceptible of improvement, and that even if their methods are right, they themselves are by no means perfect teachers. Only let the *desire* of improvement once exist, and the teacher will find a new interest in his work. In part, the treadmill-like monotony so wearing to the spirits will be done away, and he will at times have the encouragement of conscious progress. To a man thus minded, theorists may be of great assistance. His practical knowledge may, indeed, often show him the absurdity of some pompously enunciated principle, and even where the principles seem sound, he may smile at the applications. But the theorists will show him many aspects of his profession, and will lead him to make many observations in it, which would otherwise have escaped him. They will save him from a danger caused by the difficulty of getting anything done in the school-room, the danger of thinking more of means than ends. They will teach him to examine what his aim really is, and then whether he is using the most suitable methods to accomplish it.

Such a theorist is Pestalozzi. He points to a high ideal, and bids us measure our modes of education by it. Let us not forget that if we are practical men we are Christians, and as such the ideal set before us is the highest of all. "Be ye perfect, even as your Father in heaven is perfect."

The Pestalozzian literature in German and even in French is now considerable, but it is still small in English. The book I have made most use of is *Histoire de Pestalozzi par R. de Guimps* (Lausanne, Bridel), with its translation by John Russell (London: Sonnenschein. Appleton's: N. Yk.). In Henry Barnard's *Pestalozzi and Pestalozzianism* are collected some good papers, among them Tilleard's trans. from Raumer. We also have H. Kruesi's *Pestalozzi* (Cincinatti: Wilson, Hinkle, & Co.). I have already mentioned Miss Channing's *Leonard and Gertrude*. The *Letters to Greaves* are now out of print. A complete account of Pestalozzi and everything connected with him, bibliography included, is given in M. J. Guillaume's article *Pestalozzi*, in Buisson's *Dictionnaire de Pédagogie*. (See also *Pestalozzi* par J. Guillaume (Hachette) just published.)

XVII.

FRIEDRICH FROEBEL.

(1783-1852.)

§ 1. I now approach the most difficult part of my subject. I have endeavoured to give some account of the lessons taught us by the chief Educational Reformers. No doubt my selection of these has been made in a fashion somewhat arbitrary, and there are names which do not appear and yet might reasonably be looked for if all the chief Educational Reformers were supposed to be included. But the plan of my book has restricted me to a few, and I am by no means sure that some to whom I have given a chapter are as worthy of it as some to whom I have not. I have in a measure been guided by fancy and even by chance. One man, however, I dare not leave out. All the best tendencies of modern thought on education seem to me to culminate in what was said and done by Friedrich Froebel, and I have little doubt that he has shown the right road for further advance. Of what he said and did I therefore feel bound to give the best account I can, but I am well aware that I shall fail, even more conspicuously than in other cases, to do him justice. There are some great men who seem to have access to a world from which we ordinary mortals are shut out. Like Moses "they go up into the Mount," and the directions they give us are based upon what they have seen in it. But we cannot go up with them; so we feel that we very imperfectly understand them; and when there can be not the smallest doubt of their sincerity we at times hesitate about the nature of their visions. For myself I must admit that I very imperfectly understand Froebel. I am convinced, as I said, that he has pointed out the right road for our advance in education; but he was perhaps right in saying: "Centuries may yet pass before my view of the human creature as manifested in the child, and of the educational treatment it requires, are universally received." It has already taken centuries to recover from the mistakes made at the Renascence. For the full attainment of Froebel's standpoint perhaps a few additional centuries may be necessary.

§ 2. Friedrich Wilhelm August Froebel[173] was born at Oberweissbach, a village of the Thuringian Forest, on the 21st April, 1783. He completed his seventieth year, and died at Marienthal, near Bad-Liebenstein, on the 21st June, 1852. Like Comenius, with whom he had much in common, he was neglected in his youth; and the remembrance of his own early sufferings made him in after life the more eager in promoting the happiness of children. His mother he lost in his infancy, and his father, the pastor of Oberweissbach and the surrounding district, attended to his parish but not to his family. Friedrich soon had a stepmother, and neglect was succeeded by stepmotherly attention; but a maternal uncle took pity on him, and for some years gave him a home a few miles off at Stadt-Ilm. Here he went to the village school, but like many thoughtful boys he passed for a dunce. Throughout life he was always seeking for hidden connexions and an underlying unity in all things. In his own words: "Man, particularly in boyhood, should become intimate with nature—not so much with reference to the details and the outer forms of her phenomena as with reference to the Spirit of God that lives in her and rules over her. Indeed, the boy feels this deeply and demands it" (*Ed. of M.*, Hailmann's trans., p. 162). But nothing of this unity was to be perceived in the piecemeal studies of the school; so Froebel's mind, busy as it was for itself, would not work for the masters. His half-brother was therefore thought more worthy of a university education, and Friedrich was apprenticed for two years to a forester (1797-1799). Left to himself in the Thuringian Forest, Froebel now began to "become intimate with nature;" and without scientific instruction he obtained a profound insight into the uniformity and essential unity of nature's laws. Years afterwards the celebrated Jahn (the "Father Jahn" of the German gymnasts) told a Berlin student of a queer fellow he had met, who made out all sorts of wonderful things from stones and cobwebs. This "queer fellow" was Froebel; and the habit of making out general truths from the observation of nature, especially of plants and trees, dated from his solitary rambles in the Forest. No training could have been better suited to strengthen his inborn tendency to mysticism; and when he left the Forest at the early age of seventeen, he seems to have been possessed by the main ideas which influenced him all his life. The conception which in him dominated all others was the *unity of nature*; and he longed to study natural sciences that he might find in them various applications of nature's universal laws. With great difficulty he got leave to join his elder brother at

the university of Jena; and there for a year he went from lecture-room to lecture-room hoping to grasp that connexion of the sciences which had for him far more attraction than any particular science in itself. But Froebel's allowance of money was very small, and his skill in the management of money was never great; so his university career ended in an imprisonment of nine weeks for a debt of thirty shillings. He then returned home with very poor prospects, but much more intent on what he calls the course of "self-completion" (*Vervollkommnung meines selbst*) than on "getting on" in a worldly point of view. He was soon sent to learn farming, but was recalled in consequence of the failing health of his father. In 1802 the father died, and Froebel, now twenty years old, had to shift for himself. It was some time before he found his true vocation, and for the next three-and-a half years we find him at work now in one part of Germany now in another,—sometimes land-surveying, sometimes acting as accountant, sometimes as private secretary.

§ 3. But in all this his "outer life was far removed from his inner life." "I carried my own world within me," he tells us, "and this it was for which I cared and which I cherished." In spite of his outward circumstances he became more and more conscious that a great task lay before him for the good of humanity; and this consciousness proved fatal to his "settling down." "To thee may Fate soon give a settled hearth and a loving wife" (thus he wrote in a friend's album in 1805); "me let it keep wandering without rest, and allow only time to learn aright my true relation to the world and to my own inner being. Do thou give bread to men; be it my effort to give men to themselves" (K. Schmidt's *Gesch. d. Päd.*, 3rd ed. by Lange, vol. iv, p. 277).

§ 4. As yet the nature of the task was not clear to him, and it seemed determined by accident. While studying architecture in Frankfort-on-the-Main, he became acquainted with the director of a model school who had caught some of the enthusiasm of Pestalozzi. This friend saw that Froebel's true field was education, and he persuaded him to give up architecture and take a post in the model school. "The very first time," he says, "that I found myself before thirty or forty boys, I felt thoroughly at home. In fact, I perceived that I had at last found my long-missed life-element; and I wrote to my brother that I was as well pleased as the fish in the water: I was inexpressibly happy."

§ 5. In this school Froebel worked for two years with remarkable success; but he felt more and more his need of preparation, so he then retired and undertook the education of three lads of one family. Even in this he could not satisfy himself, and he obtained the parents' consent to his taking the boys to Yverdun, and there forming with them a part of the celebrated institution of Pestalozzi. Thus from 1807 till 1809 Froebel was drinking in Pestalozzianism at the fountain head, and qualifying himself to carry on the work which Pestalozzi had begun. For the science of education had to deduce from Pestalozzi's experience principles which Pestalozzi himself could not deduce; and "Froebel, the pupil of Pestalozzi, and a genius like his master, completed the reformer's system; taking the results at which Pestalozzi had arrived through the necessities of his position, Froebel developed the ideas involved in them, not by further experience but by deduction from the nature of man, and thus he attained to the conception of true human development and to the requirements of true education" (Schmidt's *Gesch. d. Päd.*).

§ 6. Holding that man and nature, inasmuch as they proceed from the same Source, must be governed by the same laws, Froebel longed for more knowledge of natural science. Even Pestalozzi seemed to him not to "honour science in her divinity." He therefore determined to continue the university course which had been so rudely interrupted eleven years before, and in 1811 he began studying at Göttingen, whence he proceeded to Berlin. In his Autobiography he tells us: "The lectures for which I had so longed really came up to the needs of my mind and soul, and made me feel more fervently than ever the certainty of the demonstrable inner connexion of the whole cosmical development of the universe. I saw also the possibility of man's becoming conscious of this absolute unity of the universe, as well as of the diversity of things and appearances which is perpetually unfolding itself within that unity; and then when I had made clear to myself, and brought fully home to my consciousness the view that the infinitely varied phenomena in man's life, work, thought, feeling, and position were all summed up in the unity of his personal existence I felt myself able to turn my thoughts once more to educational problems" (*Autob.* trans. by Michaelis and Moore, p. 89).

But again his studies were interrupted, this time by the king of Prussia's celebrated call "To my people." Though not a Prussian, Froebel was heart

and soul a German. He therefore responded to the call, enlisted in Lützow's corps, and went through the campaign of 1813. His military ardour, however, did not take his mind off education. "Everywhere," he writes, "as far as the fatigues I underwent allowed, I carried in my thoughts my future calling as educator; yes, even in the few engagements in which I had to take part. Even in these I could gather experience for the task I proposed to myself." Froebel's soldiering showed him the value of discipline and united action, how the individual belongs not to himself but to the whole body, and how the whole body supports the individual.

Froebel was rewarded for his patriotism by the friendship of two men whose names will always be associated with his, Langethal and Middendorff. These young men, ten years younger than Froebel, became attached to him in the field, and were ever afterwards his devoted followers, sacrificing all their prospects in life for the sake of carrying out his ideas.

§ 7. At the peace of Fontainebleau (signed in May, 1814) Froebel returned to Berlin, and became curator of the Museum of Mineralogy under Professor Weiss. In accepting this appointment from the Government he seemed to turn aside from his work as educator; but if not teaching he was learning. The unity of nature and human nature seemed more and more to reveal itself to him. Of the days past in the museum he afterwards wrote: "Here was I at the central point of my life and strife, where inner working and law, where life, nature, and mathematics were united in the fixed crystaline form, where a world of symbols lay open to the inner eye." Again he says: "The stones in my hand and under my eye became speaking forms. The world of crystals declared to me the life and laws of life of man, and in still but real and sensible speech taught the true life of humanity." "Geology and crystallography not only opened for me a higher circle of knowledge and insight, but also showed me a higher goal for my inquiry, my speculation, and my endeavour. Nature and man now seemed to me mutually to explain each other through all their numberless various stages of development. Man, as I saw, receives from a knowledge of natural objects, even because of their immense deep-seated diversity, a foundation for and a guidance towards a knowledge of himself and life, and a preparation for the manifestation of that knowledge" (*Autob. ut supra*, p. 97). More and more the thought possessed him that the one thing needful for man was unity of development, perfect evolution in accordance with the

laws of his being, such evolution as science discovers in the other organisms of nature.

§ 8. He at first intended to become a teacher of natural science, but before long wider views dawned upon him. Langethal and Middendorff were in Berlin, engaged in tuition. Froebel gave them regular instruction in his theory, and at length, counting on their support, he resolved to set about realising his own idea of "the new education." This was in 1816. Three years before one of his brothers, a clergyman, had died of fever caught from the French prisoners. His widow was still living in the parsonage at Griesheim, a village on the Ilm. Froebel gave up his post in Berlin, and set out for Griesheim on foot, spending his very last groschen on the way for bread. Here he undertook the education of his orphan niece and nephews, and also of two more nephews sent him by another brother. With these he opened a school, and wrote to Middendorff and Langethal to come and help in the experiment. Middendorff came at once, Langethal a year or two later, when the school had been moved to Keilhau, another of the Thuringian villages, which became the Mecca of the new faith. In Keilhau, Froebel, Langethal, Middendorff, and Barop, a relation of Middendorff's, all married and formed an educational community. Such zeal could not be fruitless, and the school gradually increased, though for many years its teachers, with Froebel at their head, were in the greatest straits for money, and at times even for food. Karl Froebel, who was brought up in the school, tells how, on one occasion, he and the other children were sent to ramble in the woods till some of the seed-corn provided for the coming year had been turned into bread for them. Besides these difficulties the community suffered from the panic and reaction after the murder of Kotzebue (1819), and were persecuted as a nest of demagogues. But "the New Education" was sufficiently successful to attract notice from all quarters; and when he had been ten years at Keilhau (1826) Froebel published his great work, *The Education of Man*.

§ 9. Four years later he determined to start other institutions in connexion with the parent institution at Keilhau; and being offered by a private friend the use of a castle on the Wartensee, in the canton of Lucerne, he left Keilhau under the direction of Barop, and with Langethal made a settlement in Switzerland. The ground, however, was very ill chosen. The Catholic clergy resisted what they considered as a Protestant invasion, and the

experiment on the Wartensee and at Willisau in the same canton, to which the institution was moved in 1833, never had a fair chance. It was in vain that Middendorff at Froebel's call left his wife and family at Keilhau, and laboured for four years in Switzerland without once seeing them. The Swiss institution never flourished. But the Swiss Government wished to turn to account the presence of the great educator; so young teachers were sent to Froebel for instruction, and finally he removed to Burgdorf (a town already famous from Pestalozzi's labours there thirty years earlier) to undertake the establishment of a public orphanage, and also to superintend a course of teaching for schoolmasters. The elementary teachers of the canton were to spend three months every alternate year at Burgdorf, and there compare experiences, and learn of distinguished men such as Froebel and Bitzius.

§ 10. In his conferences with these teachers Froebel found that the schools suffered from the state of the raw material brought into them. Till the school age was reached the children were entirely neglected. Froebel's conception of harmonious development naturally led him to attach much importance to the earliest years, and his great work on *The Education of Man*, published as early as 1826, deals chiefly with the education of children. At Burgdorf his thoughts were much occupied with the proper treatment of *young* children, and in scheming for them a graduated course of exercises modelled on the games in which he observed them to be most interested. In his eagerness to carry out his new plans he grew impatient of official restraints; and partly from this reason, partly on account of his wife's ill health, he left Burgdorf without even actually becoming "Waisenvater" (father of the orphans).[174] After a sojourn of some months in Berlin, where he was detained through family affairs, but used the opportunities thus afforded of examining the recently founded infant schools, Froebel returned to Keilhau, and soon afterwards opened the first *Kindergarten*, or "Garden of Children," in the neighbouring village of Blankenburg (A.D. 1837). Not only the thing but the name seemed to Froebel a happy inspiration, and it has now become inseparably connected with his own. Perhaps we can hardly understand the pleasure he took in it unless we know its predecessor, *Kleinkinderbeschäftigungsanstalt*.

§ 11. Firmly convinced of the importance of the Kindergarten for the whole human race, Froebel described his system in a weekly paper (his *Sonntagsblatt*) which appeared from the middle of 1837 till 1840. He also

lectured in great towns; and he gave a regular course of instruction to young teachers at Blankenburg.

§ 12. But although the principles of the Kindergarten were gradually making their way, the first Kindergarten was failing for want of funds. It had to be given up; and Froebel, now a widower (he had lost his wife in 1839), carried on his course for teachers first at Keilhau, and from 1848, for the last four years of his life, at or near Liebenstein, in the Thuringian Forest, and in the duchy of Meiningen. It is in these last years that the man Froebel will be best known to posterity; for in 1849 be attracted within the circle of his influence a woman of great intellectual power, the Baroness von Marenholtz-Bülow, who has given us in her *Recollections of Friedrich Froebel* the only life-like portrait we possess. In these records of personal intercourse we see the truth of Deinhardt's words: "The living perception of universal and ideal truth which his talk revealed to us, his unbounded enthusiasm for the education and happiness of the human race, his willingness to offer up everything he possessed for the sake of his idea, the stream of thoughts which flowed from his enthusiasm for the ideal as from an inexhaustible fountain, all these made Froebel a wonderful appearance in the world, by whom no unprejudiced spectator could fail to be attracted and elevated."

§ 13. These seemed likely to be Froebel's most peaceful days. He married again; and having now devoted himself to the training of women as educators, he spent his time in instructing his class of young female teachers. But trouble came upon him from a quarter whence he least expected it. In the great year of revolutions, 1848, Froebel had hoped to turn to account the general eagerness for improvement, and Middendorff had presented an address on Kindergartens to the German Parliament. Besides this a nephew of Froebel's published books which were supposed to teach socialism. True the uncle and nephew differed so widely that "the New Froebelians" were the enemies of the "Old." But the distinction was overlooked, and Friedrich and Karl Froebel were regarded as the united advocates of "some new thing." In the reaction which soon set in, Froebel found himself suspected of socialism and irreligion; and in 1851 the *Cultus-minister* Raumer issued an edict forbidding the establishment of schools "after Friedrich and Karl Froebel's principles" in Prussia. It was in vain that Froebel proved that his principles differed fundamentally from his

nephew's. It was in vain that a congress of schoolmasters, presided over by the celebrated Diesterweg, protested against the calumnious decree. The Minister turned a deaf ear, and the decree remained in force ten years after the death of Froebel (*i.e.*, till 1862). But the edict was a heavy blow to the old man, who looked to the Government of the "*Cultus-staat*" Prussia for support, and was met with denunciation. Of the justice of the charge brought by the Minister against Froebel the reader may judge from the account of his principles given below.

Whether from the worry of this new controversy, or from whatever cause, Froebel did not long survive the decree. His seventieth birthday was celebrated with great rejoicings in May, 1852, but he died in the following month, and lies buried at Schweina, a village near his last abode, Marienthal.

§ 14. Throughout these essays my object has been to collect what seemed to me the most valuable lessons of various Reformers. In doing this I have had to judge and decide what was most valuable, and at times to criticise and differ from my authorities. This may perhaps give rise to the question, Do you then think yourself the superior or at least the equal of the great men you criticise? and I could only reply in all sincerity, I most certainly do not. If I am asked further, what then is my attitude towards them? I reply, it differs very much with different individuals. I cannot say I am prepared to sit at the feet of Mulcaster, or Dury, or Petty. In writing of these men I simply point out very early expression of ideas that following generations have developed partially and we are developing still. When we come to the great leaders we see among them men like Comenius who unite a thorough study of what has already been thought and done with a genius for original thinking, men like Locke with splendid intellectual gifts and a power of happy and clear expression, men like Rousseau with a talent for shaking themselves free from "custom"—custom which "lies upon us with a weight, Heavy as frost and deep almost as life," and besides this (in his case at least) endowed with a voice to be heard throughout the world. Then again we have men like Pestalozzi who with a genius for investigating, devote their lives to the investigation, and men like Froebel who seem to penetrate to a region above us or at least beyond us, and to talk about it in language which at times only partially conveys a meaning. From all these men we have much to learn; and that we may do this we must come as learners to

them. When we thus come we find that the great lessons they teach become clearer and clearer as each takes up wholly or in part what has been taught by his predecessors and adds to it. Some of these lessons we may now receive as established truths and seek to conform our practice to them. But in following our leaders we dare not close our eyes. Before we can know anything we must see it, as Locke says, with our mind's eye. The great thing is to keep the eye of the mind wide open and always on the lookout for truth. Acting on this conviction I have not blindly accepted the dicta even of the greatest men but have selected those of their lessons which are taught if not by all at least by most of them, and which also seem to evoke "the spontaneous spring of the intelligence towards truth" (see p. 362, *supra*).

§ 15. In reading Froebel however I am conscious that this "spring" is wanting. Before one can accept teaching one must at least understand it, and this preliminary is not always possible when we would learn from Froebel. At times he goes entirely out of sight, and whether the words we hear are the expression of deep truth or have absolutely no meaning at all, I for my part am at times totally unable to determine. But where I can understand him he seems to me singularly wise; and working in the same lines as Pestalozzi he in some respects advances far beyond his great predecessor.

§ 16. Both these men were devotees of science; but instead of finding in science anything antagonistic to religion they looked upon science as the expression of the mind of God. Their belief was just that which Sir Thomas Browne had uttered more than 200 years before in the *Religio Medici*: "Though we christen effects by their most sensible and nearest causes yet is God the true and infallible cause of all, whose concourse [*i.e.*, concurrence, co-operation] though it be general, yet doth it subdivide itself into the particular actions of everything, and is that spirit by which each singular essence not only subsists but performs its operation."[175] With this belief Froebel sought to trace everything back to the central Unity, to God. The author of the *De Imitatione Christi* has said: "The man to whom all things are one, who refers all things to one and sees all things in one, he can stand firm and be at peace in God. Cui omnia unum sunt, et qui omnia ad unum trahit, et omnia in uno videt, potest stabilis esse et in Deo pacificus permanere" (*De Im. Xti.* lib. i; cap. 3, § 2). So thought Froebel, and his great

longing was to refer all things to one and see all things in one. However little we may share this longing we must admit that it is a natural outcome from the Christian religion. If there is One in Whom all "live and move and have their being," everything should be referred to Him. As Froebel says, "In Allem wirkt und schafft *Ein* Leben, Weil das Leben All' ein einz'ger Gott gegeben. (In everything there works and stirs *one* life, because to all One God has given life.)" So long then as we remain Christians we must agree with Froebel that all true education is founded on Religion. Perhaps in the end we may adopt his high ideal and say with him, "Education should lead and guide man to clearness concerning himself and in himself, to peace with nature, and to unity with God; hence, it should lift him to a knowledge of himself and of mankind, to a knowledge of God and of Nature, and to the pure and holy life to which such knowledge leads." (*E. of M.*, Hailmann's t., 5.) "The object of education is the realization of a faithful, pure, inviolate, and hence holy life" (*Ib.* 4).

§ 17. This is indeed a high ideal: and we naturally ask, If we would work towards it what road would Froebel point out to us? This brings us to his theory of development or, as it has been called since Darwin, evolution. The idea of organic growth was first definitely applied to the young by Pestalozzi, but it was more clearly and consistently applied by Froebel. It has gone forth conquering and to conquer; and though far indeed from being accepted by the teaching profession of this age, it is likely to have a vast influence on the practice of those who will come after them. I therefore give the following statement of it, which seems to me excellent:—

"The first thing to note in the idea of development is that it indicates, not an increase in bulk or quantity (though it may include this), but an increase in complexity of structure, an improvement in power, skill, and variety in the performance of natural functions. We say that a thing is fully developed when its internal organisation is perfect in every detail, and when it can perform all its natural actions or functions perfectly. If we apply this distinction to mind, an increase in bulk will be represented by an increase in the amount of material retained in the mind, in the memory; development will be a perfecting of the structure of the mind itself, an increase of power and skill and variety in dealing with knowledge, and in putting knowledge to all its natural uses. The next thing to consider is how this development is produced. How can we aid in promoting this change from germ to complete

organism, from partially developed thing to more highly developed thing? The answer comes from every part of creation with ever-increasing clearness and emphasis—development is produced by exercise of function, use of faculty. Neglect or disuse of any part of an organism leads to the dwindling, and sometimes even to the disappearance, of that part. And this applies not only to individuals, but stretches also from parent to child, from generation to generation, constituting then what we call heredity, or what Froebel calls the connectedness of humanity. Slowly through successive generations a faculty or organ may dwindle and decay, or may be brought to greater and greater perfection. As Froebel puts it, humanity past, present, and future is one continuous whole. The *amount* of development, then, possible in any particular case plainly depends partly on the original outfit, and partly (and as a rule in a greater measure) on the opportunities there have been for exercise, and the use made of those opportunities. If we wish to develop the hand, we must exercise the hand. If we wish to develop the body, we must exercise the body. If we wish to develop the mind, we must exercise the mind. If we wish to develop the *whole* human being, we must *exercise the whole* human being. But will *any* exercise suffice? Again the answer is clear. Only that exercise which is always in harmony with the nature of the thing, and which is always proportioned to the strength of the thing, produces true development. All other exercise is partially or wholly hurtful. And another condition, evident in every case, becomes still more evident when we apply these laws to the mind. To produce development most truly and effectively, the exercise must arise from and be sustained by the thing's own activity—its own natural powers, and all of them (as far as these are in *any* sense connected with the activity proposed) should be awakened and become naturally active. If, for instance, we desire to further the development of a plant, what we have to do is to induce the plant (and the whole of it) to become active in its own natural way, and to help it to sustain that activity. We may abridge the time; we may modify the result; but we must act through and by the plant's own activity. This activity of a thing's own self we call *self-activity* (*E. of M.*, § 9). We generally consider the mind in the light of its three activities of *knowing, feeling, and willing*. The exercise which aims at producing mental development must be in harmony with the nature of *knowing*, *feeling*, and *willing*, and continually in proportion to their strength. And, further, it is found that the more the activity is that of the *whole* mind, the more it is the mind's *own* activity—

self-produced, and self-maintained, and self-directed—the better is the result. In other words, knowing, feeling, and willing must *all* take their rightful share in the exercise; and, in particular, feeling and willing—the mind's powers of prompting and nourishing, of maintaining and directing its own activities—must never be neglected" (H. C. Bowen on *Ed. of M.*).

§ 18. "A divine message or eternal regulation of the Universe there verily is, in regard to every conceivable procedure and affair of man; faithfully following this, said procedure or affair will prosper ... not following this ... destruction and wreck are certain for every affair." These words of Carlyle's express Froebel's thought about education. Before attempting to educate we must do all we can to ascertain the divine message and must then direct our proceedings by it. The divine message must be learnt according to Froebel by studying the nature of the organism we have to assist in developing. Each human being must "develop from within, self-active and free, in accordance with the eternal law. This is the problem and the aim of all education in instruction and training; there can be and should be no other" (*Ed. of M.*, 13). For "all has come forth from the Divine, from God, and is through God alone conditioned. To this it is that all things owe their existence—to the Divine working in them. The Divine element that works in each thing is the true idea (*das Wesen*) of the thing." Therefore "the destiny and calling of all things is to develop their true idea, and in so doing to reveal God in outward and through passing forms."

§19. What we must think of then is the "true idea" which each child should develop. How is this idea to be ascertained? In other words, how are we to learn the Divine Message about the bringing up of children? This Message is given us through the works of God. "In the creation, in nature and the order of the material world, and in the progress of mankind, God has given us the true type (*Urbild*) of education."

§ 20. So Froebel would have all educators lay to heart the great principle of the Baconian philosophy: We command Nature only by obeying her. They are to be very cautious how they interfere, and the education they give is to be "passive, following." Even in teaching they must bear in mind, that "the purpose of teaching is to bring ever more *out of* man rather than to put more and more *into* him." (*Ed. of M.*, 279.) Froebel in fact taught the Pestalozzian doctrine that the function of the educator was that of "benevolent superintendence."[176]

§21. But if Froebel would thus limit the action of the educator he would greatly extend the action of those educated; and here we see the great principle with which the name of Froebel is likely to be permanently associated. “The starting-point of all that appears, of all that exists, and therefore of all intellectual conception, is act, action. From the act, from action, must therefore start true human education, the developing education of the man; in action, in acting, it must be rooted and must spring up.... Living, acting, conceiving,—these must form a triple chord within every child of man, though the sound now of this string, now of that, may preponderate, and then again of two together.”

§ 22. Many thinkers before Froebel had seen the transcendent importance of action; but Froebel not only based everything upon it, but he based it upon God. “God creates and works productively in uninterrupted continuity. Each thought of God is a work, a deed” (*Ed. of M.*, § 23). As Jesus has said: “My Father worketh hitherto and I work” (St. John v, 17). From this it follows that, since God created man in his own image, “man should create and bring forth like God” (*Ed. of M.*, *ib.*). “He who will early learn to recognise the Creator must early exercise his own power of action with the consciousness that he is bringing about what is good; for the doing good is the link between the creature and the Creator, and the conscious doing of it the conscious connexion, the true living union of the man with God, of the individual man as of the human race, and is therefore at once the starting point and the eternal aim of all education.” Elsewhere he says: “We become truly God-like in diligence and industry, in working and doing, which are accompanied by the clear perception or even by the vaguest feeling that thereby we represent the inner in the outer; that we give body to spirit, and form to thought; that we render visible the invisible; that we impart an outward, finite, transient being to life in the spirit. Through this God-likeness we rise more and more to a true knowledge of God, to insight into His Spirit; and thus, inwardly and outwardly, God comes ever nearer to us. Therefore Jesus says of the poor, ‘Theirs is the kingdom of heaven,’ if they could but see and know it and practice it in diligence and industry, in productive and creative work. Of children too is the kingdom of heaven; for unchecked by the presumption and conceit of adults they yield themselves in child-like trust and cheerfulness to their formative and creative instinct” (*Ed. of M.*, § 23. P. 31).

§ 23. This “formative and creative instinct” which as we must suppose has existed in all children in all nations and in all ages of the world, Froebel was the first to take duly into account for education. Pestalozzi saw the importance of getting children to *think*, and to think about their material surroundings. These the child can observe and search into; and in doing this he may discover what is not at first obvious to sight or touch and may even ascertain relations between the several parts of the same thing or connexions between different things compared together. All these discoveries may be made by the child’s self-activity, but only on one condition, viz.: that the child is interested. But in the search interest soon flags and then observation comes to an end. Besides, even while it lasts in full vigour the activity is mental only; it is concerned with perceiving, taking in; and for development something more is needed; the organism must not only take in, it must also *give out*. And so we find in children a restless eagerness to touch, pull about, and change the condition of things around them. When this activity of theirs, instead of being checked is properly directed, the children are delighted in recognising desirable results which they themselves have brought about; especially those which give expression to what is their own thought. In this way the child “renders the inner outer;” and in thus satisfying his creative instinct he is led to exercise some faculties both of mind and body.

§ 24. The prominence which Froebel gave to action, his doctrine that man is primarily a doer and even a creator, and that he learns only through “self-activity,” may produce great changes in educational methods generally, and not simply in the treatment of children too young for schooling. But it was to the first stage of life that Froebel paid the greatest attention, and it is over this stage that his influence is gradually extending. Froebel held that each age has a completeness of its own (“First the blade, then the ear, then the full corn in the ear”), and that the perfection of the later stage can be attained only through the perfection of the earlier. If the infant is what he should be as an infant, and the child as a child, he will become what he should be as a boy, just as naturally as new shoots spring from the healthy plant. Every stage, then, must be cared for and tended in such a way that it may attain its own perfection. But as Bacon says with reference to education, the gardener bestows most care on the young plants, and it was “the young plants” for whom Froebel designed his Kindergarten. Like Pestalozzi he attached the very highest importance to giving instruction to

mothers. But he would not like Pestalozzi leave young children entirely in the mother's hands. There was something to be done for them which even the ideal mother in the ideal family could not do. Pestalozzi held that the child belonged to the family. Fichte on the other hand claimed it for society and the state. Froebel, whose mind, like that of our own theologian Frederick Maurice, delighted in harmonising apparent contradictions, and who taught that "all progress lay through opposites to their reconciliation," maintained that the child belongs both to the family and to society; and he would therefore have children prepare for society by spending some hours of the day in a common life and in well-organised common employments.

§ 25. His study of children showed him that one of their most striking characteristics was restlessness. This was, first, restlessness of body, delight in mere motion of the limbs; and, secondly, restlessness of mind, a constant curiosity about whatever came within the range of the senses, and especially a desire to examine with the hand every unknown object within reach.[177] Children's fondness for using their hands was especially noted by Froebel; and he found that they delighted, not merely in examining by touch, but also in altering whatever they could alter, and further that they endeavoured to imitate known forms whether by drawing or whenever they could get any kind of plastic material by modelling. Besides remarking in them these various activities, he saw that children were sociable and needed the sympathy of companions. There was, too, in them a growing moral nature, passions, affections, and conscience, which needed to be controlled, responded to, cultivated. Both the restraints and the opportunities incident to a well-organised community would be beneficial to their moral nature, and prove a cure for selfishness.

§ 26. As all education was to be sought in rightly directed but spontaneous action, Froebel considered how the children in this community should be employed. At that age their most natural employment is play, especially as Wordsworth has pointed out, games in which they imitate and "con the parts" they themselves will have to fill in after years. Froebel agreed with Montaigne that the games of children were "their most serious occupations," and with Locke that "all the plays and diversions of children should be directed towards good and useful habits, or else they will introduce ill ones" (*Th. c. Ed.*, § 130). So he invented a course of occupations, a great part of which consisted in social games. Many of the

names are connected with the "Gifts," as he called the series of simple playthings provided for the children, the first being the ball, "the type of unity." The "gifts" are chiefly not mere playthings but materials which the children work up in their own way, thus gaining scope for their power of doing and inventing and creating. The artistic faculty was much thought of by Froebel, and, as in the education of the ancients, the sense of rhythm in sound and motion was cultivated by music and poetry introduced in the games. Much care was to be given to the training of the senses, especially those of sight, sound, and touch. Intuition (*Anschauung*) was to be recognised as the true basis of knowledge, and though stories were to be told, and there was to be much intercourse in the way of social chat, instruction of the imparting and "learning-up" kind was to be excluded. There was to be no "dead knowledge;" in fact Froebel like Pestalozzi endeavoured to do for the child what Bacon nearly 200 years before had done for the philosopher. Bacon showed the philosopher that the way to study Nature was not to learn what others had surmised but to go straight to Nature and use his own senses and his own powers of observation. Pestalozzi and Froebel wished children to learn in this way as well as philosophers.

§ 27. Schools for very young children existed before Froebel's Kindergarten, but they had been thought of more in the interest of the mothers than of the children. It was for the sake of the mothers that Oberlin established them in the Vosges more than a century ago, his first *Conductrices de l'Enfance* being peasant women, Sara Banzet and Louise Scheppler. In the early part of this century the notion was taken up by James Buchanan and Samuel Wilderspin in this country (see James Leitch's *Practical Educationists*) and by J. M. D. Cochin in France. But Froebel's conception differed from that of the "Infant School." His object was purely educational but he would have no "schooling." He called these communities of children *Kindergarten*, Gardens of children, *i.e.*, enclosures in which young human plants are nurtured.[178] The children's employment is to be play. But any occupation in which children delight is *play* to them; and Froebel's series of employments, while they are in this sense play to the children, have nevertheless, as seen from the adult point of view, a distinctly educational object. This object, as Froebel himself describes it, is "to give the children employment in agreement with their whole nature, to strengthen their bodies, to exercise their senses, to engage their awakening

mind, and through their senses to bring them acquainted with nature and their fellow-creatures; it is especially to guide aright the heart and the affections, and to lead them to the original ground of all life, to unity with themselves."

§ 28. No less than six-and-thirty years ago Henry Barnard (in his Report to Governor of Connecticut, 1854) declared the Kindergarten to be "by far the most original, attractive, and philosophical form of infant development the world has yet seen." Since then it has spread in all civilised lands, and in many of them there are now *public* Kindergartens, the first I believe having been established in 1873 by Dr. William T. Harris in St. Louis, Mo. But Froebel's ideas are not so easily got hold of as his "Gifts," and the real extension of his system may be by no means so great as it seems. "The Kindergarten system in the hands of one who understands it," says Dr. James Ward, "produces admirable results; but it is apt to be too mechanical and formal. There does not seem room for the individuality of a child, to which all free play possible should be given in the earliest years." (In *Parents' Review* Ap. 1890.) And Mr. Courthope Bowen has well said: "Kindergarten work without the Kindergarten idea, like a body without a soul, is subject to rapid degeneration and decay." So perhaps it will in the end prove that Froebel in his *Education of Man* which is "a book with seven seals" has left us a more precious legacy than in his "Gifts" and Occupations which are so popular and so easily adopted.

§ 29. It has been well said that "the essence of stupidity is in the demand for final opinions." How our thoughts have widened about education since a man like Dr. Johnson could assert, "Education is as well known, and has long been as well known, as ever it can be!"[179] (Hill's *Boswell's J.* ij, 407.) The astronomers of the Middle Ages might as well have asserted that nothing more could ever be known about astronomy.

Was Froebel what he believed himself to be, the Kepler or the Newton of the educational system? Whoso is wise will not during the nineteenth century lay claim to a "final opinion" on this point. But the "New Education" seems gaining ground. F. W. Parker emphatically declares "the Kindergarten" (by which he probably means Froebel's encouragement of self-activity) to be "the most important far-reaching educational reform of the nineteenth century." We sometimes see it questioned whether the "New Education" has any proper claim to its title; but the education which Dr.

Johnson considered final and which seems to us old aimed at learning; and the education which aims not at learning, but at developing through self-activity is so different from this that it may well be called New. If we consider the platform of the New Educationists as it stands, *e.g.*, in the New York *School Journal*, we shall find that if it is not all new in theory it would be substantially new in practice.

§ 30. Let us look at a brief statement of what the "New Education" requires:—

1. Each study must be valued in proportion as it develops *power*; and power is developed by self-activity.

2. The memory must be employed in strict subservience to the higher faculties of the mind.

3. Whatever instruction is given, it must be adapted to the actual state of the pupil, and not ruled by the wants of the future boy or man.

4. More time must be given to the study of nature and to modern language and literature; less to the ancient languages.

5. The body must be educated as well as the mind.

6. Rich and poor alike must be taught to use their eyes and hands. 7. The higher education of women must be cared for no less than that of men.

8. Teachers, no less than doctors, must go through a course of professional training.

To these there must in time be added another:

9. All methods shall have a scientific foundation, *i.e.*, they shall be based on the laws of the mind, or shall have been tested by those laws.

§ 31. When this program is adopted, even as the object of our efforts, we shall, indeed, have a New Education. At present the encouragement of self-activity is thought of, if at all, only as a "counsel of perfection." Our school work is chiefly mechanical and will long remain so. "From the primary school to the college productive creative doing is almost wholly excluded. Knowledge in its barrenest form is communicated, and tested in the barrenest, wordiest way possible. Never is the learner taught or permitted to apply his knowledge to even second-hand life-purpose.... So inveterate is

the habit of the school that the Kindergarten itself, although invented by the deep-feeling and far-seeing Froebel for the very purpose of correcting this fault, has in most cases fallen a victim to its influence." So says W. H. Hailmann (*Kindergarten*, May, 1888) and those who best know what usually goes on in the school-room are the least likely to differ from him.

§ 32. During the last thirty years I have spent the greatest part of my working hours in a variety of school-rooms; and if my school experience has shown me that our advance is slow, my study of the Reformers convinces me that it is sure.

“Ring out the old, ring in the new!”

It has been well said that to study science is to study the thoughts of God; and thus it is that all true educational Reformers declare the thoughts of God to us. “A divine message, of eternal regulation of the Universe, there verily is in regard to every conceivable procedure and affair of man;” and it behoves us to ascertain what that message is in regard to the immensely important procedure and affair of bringing up children. After innumerable mistakes we seem by degrees to be getting some notion of it; and such insight as we have we owe to those who have contributed to the science of education. Among these there are probably no greater names than the names of Pestalozzi and Froebel.

Froebel’s *Education of Man*, trans. by W. N. Hailmann, is a vol. of Appleton’s Series, ed. by Dr. W. T. Harris. The *Autobiography* trans., by Michaelis and Moore, is published by Sonnenschein. The *Mutter-u-K.-lieder* have been trans. by Miss Lord (London, Rice). *Reminiscences of Froebel* by the Baroness Marenholtz-Bülow, is trans. by Mr. Horace Mann. *The Child and Child Nature* is trans. from the Baroness by Miss A. M. Christie. The Froebel lit. is now immense. I will simply mention some of those who have expounded Froebel in *English*: Miss Shirreff, Miss E. A. Manning, Miss Lyschinska, Miss Heerwart, Mdme. De Portugall, Miss Peabody, H. G Bowen, F. W. Parker, W. N. Hailmann, Joseph Payne, W. T. Harris, are the names that first suggest themselves. Henry Barnard’s *Kindergarten and Child Culture* is a valuable collection of papers.

XVIII.

JACOTOT, A METHODIZER.

1770-1840.

§ 1. We are now by degrees becoming convinced that teachers, like everyone else who undertakes skilled labour, should be trained before they seek an engagement. This has led to a great increase in the number of Normal Schools. In some of these schools it has already been discovered that while the study of principles requires much time and the application of much intellectual force, the study of methods is a far simpler matter and can be knocked off in a short time and with no intellectual force at all. Methods are special ways of doing things, and when it has been settled what is to be done and why, a knowledge of the methods available adds greatly to a teacher's power; but the what and the why demand our attention before the how, and the study of methods disconnected from principles leads straight to the prison-house of all the teachers' higher faculties—routine.

§ 2. I have called Jacotot a methodizer because he invented a special method and wished everything to be taught by it. But in advocating this method he appeals to principles; and his principles are so important that at least one man great in educational science, Joseph Payne, always spoke of him as his master.

§ 3. In the following summary of Jacotot's system I am largely indebted to Joseph Payne's Lectures, which he published in the *Educational Times* in 1867, and which I believe Dr. J. F. Payne has lately reprinted in a volume of his father's collected papers.

§ 4. Jacotot was born at Dijon, of humble parentage, in 1770. Even as a boy he showed his preference for "self-teaching." We are told that he rejoiced greatly in the acquisition of all kinds of knowledge that could be gained by his own efforts, while he steadily resisted what was imposed on him by authority. He was, however, early distinguished by his acquirements, and at the age of twenty-five was appointed sub-director of the Polytechnic School. Some years afterwards he became Professor of "the

Method of Sciences" at Dijon, and it was here that his method of instruction first attracted attention. "Instead of pouring forth a flood of information on the subject under attention from his own ample stores—explaining everything, and thus too frequently superseding in a great degree the pupil's own investigation of it—Jacotot, after a simple statement of the subject, with its leading divisions, boldly started it as a quarry for the class to hunt down, and invited every member of it to take part in the chase." All were free to ask questions, to raise objections, to suggest answers. The Professor himself did little more than by leading questions put them on the right scent. He was afterwards Professor of Ancient and Oriental Languages, of Mathematics, and of Roman Law; and he pursued the same method, we are told, with uniform success. Being compelled to leave France as an enemy of the Bourbons, he was appointed, in 1818, when he was forty-eight years old, to the Professorship of the French Language and Literature at the University of Louvain. The celebrated teacher was received with enthusiasm, but he soon met with an unexpected difficulty. Many members of his large class knew no language but the Flemish and Dutch, and of these he himself was totally ignorant. He was, therefore, forced to consider how to teach without talking to his pupils. The plan he adopted was as follows:—He gave the young Flemings copies of Fénelon's "Télémaque," with the French on one side, and a Dutch translation on the other. This they had to study for themselves, comparing the two languages, and learning the French by heart. They were to go over the same ground again and again, and as soon as possible they were to give in French, however bad, the substance of those parts which they had not yet committed to memory. This method was found to succeed marvellously. Jacotot attributed its success to the fact that the students had learnt *entirely by the efforts of their own minds*, and that, though working under his superintendence, they had been, in fact, their own teachers. Hence he proceeded to generalise, and by degrees arrived at a series of astounding paradoxes. These paradoxes at first did their work well, and made noise enough in the world; but Jacotot seems to me like a captain who in his eagerness to astonish his opponents takes on board guns much too heavy for his own safety.

§ 5. "*All human beings are equally capable of learning*," said Jacotot.

The truth which Jacotot chose to throw into this more than doubtful form, may perhaps be expressed by saying that the student's power of learning

depends, in a great measure, on his *will*, and that where there is no will there is no capacity.

§ 6. "*Everyone can teach; and, moreover, can teach that which he does not know himself.*"

Let us ask ourselves what is the meaning of this. First of all, we have to get rid of some ambiguity in the meaning of the word *teach*. To teach, according to Jacotot's idea, is to cause to learn. Teaching and learning are therefore correlatives: where there is no learning there can be no teaching. But this meaning of the word only coincides partially with the ordinary meaning. We speak of the lecturer or preacher as teaching when he gives his hearers an opportunity of learning, and do not say that his teaching ceases the instant they cease to attend. On the other hand, we do not call a parent a teacher because he sends his boy to school, and so causes him to learn. The notion of teaching, then, in the minds of most of us, includes giving information, or showing how an art is to be performed, and we look upon Jacotot's assertion as absurd, because we feel that no one can give information which he does not possess, or show how anything is to be done if he does not himself know. But let us take the Jacototian definition of teaching—causing to learn—and then see how far a person can cause another to learn that of which he himself is ignorant.

§ 7. Subjects which are *taught* may be divided into three great classes:—1, Facts; 2, reasonings, or generalisation from facts, *i.e.*, science; 3, actions which have to be performed by the learner, *i.e.*, arts.

1. We learn some facts by "intuition," *i.e.*, by direct experience. It may be as well to make the number of them as large as possible. No doubt there are no facts which are *known* so perfectly as these. For instance, a boy who has tried to smoke knows the fact that tobacco is apt to produce nausea much better than another who has picked up the information second-hand. An intelligent master may suggest experiments, even in matters about which he himself is ignorant, and thus, in Jacotot's sense, he teaches things which he does not know. But some facts cannot be learnt in this way, and then a Newton is helpless either to find them out for himself, or to teach them to others without knowing them. If the teacher does not know in what county Tavistock is, he can only learn from those who do, and the pupils will be no cleverer than their master. Here, then, I consider that Jacotot's pretensions

utterly break down. “No,” the answer is; “the teacher may give his pupil an atlas, and direct the boy to find out for himself: thus the master will teach what he does not know.” But, in this case, he is a teacher only so far as he knows. For what he does not know, he hands over the pupil to the maker of the map, who communicates with him, not orally, but by ink and paper. The master’s ignorance is simply an obstacle to the boy’s learning; for the boy would learn sooner the position of Tavistock if it were shown him on the map. “That’s the very point,” says the disciple of Jacotot. “If the boy gets the knowledge without any trouble, he is likely to forget it again directly. ‘Lightly come, lightly go.’ Moreover, his faculty of observation will not have been exercised.” It is indeed well not to allow the knowledge even of facts to come too easily; though the difficulties which arise from the master’s ignorance will not be found the most advantageous. Still there is obviously a limit. If we gave boys their lessons in cipher, and offered a prize to the first decipherer, one would probably be found at last, and meantime all the boys’ powers of observation, &c., would have been cultivated by comparing like signs in different positions, and guessing at their meaning; but the boys’ time might have been better employed. Jacotot’s plan of teaching a language which the master did not know, was to put a book with, say, “Arma virumque cano,” &c., on one side, and “I sing arms and the man, &c.” on the other, and to require the pupil to puzzle over it till he found out which word answered to which. In this case the teacher was the translator; and though from the roundabout way in which the knowledge was communicated the pupil derived some benefit, the benefit was hardly sufficient to make up for the expenditure of time involved.

Jacotot, then, did not teach facts of which he was ignorant, except in the sense in which the parent who sends his boy to school may be said to teach him. All Jacotot did was to direct the pupil to learn, sometimes in a very awkward fashion, from somebody else.[180]

§ 8. 2. When we come to science, we find all the best authorities agree that the pupil should be led to principles if possible, and not have the principles brought to him. Men like Tyndall, Huxley, H. Spencer, J. M. Wilson have spoken eloquently on this subject, and shown how valuable scientific teaching is, when thus conducted, in drawing out the faculties of the mind. But although a schoolboy may be led to great scientific discoveries by anyone who knows the road, he will have no more chance of

making them with an ignorant teacher than he would have had in the days of the Ptolemies. Here again, then, I cannot understand how the teacher can teach what he does not know. He may, indeed, join his pupil in investigating principles, but he must either keep with the pupil or go in advance of him. In the first case he is only a fellow-pupil; in the second, he teaches only that which he knows.

§ 9. Finally, we come to arts, and we are told that Jacotot taught drawing and music, without being either a draughtsman or a musician. In art everything depends on *rightly directed practice*. The most consummate artist cannot communicate his skill, and, except for inspiration may be inferior as a teacher to one whose attention is more concentrated on the mechanism of the art. Perhaps it is not even necessary that the teacher should be able to do the exercises himself, if only he knows how they should be done; but he seldom gets credit for this knowledge, unless he can show that he knows how the thing should be done, by doing it. Lessing tells us that Raphael would have been a great painter even if he had been born without hands. He would not, however, have succeeded in getting mankind to believe it. I grant, then, that the teacher of art need not be a first-rate artist, and, in some very exceptional cases, need not be an artist at all; but, if he cannot perform the exercises he gives his pupil, he must at least *know how they should be done*. But Jacotot claims perfect ignorance. We are told that he "taught" drawing by setting objects before his pupils, and making them imitate them on paper as best they could. Of course the art originated in this way, and a person with great perseverance, and (I must say, in spite of Jacotot) with more than average ability, would make considerable progress with no proper instruction; but he would lose much by the ignorance of the person calling himself his teacher. An awkward habit of holding the pencil will make skill doubly difficult to acquire, and thus half his time might be wasted. Then, again, he would hardly have a better eye than the early painters, so the drawing of his landscape would not be less faulty than theirs. To consider music I am told that a person who is ignorant of music can teach, say, the piano or the violin. This seems to go beyond the region of paradox into that of utter nonsense. Talent often surmounts all kinds of difficulties; but in the case of self-taught, and ill-taught musicians, it is often painful to see what time and talent have been wasted for want of proper instruction.

I have thus carefully examined Jacotot's pretensions to teach what he did not know, because I am anxious that what seems to me the rubbish should be cleared away from his principles, and should no longer conceal those parts of his system which are worthy of general attention.

§ 10. At the root of Jacotot's paradox lay a truth of very great importance. The highest and best teaching is not that which makes the pupils passive recipients of other peoples' ideas (not to speak of the teaching which conveys mere words without any ideas at all), but that which guides and encourages the pupils in working for themselves and thinking for themselves. The master, as Joseph Payne well says, can no more think, or practise, or see for his pupil, than he can digest for him, or walk for him. The pupil must owe everything to his own exertions, which it is the function of the master to encourage and direct. Perhaps this may seem very obvious truth, but obvious or not it has been very generally neglected. The old system of lecturing which found favour with the Jesuits, has indeed now passed away, and boys are left to acquire facts from school-books instead of from the master. But this change is merely accidental. The essence of the teaching still remains. Even where the master does not confine himself to hearing what the scholars have learnt by heart, he seldom does more than offer explanations. He measures the teaching rather by the amount which has been put before the scholars—by what he has done for them and shown them—than by what they have learned. But this is not teaching of the highest type. When the votary of Dulness in the "Dunciad" is rendering an account of his services, he arrives at this climax,

> "For thee explain a thing till all men doubt it,
> And write about it, Goddess, and about it."

And in the same spirit Mr. J. M. Wilson stigmatises as synonymous "the most stupid and most *didactic* teaching."

§ 11. All the eminent authorities on education have a very different theory of the teachers function. According to them the master's attention is not to be fixed on his own mind and his own store of knowledge, but on his pupil's mind and on its gradual expansion. He must, in fact, be not so much a *teacher* as a *trainer*. Here we have the view which Jacotot intended to enforce by his paradox; for we may possibly train faculties which we do not

ourselves possess, just as the sportsman trains his pointer and his hunter to perform feats which are altogether out of the range of his own capacities. Now, "training is the cultivation bestowed on any set of faculties with the object of developing them" (J. M. Wilson), and to train any faculty, you must set it to work. Hence it follows, that as boys' minds are not simply their memories, the master must aim at something more than causing his pupils to remember facts. Jacotot has done good service to education by giving prominence to this truth, and by showing in his method how other faculties may be cultivated besides the memory.

§ 12. "*Tout est dans tout*" ("All is in all"), is another of Jacotot's paradoxes. I do not propose discussing it as the philosophical thesis which takes other forms, as "Every man is a microcosm," &c., but merely to inquire into its meaning as applied to didactics.

If you asked an ordinary French schoolmaster who Jacotot was, he would probably answer, Jacotot was a man who thought you could learn everything by getting up Fénelon's "Télémaque" by heart. By carrying your investigation further, you would find that this account of him required modification, that the learning by heart was only part, and a very small part, of what Jacotot demanded from his pupils, but you would also find that entire mastery of "Télémaque" was the first requisite, and that he managed to connect everything he taught with that "model-book." Of course, if "tout est dans tout," everything is in "Télémaque;" and, said an objector, also in the first book of "Télémaque" and in *the first word*. Jacotot went through a variety of subtilties to show that all "Télémaque" is contained in the word *Calypso*, and perhaps he would have been equally successful, if he had been required to take only the first letter instead of the first word. His maxim indeed becomes by his treatment of it a mere paraphrase of "*Quidlibet ex quolibet*." The reader is amused rather than convinced by these discussions, but he finds them not without fruit. They bring to his mind very forcibly a truth to which he has hitherto probably not paid sufficient attention. He sees that all knowledge is connected together, or (what will do equally well for our present purpose) that there are a thousand links by which we may bring into connexion the different subjects of knowledge. If by means of these links we can attach in our minds the knowledge we acquire to the knowledge we already possess, we shall learn faster and more intelligently, and at the same time we shall have a much better chance of retaining our

new acquisitions. The memory, as we all know, is assisted even by artificial association of ideas, much more by natural. Hence the value of "tout est dans tout," or, to adopt a modification suggested by Joseph Payne, of the connexion of knowledges. Suppose we know only one subject, but know that thoroughly, our knowledge, if I may express myself algebraically, cannot be represented by ignorance plus the knowledge of that subject. We have acquired a great deal more than that. When other subjects come before us, they may prove to be so connected with what we had before, that we may also seem to know them already. In other words when we know a little thoroughly, though our actual possession is small, we have potentially a great deal more.[181]

§ 13. Jacotot's practical application of his "tout est dans tout" was as follows:—"*Il faut apprendre quelque chose, et y rapporter tout le reste.*" ("The pupil must learn something thoroughly, and refer everything to that.") For language he must take a model book, and become thoroughly master of it. His knowledge must not be a verbal knowledge only, but he must enter into the sense and spirit of the writer. Here we find that Jacotot's practical advice coincides with that of many other great authorities, who do not base it on the same principle. The Jesuits' maxim was, that their pupils should always learn something thoroughly, however little it might be. Pestalozzi insisted on the children going over the elements again and again till they were completely master of them. Ascham, Ratke, and Comenius all required a model-book to be read and re-read till words and thoughts were firmly fixed in the pupil's memory. Jacotot probably never read Ascham's "Schoolmaster." If he had done so he might have appropriated some of Ascham's words as exactly conveying his own thoughts. Ascham, as we saw, recommended that a short book should be thoroughly mastered, each lesson being worked over in different ways a dozen times at the least, and in this way "your scholar shall be brought not only to like eloquence, but also to all true understanding and right judgment, both for writing and speaking." In this the Englishman and the Frenchman are in perfect accord.

§ 14. But if Jacotot agrees so far with earlier authorities, there is one point in which he seems to differ from them. He makes great demands on the memory, and requires six books of "Télémaque" to be learned by heart. On the other hand, Montaigne, Locke, Rousseau, H. Spencer, and other great writers would be opposed to this. Ratke insisted that nothing should

be learnt by heart. Protests against “loading the memory,” “saying without book,” &c., are everywhere to be met with, and nowhere more vigorously expressed than in Ascham. He says of the grammar-school boys of his time, that “their whole knowledge, by learning without the book, was tied only to their tongue and lips, and never ascended up to the brain and head, and therefore was soon spit out of the mouth again. They learnt without book everything, they understood within the book little or nothing.” But these protests were really directed at verbal knowledge, when it is made to take the place of knowledge of the thing signified. We are always too ready to suppose that words are connected with ideas, though both old and young are constantly exposing themselves to the sarcasm of Mephistopheles:—

> ... eben wo Begriffe fehlen,
> Da stellt ein Wort zur rechten Zeit sich ein.
>
> ... just where meaning fails, a word
> Comes patly in to serve your turn.

Against this danger Jacotot took special precautions. The pupil was to undergo an examination in everything connected with the lesson learnt, and the master’s share in the work was to convince himself, from the answers he received, that the pupil thoroughly grasped the meaning, as well as remembered the words, of the author. Still the six books of “Télémaque,” which Jacotot gave to be learnt by heart, was a very large dose, and he would have been more faithful to his own principles, says Joseph Payne, if he had given the first book only.

§ 15. There are three ways in which the model-book may be studied. 1st, it may be read through rapidly again and again, which was Ratke’s plan and Hamilton’s; or, 2nd, each lesson may be thoroughly mastered, read in various ways a dozen times at the least, which was Ascham’s plan; or, 3rd, the pupil may begin always at the beginning, and advance a little further each time, which was Jacotot’s plan.[182] This last, could not, of course, be carried very far The repetitions, when the pupil had got on some way in the book, could not always be from the beginning; still every part was to be repeated so frequently that *nothing could be forgotten*. Jacotot did not wish his pupils to learn simply in order to forget, but to learn in order to remember for ever. “We are learned,” said he, “not so far as we have

learned, but only so far as we remember." He seems, indeed, almost to ignore the fact that the act of learning serves other purposes than that of making learned, and to assert that to forget is the same as never to have learned, which is a palpable error. We necessarily forget much that passes through our minds, and yet its effect remains. All grown people have arrived at some opinions, convictions, knowledge, but they cannot call to mind every spot they trod on in the road thither. When we have read a great history, say, or travelled through a fresh country, we have gained more than the number of facts we happen to remember. The mind seems to have formed an acquaintance with that history or that country, which is something different from the mere acquisition of facts. Moreover, our interests, as well as our ideas, may long survive the memory of the facts which originally started them. We are told that one of the old judges, when a barrister objected to some dictum of his, put him down by the assertion, "Sir, I have forgotten more law than ever you read." If he wished to make the amount forgotten a measure of the amount remembered, this was certainly fallacious, as the ratio between the two is not a constant quantity. But he may have meant that this extensive reading had left its result, and that he could see things from more points of view than the less travelled legal vision of his opponent. That *power* acquired by learning may also last longer than the knowledge of the thing learned is sufficiently obvious. So the advantages derived from having learnt a thing are not entirely lost when the thing itself is forgotten.[183]

§ 16. But the reflection by no means justifies the disgraceful waste of memory which goes on in most school-rooms. Much is learnt which, for want of the necessary repetition, will soon be lost again, besides much that would be valueless if remembered. The thing to aim at is not giving "useful knowledge," but making the memory a store house of such facts as are good material for the other powers of the mind to work with; and that the facts may serve this purpose they must be such as the mind can thoroughly grasp and handle, and such as can be connected together. To *instruct is instruere*, "to put together in order, to build;" it is not cramming the memory with facts without connexion, and, as Herbert Spencer calls them, *unorganisable*. And yet a great deal of our children's memory is wasted in storing facts of this kind, which can never form part of any organism. We do not teach them geography (*earth knowledge*, as the Germans call it), but the names of places. Our "history" is a similar, though disconnected study. We leave our

children ignorant of the land, but insist on their getting up the "landmarks." And, perhaps, from a latent perception of the uselessness of such work, neither teachers nor scholars ever think of these things as learnt to be remembered. They are indeed got up, as Schuppius says of the Logic of his day, *in spem futuræ oblivionis*. Latin grammar is gone through again and again, and a boy feels that the sooner he gets it into his head, the better it will be for him; but who expects that the lists of geographical and historical names which are learnt one half-year, will be remembered the next? I have seen it asserted, that when a boy leaves school, he has already forgotten nine-tenths of what he has been taught, and I dare say that estimate is quite within the mark.

§ 17. By adopting the principles of Jacotot, we avoid a great deal of this waste. We give some thorough knowledge, with which fresh knowledge may be connected. And it will then be found that perfect familiarity with a subject is something beyond the mere understanding it and being able, with difficulty, to reproduce what we have learned. By thus going over the same thing again and again, we acquire a thorough command over our knowledge; and the feeling perfectly at home, even within narrow borders, gives a consciousness of strength. An old adage tells us that the Jack-of-all-trades is master of none; but the master of one trade will have no difficulty in extending his insight and capacity beyond it. To use an illustration, which is of course an illustration merely, we should kindle knowledge in children, like fire in a grate. A stupid servant, with a small quantity of wood, spreads it over the whole grate. It blazes away, goes out, and is simply wasted. Another, who is wiser or more experienced, kindles the whole of the wood at one spot, and the fire, thus concentrated, extends in all directions. Similarly we should concentrate the beginnings of knowledge, and although we could not expect to make much show for a time, we might be sure that after a bit the fire would extend, almost of its own accord.[184]

§ 18. From Joseph Payne I take Jacotot's directions for carrying out the rule, "II faut apprendre quelque chose, et y rapporter tout le reste."

1. LEARN—*i.e.*, learn so as to know thoroughly, perfectly, immovably (*imperturbablement*), as well six months or twelve months hence, as now—SOMETHING—something which fairly represents the subject to be acquired, which contains its essential characteristics. 2. REPEAT that "something" incessantly (*sans cesse*), *i.e.*, every day, or very frequently, from the

beginning, without any omission, so that no part may be forgotten. 3. REFLECT upon the matter thus acquired, so as, by degrees, to make it a possession of the mind as well as of the memory, so that, being appreciated as a whole, and appreciated in its minutest parts, what is as yet unknown, may be *referred to* it and interpreted by it. 4. VERIFY, or test, general remarks, *e.g.*, grammatical rules, &c., made by others, by comparing them with the facts (*i.e.*, the words and phraseology) which you have learnt yourself.

§ 19. In conclusion, I will give some account of the way in which reading, writing, and the mother-tongue were taught on the Jacototian system.

The teacher takes a book, say Edgeworth's "Early Lessons," points to the first word, and names it, "Frank." The child looks at the word and also pronounces it. Then the teacher does the same with the first two words, "Frank and"; then with the three first, "Frank and Robert," &c. When a line or so has been thus gone over, the teacher asks which word is Robert? What word is that (pointing to one)? "Find me the same word in this line" (pointing to another part of the book). When a sentence has been thus acquired, the words already known are analysed into syllables, and these syllables the child must pick out elsewhere. Finally, the same thing is done with letters. When the child can read a sentence, that sentence is put before him written in small-hand, and the child is required to copy it. When he has copied the first word, he is led, by the questions of the teacher, to see how it differs from the original, and then he tries again. The pupil must always correct himself, guided only by questions. This sentence must be worked at till the pupil can write it pretty well from memory. He then tries it in larger characters. By carrying out this plan, the children's powers of observation and making comparisons are strengthened, and the arts of reading and writing are said to be very readily acquired.

§ 20. For the mother-tongue, a model book is chosen and thoroughly learned. Suppose "Rasselas" is selected. "The pupil learns by heart a sentence, or a few sentences, and to-morrow adds a few more, still repeating from the beginning. The teacher, after two or three lessons of learning and repeating, takes portions—any portion—of the matter, and submits it to the crucible of the pupil's mind:—Who was Rasselas? Who was his father? What is the father of waters? Where does it begin its course?

Where is Abyssinia? Where is Egypt? Where was Rasselas placed? What sort of a person was Rasselas? What is ‘credulity’? What are the ‘whispers of fancy,’ the ‘promises of youth,’ &c., &c.?”

A great variety of written exercises is soon joined with the learning by heart. Pieces must be written from memory, and the spelling, pointing, &c., corrected by the pupil himself from the book. The same piece must be written again and again, till there are no more mistakes to correct. “This,” said Joseph Payne, who had himself taught in this way, “is the best plan for spelling that has been devised.” Then the pupil may write an analysis, may define words, distinguish between synonyms, explain metaphors, imitate descriptions, write imaginary dialogues or correspondence between the characters, &c. Besides these, a great variety of grammatical exercises may be given, and the force of prefixes and affixes may be found out by the pupils themselves by collection and comparison. “The resources even of such a book as “Rasselas” will be found all but exhaustless, while the training which the mind undergoes in the process of thoroughly mastering it, the acts of analysis, comparison, induction, and deduction, performed so frequently as to become a sort of second nature, cannot but serve as an excellent preparation for the subsequent study of English literature” (Payne).

§ 21. We see, from these instances, how Jacotot sought to imitate the method by which young children and self-taught men teach themselves. All such proceed from objects to definitions, from facts to reflections and theories, from examples to rules, from particular observations to general principles. They pursue, in fact, however unconsciously, the *method of investigation*, the advantages of which are thus set out in a passage from Burke’s treatise on the Sublime and Beautiful:—“I am convinced,” says he, “that the method of teaching which approaches most nearly to the method of investigation is incomparably the best; since, not content with serving up a few barren and lifeless truths, it leads to the stock on which they grew; it tends to set the reader [or learner] himself in the track of invention, and to direct him into those paths in which the author has made his own discoveries.” “For Jacotot, I think the claim may, without presumption, be maintained that he has, beyond all other teachers, succeeded in co-ordinating the method of elementary teaching with the method of investigation” (Payne).

§ 22. The latter part of his life, which did not end till 1840, Jacotot spent in his native country—first at Valenciennes, and then at Paris. To the last he laboured indefatigably, and with a noble disinterestedness, for what he believed to be the "intellectual emancipation" of his fellow-creatures. For a time, his system made great way in France, but we now hear little of it. Jacotot has, however, lately found an advocate in M. Bernard Perez, who has written a book about him and also a very good article in Buisson's *Dictionnaire*.

XIX.

HERBERT SPENCER.[185]

§ 1. I once heard it said by a teacher of great ability that no one without practical acquaintance with the subject could write anything worth reading on Education. My own opinion differs very widely from this. I am not, indeed, prepared to agree with another authority, much given to paradox, that the actual work of education unfits a man for forming enlightened views about it, but I think that the outsider, coming fresh to the subject, and unencumbered by tradition and prejudice, may hit upon truths which the teacher, whose attention is too much engrossed with practical difficulties, would fail to perceive without assistance, and that, consequently, the theories of intelligent men, unconnected with the work of education, deserve our careful, and, if possible, our impartial consideration.

§ 2. One of the most important works of this kind which has lately appeared, is the treatise of Mr. Herbert Spencer. So eminent a writer has every claim to be listened to with respect, and in this book he speaks with more than his individual authority. The views he has very vigorously propounded are shared by a number of distinguished scientific men; and not a few of the unscientific believe that in them is shadowed forth the education of the future.

§ 3. It is perhaps to be regretted that Mr. Spencer has not kept the tone of one who investigates the truth in a subject of great difficulty, but lays about him right and left, after the manner of a spirited controversialist. This, no doubt, makes his book much more entertaining reading than such treatises usually are, but, on the other hand, it has the disadvantage of arousing the antagonism of those whom he would most wish to influence. When the man who has no practical acquaintance with education, lays down the law *ex cathedrâ*, garnished with sarcasms at all that is now going on, the schoolmaster, offended by the assumed tone of authority, sets himself to show where these theories would not work, instead of examining what basis of truth there is in them, and how far they should influence his own practice.

I shall proceed to examine Mr. Spencer's proposals with all the impartiality I am master of.

§ 4. The great question, whether the teaching which gives the most valuable knowledge is the same as that which best disciplines the faculties of the mind, Mr. Spencer dismisses briefly. "It would be utterly contrary to the beautiful economy of nature," he says, "if one kind of culture were needed for the gaining of information, and another kind were needed as a mental gymnastic."[186] But it seems to me that different subjects must be used to train the faculties at different stages of development. The processes of science, which form the staple of education in Mr. Spencer's system cannot be grasped by the intellect of a child. "The scientific discoverer does the work, and when it is done the schoolboy is called in to witness the result, to learn its chief features by heart, and to repeat them when called upon, just as he is called on to name the mothers of the patriarchs, or to give an account of the Eastern campaigns of Alexander the Great."—(*Pall Mall G.*). This, however, affords but scanty training for the mind. We want to draw out the child's interests, and to direct them to worthy objects. We want not only to teach him, but to enable and encourage him to teach himself; and, if following Mr. Spencer's advice, we make him get up the species of plants, "which amount to some 320,000," and the varied forms of animal life, which are "estimated at some 2,000,000," we may, as Mr. Spencer tells us, have strengthened his memory as effectually as by teaching him languages; but the pupil will, perhaps have no great reason to rejoice over his escape from the horrors of the "As in Præsenti," and "Propria quæ Maribus." The consequences will be the same in both cases. We shall disgust the great majority of our scholars with the acquisition of knowledge, and with the use of the powers of their mind. Whether, therefore, we adopt or reject Mr. Spencer's conclusion, that there is one sort of knowledge which is universally the most valuable, I think we must deny that there is one sort of knowledge which is universally and at every stage in education, the best adapted to develop the intellectual faculties. Mr. Spencer himself acknowledges this elsewhere. "There is," says he, "a certain sequence in which the faculties spontaneously develop, and a certain kind of knowledge, which each requires during its development." It is for us to ascertain this sequence, and supply this knowledge.

§ 5. Mr. Spencer discusses more fully "the relative value of knowledges," and this is a subject which has hitherto not met with the attention it deserves. It is not sufficient for us to prove of any subject taught in our schools that the knowledge or the learning of it is valuable. We must also show that the knowledge or the learning of it is of at least as great value as that of anything else that might be taught in the same time. "Had we time to master all subjects we need not be particular. To quote the old song—

> Could a man be secure
> That his life would endure,
> As of old, for a thousand long years,
> What things he might know!
> What deeds he might do!
> And all without hurry or care!

But we that have but span-long lives must ever bear in mind our limited time for acquisition."

§ 6. To test the value of the learning imparted in education we must look to the end of education. This Mr. Spencer defines as follows: "To prepare us for complete living is the function which education has to discharge, and the only rational mode of judging of an educational course is to judge in what degree it discharges such function." For complete living we must know "in what way to treat the body; in what way to treat the mind; in what way to manage our affairs; in what way to bring up a family; in what way to behave as a citizen; in what way to utilise those sources of happiness which nature supplies—how to use all our faculties to the greatest advantage of ourselves and others." There are a number of sciences, says Mr. Spencer, which throw light on these subjects. It should, therefore, be the business of education to impart these sciences.

But if there were (which is far from being the case) a well-defined and well-established science in each of these departments, those sciences would not be understandable by children, nor would any individual have time to master the whole of them, or even "a due proportion of each." The utmost that could be attempted would be to give young people some knowledge of the *results* of such sciences and the rules derived from them. But to this Mr.

Spencer would object that it would tend, like the learning of languages, “to increase the already undue respect for authority.”

§ 7. To consider Mr. Spencer’s divisions in detail, we come first to knowledge that leads to self-preservation.

“Happily, that all-important part of education which goes to secure direct self-preservation is, in part, already provided for. Too momentous to be left to our blundering, Nature takes it into her own hands.” But Mr. Spencer warns us against such thwartings of Nature as that by which “stupid schoolmistresses commonly prevent the girls in their charge from the spontaneous physical activities they would indulge in, and so render them comparatively incapable of taking care of themselves in circumstances of peril.”

§ 8. Indirect self-preservation, Mr. Spencer believes, may be much assisted by a knowledge of physiology. “Diseases are often contracted, our members are often injured, by causes which superior knowledge would avoid.” I believe these are not the only grounds on which the advocates of physiology urge its claim to be admitted into the curriculum; but these, if they can be established, are no doubt very important. Is it true, however, that doctors preserve their own life and health or that of their children by their knowledge of physiology? I think the matter is open to dispute. Mr. Spencer does not. He says very truly that many a man would blush if convicted of ignorance about the pronunciation of Iphigenia, or about the labours of Hercules who, nevertheless, would not scruple to acknowledge that he had never heard of the Eustachian tubes, and could not tell the normal rate of pulsation. “So terribly,” adds Mr. Spencer, “in our education does the ornamental override the useful!” But this is begging the question. At present classics form part of the instruction given to every gentleman, and physiology does not. This is the simpler form of Mr. Spencer’s assertion about the labours of Hercules and the Eustachian tubes, and no one denies it. But we are not so well agreed on the comparative value of these subjects. In his Address at St. Andrews, J. S. Mill showed that he at least was not convinced of the uselessness of classics, and Mr. Spencer does not tell us how the knowledge of the normal state of pulsation is useful; how, to use his own test, it “influences action.” However, whether we admit the claims of physiology or not, we shall probably allow that there are certain physiological facts and rules of health, the knowledge of which

would be of great practical value, and should therefore be imparted to everyone. Here the doctor should come to the schoolmaster's assistance, and give him a manual from which to teach them.

§ 9. Next in order of importance, according to Mr. Spencer, comes the knowledge which aids indirect self-preservation by facilitating the gaining of a livelihood. Here Mr. Spencer thinks it necessary to prove to us that such sciences as mathematics and physics and biology underlie all the practical arts and business of life. No one would think of joining issue with him on this point; but the question still remains, what influence should this have on education? "Teach science," says Mr. Spencer. "A grounding in science is of great importance, both because it prepares for all this [business of life], and because rational knowledge has an immense superiority over empirical knowledge." Should we teach all sciences to everybody? This is clearly impossible. Should we, then, decide for each child what is to be his particular means of money-getting, and instruct him in those sciences which will be most useful in that business or profession? In other words, should we have a separate school for each calling? The only attempt of this kind which has been made is, I believe, the institution of *Handelschulen* (commercial schools) in Germany. In them, youths of fifteen or sixteen enter for a course of two or three years' instruction which aims exclusively at fitting them for commerce. But, in this case, their general education is already finished. With us, the lad commonly goes to work at the business itself quite as soon as he has the faculties for learning the sciences connected with it. If the school sends him to it with a love of knowledge, and with a mind well disciplined to acquire knowledge, this will be of more value to him than any special information.

§ 10. As Mr. Spencer is here considering science merely with reference to its importance in earning a livelihood, it is not beside the question to remark, that in a great number of instances, the knowledge of the science which underlies an operation confers no practical ability whatever. No one sees the better for understanding the structure of the eye and the undulatory theory of light. In swimming or rowing, a senior wrangler has no advantage over a man who is entirely ignorant about the laws of fluid pressure. As far as money-getting is concerned then, science will not be found to be universally serviceable. Mr. Spencer gives instances indeed, where science would prevent very expensive blundering; but the true inference is, not that

the blunderers should learn science, but that they should mind their own business, and take the opinion of scientific men about theirs. “Here is a mine,” says he, “in the sinking of which many shareholders ruined themselves, from not knowing that a certain fossil belonged to the old red sandstone, below which no coal is found.” Perhaps they were misled by the little knowledge which Pope tells us is a dangerous thing. If they had been entirely ignorant, they would surely have called in a professional geologist, whose opinion would have been more valuable than their own, even though geology had taken the place of classics in their schooling. “Daily are men induced to aid in carrying out inventions which a mere tyro in science could show to be futile.” But these are men whose function it would always be to lose money, not make it, whatever you might teach them.[187] I have great doubt, therefore, whether the learning of sciences will ever be found a ready way of making a fortune. But directly we get beyond the region of pounds, shillings, and pence, I agree most cordially with Mr. Spencer that a rational knowledge has an immense superiority over empirical knowledge. And, as a part of their education, boys should be taught to distinguish the one from the other, and to desire rational knowledge. Much might be done in this way by teaching, not all the sciences and nothing else, but the main principles of some one science, which would enable the more intelligent boys to understand and appreciate the value of “a rational explanation of phenomena.” I believe this addition to what was before a literary education has already been made in some of our leading schools, as Harrow, Rugby, and the City of London.[188]

§ 11. Next, Mr. Spencer would have instruction in the proper way of rearing offspring form a part of his curriculum. There can be no question of the importance of this knowledge, and all that Mr. Spencer says of the lamentable ignorance of parents is, unfortunately, no less undeniable. But could this knowledge be imparted early in life? Young people would naturally take but little interest in it. It is by parents, or at least by those who have some notion of the parental responsibility, that this knowledge should be sought. The best way in which we can teach the young will be so to bring them up that when they themselves have to rear children the remembrance of their own youth may be a guide and not a beacon to them. But more knowledge than this is necessary, and I differ from Mr. Spencer only as to the proper time for acquiring it.

§ 12. Next comes the knowledge which fits a man for the discharge of his functions as a citizen, a subject to which Dr. Arnold attached great importance at the time of the first Reform Bill, and which deserves our attention all the more in consequence of the second and third. But what knowledge are we to give for this purpose? One of the subjects which seem especially suitable is history. But history, as it is now written, is, according to Mr. Spencer, useless. “It does not illustrate the right principles of political action.” “The great mass of historical facts are facts from which no conclusions can be drawn—unorganisable facts, and, therefore, facts of no service in establishing principles of conduct, which is the chief use of facts. Read them if you like for amusement, but do not flatter yourself they are instructive.” About the right principles of political action we seem so completely at sea that, perhaps, the main thing we can do for the young is to point out to them the responsibilities which will hereafter devolve upon them, and the danger, both to the state and the individual, of just echoing the popular cry without the least reflection, according to our present usage. But history, as it is now written by great historians, may be of some use in training the young both to be citizens and men. “Reading about the fifteen decisive battles, or all the battles in history, would not make a man a more judicious voter at the next election,” says Mr. Spencer. But is this true? The knowledge of what has been done in other times, even by those whose coronation renders them so distasteful to Mr. Spencer, is knowledge which influences a man’s whole character, and may, therefore, affect particular acts, even when we are unable to trace the connexion. As it has been often said, the effect of reading history is, in some respects, the same as that of travelling. Anyone in Mr. Spencer’s vein might ask, “If a man has seen the Alps, of what use will that be to him in weighing out groceries?” Directly, none at all; but indirectly, much. The travelled man will not be such a slave to the petty views and customs of his trade as the man who looks on his county town as the centre of the universe. The study of history, like travelling, widens the student’s mental vision, frees him to some extent from the bondage of the present, and prevents his mistaking conventionalities for laws of nature. It brings home to him, in all its force, the truth that “there are also people beyond the mountain” (*Hinter dem Berge sind auch Leute*), that there are higher interests in the world than his own business concerns, and nobler men than himself or the best of his acquaintance. It teaches him what men are capable of, and thus gives him

juster views of his race. And to have all this truth worked into the mind contributes perhaps as largely to "complete living" as knowledge of the Eustachian tubes or of the normal rate of pulsation.[189] I think, therefore, that the works of great historians and biographers, which we already possess, may be usefully employed in education. It is difficult to estimate the value of history according to Mr. Spencer's idea, as it has yet to be written; but I venture to predict that if boys, instead of reading about the history of nations in connection with their leading men, are required to study only "the progress of society," the subject will at once lose all its interest for them; and, perhaps, many of the facts communicated will prove, after all, no less unorganisable than the fifteen decisive battles.

§ 13. Lastly, we come to that "remaining division of human life which includes the relaxations and amusements filling leisure hours." Mr. Spencer assures us that he will yield to none in the value he attaches to æsthetic culture and its pleasures; but if he does not value the fine arts less, he values science more; and painting, music, and poetry would receive as little encouragement under his dictatorship as in the days of the Commonwealth. "As the fine arts and belles-lettres occupy the leisure part of life, so should they occupy the leisure part of education." This language is rather obscure; but the only meaning I can attach to it is, that music, drawing, poetry, &c., may be taught if time can be found when all other knowledges are provided for. This reminds me of the author whose works are so valuable that they will be studied when Shakspeare is forgotten—but not before. Any one of the sciences which Mr. Spencer considers so necessary might employ a lifetime. Where then shall we look for the leisure part of education when education includes them all?[190]

§ 14. But, if adopting Mr. Spencer's own measure, we estimate the value of knowledge by its influence on action, we shall probably rank "accomplishments" much higher than they have hitherto been placed in the schemes of educationists. Knowledge and skill connected with the business of life, are of necessity acquired in the discharge of business. But the knowledge and skill which make our leisure valuable to ourselves and a source of pleasure to others, can seldom be gained after the work of life has begun. And yet every day a man may benefit by possessing such an ability, or may suffer from the want of it. One whose eyesight has been trained by drawing and painting finds objects of interest all around him, to which other

people are blind. A primrose by a river's brim is, perhaps, more to him who has a feeling for its form and colour than even to the scientific student, who can tell all about its classification and component parts. A knowledge of music is often of the greatest practical service, as by virtue of it, its possessor is valuable to his associates, to say nothing of his having a constant source of pleasure and a means of recreation which is most precious as a relief from the cares of life. Of far greater importance is the knowledge of our best poetry. One of the first reforms in our school course would have been, I should have thought, to give this knowledge a much more prominent place; but Mr. Spencer consigns it, with music and drawing, to "the leisure part of education." Whether a man who was engrossed by science, who had no knowledge of the fine arts except as they illustrated scientific laws, no acquaintance with the lives of great men, or with any history but sociology, and who studied the thoughts and emotions expressed by our great poets merely with a view to their psychological classification—whether such a man could be said to "live completely" is a question to which every one, not excepting Mr. Spencer himself, would probably return the same answer. And yet this is the kind of man which Mr. Spencer's system would produce where it was most successful.

§ 15. Let me now briefly sum up the conclusions arrived at, and consider how far I differ from Mr. Spencer. I believe that there is no one study which is suited to train the faculties of the mind at every stage of its development, and that when we have decided on the necessity of this or that knowledge, we must consider further what is the right time for acquiring it. I believe that intellectual education should aim, not so much at communicating facts, however valuable, as at showing the boy what true knowledge is, and giving him the power and the *disposition* to acquire it. I believe that the exclusively scientific teaching which Mr. Spencer approves would not effect this. It would lead at best to a very one-sided development of the mind. It might fail to engage the pupil's interest sufficiently to draw out his faculties, and in this case the net outcome of his school-days would be no larger than at present. Of the knowledges which Mr. Spencer recommends for special objects, some, I think, would not conduce to the object, and some could not be communicated early in life, (1.) For indirect self-preservation we do not require to know physiology, but the results of physiology. (2.) The science which bears on special pursuits in life has not, in many cases, any pecuniary value, and although it is most desirable that

every one should study the science which makes his work intelligible to him, this must usually be done when his schooling is over. The school will have done its part if it has accustomed him to the intellectual processes by which sciences are learned, and has given him an intelligent appreciation of their value.[191] (3.) The right way of rearing and training children should be studied, but not by the children themselves. (4.) The knowledge which fits a man to discharge his duties as a citizen is of great importance, and, as Dr. Arnold pointed out, is likely to be entirely neglected by those who have to struggle for a livelihood. The schoolmaster should, therefore, by no means neglect this subject with those of his pupils whose school-days will soon be over, but, probably, all that he can do is to cultivate in them a sense of the citizen's duty, and a capacity for being their own teachers. (5.) The knowledge of poetry, belles-lettres, and the fine arts, which Mr. Spencer hands over to the leisure part of education, is the only knowledge in his program which I think should most certainly form a prominent part in the curriculum of every school.

§ 16. I therefore differ, though with great respect, from the conclusions at which Mr. Spencer has arrived. But I heartily agree with him that we are bound to inquire into the relative value of knowledges, and if we take, as I should willingly do, Mr. Spencer's test, and ask how does this or that knowledge influence action (including in our inquiry its influence on mind and character, through which it bears upon action), I think we should banish from our schools much that has hitherto been taught in them, besides those old tormentors of youth (laid, I fancy, at last—*requiescant in pace*)—the *Propria quæ Maribus* and its kindred absurdities. What we *should* teach is, of course, not so easily decided as what we *should not*.

§ 17. I now come to consider Mr. Spencer's second chapter, in which, under the heading of "Intellectual Education," he gives an admirable summing up of the main principles in which the great writers on the subject have agreed, from Comenius downwards. These principles are, perhaps, not all of them unassailable, and even where they are true, many mistakes must be expected before we arrive at the best method of applying them; but the only reason that can be assigned for the small amount of influence they have hitherto exercised is, that most teachers are as ignorant of them as of the abstrusest doctrines of Kant and Hegel.

§ 18. In stating these principles Mr. Spencer points out that they merely form a commencement for a science of education. “Before educational methods can be made to harmonise in character and arrangement with the faculties in the mode and order of unfolding, it is first needful that we ascertain with some completeness how the faculties *do* unfold. At present we have acquired on this point only a few general notions. These general notions must be developed in detail—must be transformed into a multitude of specific propositions before we can be said to possess that *science* on which the *art* of education must be based. And then, when we have definitely made out in what succession and in what combinations the mental powers become active, it remains to choose out of the many possible ways of exercising each of them, that which best conforms to its natural mode of action. Evidently, therefore, it is not to be supposed that even our most advanced modes of teaching are the right ones, or nearly the right ones.” It is not to be wondered at that we have no science of education. Those who have been able to observe the phenomena have had no interest in generalising from them. Up to the present time the schoolmaster has been a person to whom boys were sent to learn Latin and Greek. He has had, therefore, no more need of a science than the dancing-master.[192] But the present century, which has brought in so many changes, will not leave the state of education as it found it. Latin and Greek, if they are not dethroned in our higher schools, will have their despotism changed for a very limited monarchy. A course of instruction certainly without Greek and perhaps without Latin will have to be provided for middle schools. Juster views are beginning to prevail of the schoolmaster’s function. It is at length perceived that he has to assist the development of the human mind, and perhaps, by-and-bye, he may think it as well to learn all he can of that which he is employed in developing. When matters have advanced as far as this, we may begin to hope for a science of education. In Locke’s day he could say of physical science that there was no such science in existence. For thousands of years the human race had lived in ignorance of the simplest laws of the world it inhabited. But the true method of inquiring once introduced, science has made such rapid conquests, and acquired so great importance, that some of our ablest men seem inclined to deny, if not the existence, at least the value, of any other kind of knowledge. So, too, when teachers seek by actual observation to discover the laws of mental

development, a science may be arrived at, which, in its influence on mankind, would perhaps rank before any we now possess.

§ 19. Those who have read the previous Essays will have seen in various forms most of the principles which Mr. Spencer enumerates, but I gladly avail myself of his assistance in summing them up.

1. We should proceed from the simple to the complex, both in our choice of subjects and in the way in which each subject is taught. We should begin with but few subjects at once, and, successively adding to these, should finally carry on all subjects abreast.

Each larger concept is made by a combination of smaller ones, and presupposes them. If this order is not attended to in communicating knowledge, the pupil can learn nothing but words, and will speedily sink into apathy and disgust.

§ 20. That we must proceed from the known to the unknown is something more than a corollary to the above;[193] because not only are new concepts formed by the combination of old, but the mind has a liking for what it knows, and this liking extends itself to all that can be connected with its object. The principle of using the known in teaching the unknown is so simple, that all teachers who really endeavour to make anything understood, naturally adopt it. The traveller who is describing what he has seen and what we have not seen tells us that it is in one particular like this object, and in another like that object, with which we are already familiar. We combine these different concepts we possess, and so get some notion of things about which we were previously ignorant. What is required in our teaching is that the use of the known should be employed more systematically. Most teachers think of boys who have no school learning as entirely ignorant. The least reflection shows, however, that they know already much more than schools can ever teach them. A sarcastic examiner is said to have handed a small piece of paper to a student and told him to write *all he knew* on it. Perhaps many boys would have no difficulty in stating the sum of their school-learning within very narrow limits, but with other knowledge a child of five years old, could he write, might soon fill a volume.[194] Our aim should be to connect the knowledge boys bring with them to the schoolroom with that which they are to acquire there.[195] I suppose all will allow, whether they think it a matter of regret or otherwise, that hardly

anything of the kind has hitherto been attempted. Against this state of things I cannot refrain from borrowing Mr. Spencer's eloquent protest. "Not recognising the truth that the function of books is supplementary—that they form an indirect means to knowledge when direct means fail, a means of seeing through other men what you cannot see for yourself, teachers are eager to give second-hand facts in place of first-hand facts. Not perceiving the enormous value of that spontaneous education which goes on in early years, not perceiving that a child's restless observation, instead of being ignored or checked, should be diligently ministered to, and made as accurate and complete as possible, they insist on occupying its eyes and thoughts with things that are, for the time being, incomprehensible and repugnant. Possessed by a superstition which worships the symbols of knowledge instead of the knowledge itself, they do not see that only when his acquaintance with the objects and processes of the household, the street, and the fields, is becoming tolerably exhaustive, only then should a child be introduced to the new sources of information which books supply, and this not only because immediate cognition is of far greater value than mediate cognition, but also because the words contained in books can be rightly interpreted into ideas only in proportion to the antecedent experience of things."[196] While agreeing heartily in the spirit of this protest, I doubt whether we should wait till the child's acquaintance with the objects and processes of the household, the streets, and the fields, is becoming tolerably exhaustive before we give him instruction from books. The point of time which Mr. Spencer indicates is, at all events, rather hard to fix, and I should wish to connect book-learning as soon as possible with the learning that is being acquired in other ways. Thus might both the books, and the acts and objects of daily life, win an additional interest. If, *e.g.*, the first reading-books were about the animals, and later on about the trees and flowers which the children constantly meet with, and their attention was kept up by large coloured pictures, to which the text might refer, the children would soon find both pleasure and advantage in reading, and they would look at the animals and trees with a keener interest from the additional knowledge of them they had derived from books. This is, of course, only one small application of a very influential principle.

§ 21. One marvellous instance of the neglect of this principle is found in the practice of teaching Latin grammar before English grammar. As Professor Seeley has so well pointed out, children bring with them to school

the knowledge of language in its concrete form. They may soon be taught to observe the language they already know, and to find, almost for themselves, some of the main divisions of words in it. But, instead of availing himself of the child's previous knowledge, the schoolmaster takes a new and difficult language, differing as much as possible from English, a new and difficult science, that of grammar, conveyed, too, in a new and difficult terminology, and all this he tries to teach at the same time. The consequence is that the science is destroyed, the terminology is either misunderstood, or, more probably, associated with no ideas, and even the language for which every sacrifice is made, is found, in nine cases out of ten, never to be acquired at all.[197]

§ 22. 2. "All development is an advance from the indefinite to the definite." I do not feel very certain of the truth of this principle, or of its application, if true. Of course, a child's intellectual conceptions are at first vague, and we should not forget this; but it is rather a fact than a principle.

§ 23. 3. "Our lessons ought to start from the concrete, and end in the abstract." What Mr. Spencer says under this head well deserves the attention of all teachers. "General formulas which men have devised to express groups of details, and which have severally simplified their conceptions by uniting many facts into one fact, they have supposed must simplify the conceptions of a child also. They have forgotten that a generalisation is simple only in comparison with the whole mass of particular truths it comprehends; that it is more complex than any one of these truths taken simply; that only, after many of these single truths have been acquired, does the generalisation ease the memory and help the reason; and that, to a mind not possessing these single truths, it is necessarily a mystery. Thus, confounding two kinds of simplification, teachers have constantly erred by setting out with "first principles," a proceeding essentially, though not apparently, at variance with the primary rule [of proceeding from the simple to the complex], which implies that the mind should be introduced to principles through the medium of examples, and so should be led from the particular to the general, from the concrete to the abstract." In conformity with this principle, Pestalozzi made the actual counting of things precede the teaching of abstract rules in arithmetic. Basedow introduced weights and measures into the school, and Mr. Spencer describes some exercise in cutting out geometrical figures in cardboard, as a

preparation for geometry. The difficulty about such instruction is that it requires apparatus, and apparatus is apt to get lost or out of order. But if apparatus is good for anything at all, it is worth a little trouble. There is a tendency in the minds of many teachers to depreciate "mechanical appliances." Even a decent black-board is not always to be found in our higher schools. But, though such appliances will not enable a bad master to teach well, nevertheless, other things being equal, the master will teach better with them than without them. There is little credit due to him for managing to dispense with apparatus. An author might as well pride himself on being saving in pens and paper.

§ 24. 4. "The genesis of knowledge in the individual must follow the same course as the genesis of knowledge in the race." This is the thesis on which I have no opinion to offer.

§ 25. 5. From the above principle Mr. Spencer infers that every study should have a purely experimental introduction, thus proceeding through an empirical stage to a rational.

§ 26. 6. A second conclusion which Mr. Spencer draws is that, in education, the process of self-development should be encouraged to the utmost. Children should be led to make their own investigations, and to draw their own inferences. They should be told as little as possible, and induced to discover as much as possible. I quite agree with Mr. Spencer that this principle cannot be too strenuously insisted on, though it obviously demands a high amount of intelligence in the teacher. But if education is to be a training of the faculties, if it is to prepare the pupil to teach himself, something more is needed than simply to pour in knowledge and make the pupil reproduce it. The receptive and reproductive faculties form but a small portion of a child's powers, and yet the only portion which many schoolmasters seek to cultivate. It is indeed, not easy to get beyond this point; but the impediment is in us, not in the children. "Who can watch," ask Mr. Spencer, "the ceaseless observation, and inquiry, and inference, going on in a child's mind, or listen to its acute remarks in matters within the range of its faculties, without perceiving that these powers it manifests, if brought to bear systematically upon studies *within the same range*, would readily master them without help? This need for perpetual telling results from our stupidity, not from the child's. We drag it away from the facts in which it is interested, and which it is actively assimilating of itself. We put

before it facts far too complex for it to understand, and therefore distasteful to it. Finding that it will not voluntarily acquire these facts, we thrust them into its mind by force of threats and punishment. By thus denying the knowledge it craves, and cramming it with knowledge it cannot digest, we produce a morbid state of its faculties, and a consequent disgust for knowledge in general. And when, as a result, partly of the stolid indolence we have brought on, and partly of still-continued unfitness in its studies, the child can understand nothing without explanation, and becomes a mere passive recipient of our instruction, we infer that education must necessarily be carried on thus. Having by our method induced helplessness, we make the helplessness a reason for our method." It is, of course, much easier to point out defects than to remedy them: but every one who has observed the usual indifference of schoolboys to their work, and the waste of time consequent on their inattention or only half-hearted attention to the matter before them, and then thinks of the eagerness with which the same boys throw themselves into the pursuits of their play-hours, will feel a desire to get at the cause of this difference; and, perhaps, it may seem to him partly accounted for by the fact that their school-work makes a monotonous demand on a single faculty—the memory.

§ 27. 7. This brings me to the last of Mr. Spencer's principles of intellectual education. Instruction must excite the interest of the pupils and therefore be pleasurable to them. "Nature has made the healthful exercise of our faculties both of mind and body pleasurable. It is true that some of the highest mental powers as yet but little developed in the race, and congenitally possessed in any considerable degree only by the most advanced, are indisposed to the amount of exertion required of them. But these, in virtue of their very complexity will in a normal course of culture come last into exercise, and will, therefore, have no demands made on them until the pupil has arrived at an age when ulterior motives can be brought into play, and an indirect pleasure made to counterbalance a direct displeasure. With all faculties lower than these, however, the immediate gratification consequent on activity is the normal stimulus, and under good management the only needful stimulus. When we have to fall back on some other, we must take the fact as evidence that we are on the wrong track. Experience is daily showing with greater clearness that there is always a method to be found productive of interest—even of delight—and it ever

turns out that this is the method proved by all other tests to be the right one."

§ 28. As far as I have had the means of judging, I have found that the majority of teachers reject this principle. If you ask them why, most of them will tell you that it is impossible to make school-work interesting to children. A large number also hold that it is not desirable. Let us consider these two points separately.

Of course, if it is not possible to get children to take interest in anything they could be taught in school, there is an end of the matter. But no one really goes as far as this. Every teacher finds that some of the things boys are taught they like better than others, and perhaps that one boy takes to one subject and another to another; and he also finds, both of classes and individuals, that they always get on best with what they like best. The utmost that can be maintained is, then, that some subjects which must be taught will not interest the majority of the learners. And if it be once admitted that it is desirable to make learning pleasant and interesting to our pupils, this principle will influence us to some extent in the subjects we select for teaching, and still more in the methods by which we endeavour to teach them. I say we shall be guided *to some extent* in the selection of subjects. There are theorists who assert that nature gives to young minds a craving for their proper aliment, so that they should be taught only what they show an inclination for. But surely our natural inclinations in this matter, as in others, are neither on the one hand to be ignored, nor on the other to be uncontrolled by such motives as our reason dictates to us. We at length perceive this in the physical nurture of our children. Locke directs that children are to have very little sugar or salt. "Sweetmeats of all kinds are to be avoided," says he, "which, whether they do more harm to the maker or eater is not easy to tell." (Ed. § 20.) Now, however, doctors have found out that young people's taste for sweets should in moderation be gratified, that they require sugar as much as they require any other kind of nutriment. But no one would think of feeding his children entirely on sweetmeats, or even of letting them have an unlimited supply of plum puddings and hardbake. If we follow out this analogy in nourishing the mind, we shall, to some extent, gratify a child's taste for "stories," whilst we also provide a large amount of more solid fare. But although we should certainly not ignore our children's likes and dislikes in learning, or in

anything else, it is easy to attach too much importance to them. Dislike very often proceeds from mere want of insight into the subject. When a boy has "done" the First Book of Euclid without knowing how to judge of the size of an angle, or the Second Book without forming any conception of a rectangle, no one can be surprised at his not liking Euclid. And then the failure which is really due to bad teaching is attributed by the master to the stupidity of his pupil, and by the pupil to the dulness of the subject. If masters really desired to make learning a pleasure to their pupils, I think they would find that much might be done to effect this without any alteration in the subjects taught.

But the present dulness of school-work is not without its defenders. They insist on the importance of breaking in the mind to hard work. This can only be done, they say, by tasks which are repulsive to it. The schoolboy does not like, and ought not to like, learning Latin grammar any more than the colt should find pleasure in running round in a circle: the very fact that these things are not pleasant makes them beneficial. Perhaps a certain amount of such training may train *down* the mind and qualify it for some drudgery from which it might otherwise revolt; but if this result is attained, it is attained at the sacrifice of the intellectual activity which is necessary for any higher function. As Carlyle says, (*Latter-Day PP.*, No. iij), when speaking of routine work generally, you want nothing but a sorry nag to draw your sand-cart; your high-spirited Arab will be dangerous in such a capacity. But who would advocate for all colts a training which should render them fit for nothing but such humble toil? I shall say more about this further on (*v.* pp. 472 *ff.*); here I will merely express my strong conviction that boys' minds are frequently dwarfed, and their interest in intellectual pursuits blighted, by the practice of employing the first years of their school-life in learning by heart things which it is quite impossible for them to understand or care for. Teachers set out by assuming that little boys cannot understand anything, and that all we can do with them is to keep them quiet and cram them with forms which will come in useful at a later age. When the boys have been taught on this system for two or three years, their teacher complains that they are stupid and inattentive, and that so long as they can say a thing by heart they never trouble themselves to understand it. In other words, the teacher grumbles at them for doing precisely what they have been taught to do, for repeating words without any thought of their meaning.

§ 29. In this very important matter I am fully alive to the difference between theory and practice. It is so easy to recommend that boys should be got to understand and take an interest in their work—so difficult to carry out the recommendation! Grown people can hardly conceive that words which have in their minds been associated with familiar ideas from time immemorial, are mere sounds in the mouths of their pupils. The teacher thinks he is beginning at the beginning if he says that a transitive verb must govern an accusative, or that all the angles of a square are right angles. He gives his pupils credit for innate ideas up to this point, at all events, and advancing on this supposition he finds that he can get nothing out of them but memory-work; so he insists on this that his time and theirs may seem not to be wholly wasted. The great difficulty of teaching well, however, is after all but a poor excuse for contentedly teaching badly, and it would be a great step in advance if teachers in general were as dissatisfied with themselves as they usually are with their pupils.[198]

§ 30. I do not purpose following Mr. Spencer through his chapters on moral and physical education. In practice I find I can draw no line between moral and religious education; so the discussion of one without the other has not for me much interest. Mr. Spencer has some very valuable remarks on physical education which I could do little more than extract, and I have already made too many quotations from a work which will be in the hands of most of my readers.

§ 31. Mr. Spencer differs very widely from the great body of our schoolmasters. I have ventured in turn to differ on some points from Mr. Spencer; but I have failed to give any adequate notion of the work I have been discussing if the reader has not perceived that it is not only one of the most readable, but also one of the most important books on education in the English language.

XX.

THOUGHTS AND SUGGESTIONS.

$ 1. One of the great wants of middle-class education at present, is an ideal to work towards. Our old public schools have such an ideal. The model public school-man is a gentleman who is an elegant Latin and Greek scholar. True, this may not be a very good ideal, and some of our ablest men, both literary and scientific, are profoundly dissatisfied with it. But, so long as it is maintained, all questions of reform are comparatively simple. In middle-class schools, on the other hand, there is no *terminus ad quem*. A number of boys are got together, and the question arises, not simply *how* to teach, but *what* to teach. Where the masters are not university men, they are, it may be, not men of broad views or high culture. Of course no one will suppose me ignorant of the fact that a great number of teachers who have never been at a university, are both enlightened and highly cultivated; and also that many teachers who have taken degrees, even in honours, are neither. But, speaking broadly of the two classes, I may fairly assume that the non-university men are inferior in these respects to the graduates. If not, our universities should be reformed on Carlyle's "live-coal" principle without further loss of time. Many non-university masters have been engaged in teaching ever since they were boys themselves, and teaching is a very narrowing occupation. They are apt therefore to be careless of general principles, and to aim merely at storing their pupils' memory with *facts*—facts about language, about history, about geography, without troubling themselves to consider what is and what is not worth knowing, or what faculties the boys have, and how they should be developed. The consequence is their boys get up, for the purpose of forgetting with all convenient speed, quantities of details about as instructive and entertaining as the *Propria quæ maribus*, such as the division of England under the Heptarchy, the battles in the wars of the Roses, and lists of geographical names. Where the masters are university men, they have rather a contempt for this kind of cramming, which makes them do it badly, if they attempt it at all; but they are driven to this teaching in many cases because they do not know what to substitute in its place. In their own school-education they

were taught classics and mathematics and nothing else. Their pupils are too young to have much capacity for mathematics, and they will leave school too soon to get any sound knowledge of classics; so the strength of the teaching ought clearly not to be thrown into these subjects. But the master really knows no other. He soon finds that he is not much his pupils' superior in acquaintance with the theory of the English language or with history and geography. There are not many men with sufficient strength of will to study whilst their energies are taxed by teaching; and standard books are not always within reach: so the master is forced to content himself with hearing lessons in a perfunctory way out of dreary school-books. Hence it comes to pass that he goes on teaching subjects of which he himself is ignorant, subjects, too, of which he does not recognise the importance, with an enlightened disbelief in his own method of tuition. He finds it uphill work, to be sure, and is conscious that his pupils do not get on, however hard he may try to drive them; but he never hoped for success in his teaching, so the want of it does not distress him. I may be suspected of caricature, but not, I think, by university men who have themselves had to teach anything besides classics and mathematics.

§ 2. If there is any truth in what I have been saying, school-teaching, in subjects other than classics and mathematics (which I am not now considering), is very commonly a failure. And a failure it must remain until boys can be got to work with a will, in other words, to feel interest in the subject taught. I know there is a strong prejudice in some people's minds against the notion of making learning pleasant. They remind us that school should be a preparation for after-life. After-life will bring with it an immense amount of drudgery. If, they say, things at school are made too easy and pleasant (words, by the way, very often and very erroneously confounded), school will cease to give the proper discipline: boys will be turned out not knowing what hard work is, which, after all, is the most important lesson that can be taught them. In these views I sincerely concur, so far as this at least, that we want boys to work hard, and vigorously to go through the necessary drudgery, *i.e.*, labour in itself disagreeable. But this result is not attained by such a system as I have described. Boys do not learn to work *hard*, but in a dull stupid way, with most of their faculties lying dormant, and though they are put through a vast quantity of drudgery, they seem as incapable of throwing any energy into it as prisoners on the tread-mill. I think we shall find on consideration, that no one succeeds in

any occupation unless that occupation is interesting, either in itself or from some object that is to be obtained by means of it. Only when such an interest is aroused is energy possible. No one will deny that, as a rule, the most successful men are those for whom their employment has the greatest attractions. We should be sorry to give ourselves up to the treatment of a doctor who thought the study of disease mere drudgery, or a dentist who felt a strong repugnance to operating on teeth. No doubt the successful man in every pursuit has to go through a great deal of drudgery, but he has a general interest in the subject, which extends, partially at least, to its most wearisome details; his energy, too, is excited by the desire of what the drudgery will gain for him.[199]

§ 3. Observe, that although I would have boys take pleasure in their work, I regard the pleasure as a *means*, not an end. If it could be proved that the mind was best trained by the most repulsive exercises, I should most certainly enforce them. But I do not think that the mind *is* benefited by galley-slave labour; indeed, hardly any of its faculties are capable of such labour. We can compel a boy to learn a thing by heart, but we cannot compel him to wish to understand it; and the intellect does not act without the will (*v. supra* p. 193). Hence, when anything is required which cannot be performed by the memory alone, the driving system utterly breaks down; and even the memory, as I hope to show presently, works much more effectually in matters about which the mind feels an interest. Indeed, the mind without sympathy and interest is like the sea-anemone when the tide is down, an unlovely thing, closed against external influences, enduring existence as best it can. But let it find itself in a more congenial element, and it opens out at once, shows altogether unexpected capacities, and eagerly assimilates all the proper food that comes within its reach. Our school teaching is often little better than an attempt to get sea-anemones to flourish on dry land.

§ 4. We see then, that a boy, before he can throw energy into a study, must find that study *interesting in itself, or in its results*.

Some subjects, properly taught, are interesting in themselves.

Some subjects may be interesting to older and more thoughtful boys, from a perception of their usefulness.

All subjects may be made interesting by emulation.

§ 5. Hardly any effort is made in some schools to interest the younger children in their work, and yet no effort can be, as the Germans say, more "rewarding." The teacher of children has this advantage, that his pupils are never dull and listless, as youths are apt to be. If they are not attending to him, they very soon give him notice of it; and if he has the sense to see that their inattention is his fault, not theirs, this will save him much annoyance and them much misery. He has, too, another advantage, which gives him the power of gaining their attention—their emulation is easily excited. In the Waisenhaus at Halle I once heard a class of very young children, none of them much above six years old, perform feats of mental arithmetic quite, as I should have said, beyond their age, and I well remember the pretty eagerness with which each child held out a little hand and shouted, "*Mich! Bitte!*" to gain the privilege of answering.

§ 6. Then again, there are many subjects in which children take an interest. Indeed, all visible things, especially animals, are much more to them than to us. A child has made acquaintance with all the animals in the neighbourhood, and can tell you much more about the house and its surroundings than you know yourself. But all this knowledge and interest you would wish forgotten directly he comes into school. Reading, writing, and figures are taught in the driest manner. The two first are in themselves not uninteresting to the child, as he has something to do, and young people are much more ready to do anything than to learn anything. But when lessons are given the child to learn, they are not about things concerning which he has ideas and feels an interest, but you teach him mere sounds—*e.g.*, that Alfred (to him only a name) came to the throne in 871, though he has no notion what the throne is, or what 871 means. The child learns the lesson with much trouble and small profit, bearing the infliction with what patience he can, till he escapes out of school and begins to learn much faster on a very different system.

§ 7. We cannot often introduce into the school the thing, much less the animal, which children would care to see, but we can introduce what will please them as well, in some cases even better, viz., good pictures. A teacher who could draw boldly on the blackboard, would have no difficulty in arresting the children's attention. But, at present, few can do this, and pictures must be provided. A good deal has been done of late years in the way of illustrating children's books, and even childhood must be the

happier for such pictures as those of Tenniel and Harrison Weir. But it seems well understood that these gentlemen are incapable of doing anything for children beyond affording them innocent amusement, and we should be as much surprised at seeing their works introduced into that region of asceticism, the English school-room, as if we ran across one of Raphael's Madonnas in a Baptist chapel.[200]

§ 8. I had the good fortune, many years ago, to be present at the lessons given by a very excellent teacher to the youngest class, consisting both of boys and girls, at the first *Bürger-schule* of Leipzig. In Saxony the schooling which the state demands for each child, begins at six years old, and lasts till fourteen. These children were, therefore, between six and seven. In one year, a certain Dr. Vater taught them to read, write, and reckon. His method of teaching was as follows:—Each child had a book with pictures of objects, such as a hat, a slate, &c. Under the picture was the name of the object in printing and writing characters, and also a couplet about the object. The children having opened their books, and found the picture of a hat, the teacher showed them a hat, and told them a tale connected with one. He then asked the children questions about his story, and about the hat he had in his hand—What was the colour of it? &c. He then drew a hat on the blackboard, and made the children copy it on their slates. Next he wrote the word "hat" and told them that for people who could read this did as well as the picture. The children then copied the word on their slates. The teacher proceeded to analyse the word "hat, (*hut*)." "It is made up," said he, "of three sounds, the most important of which is the *a* (*u*), which comes in the middle." In all cases the vowel sound was first ascertained in every syllable, and then was given an approximation to consonantal sounds before and after. The couplet was now read by the teacher, and the children repeated it after him. In this way the book had to be worked over and over till the children were perfectly familiar with everything in it. They had been already six months thus employed when I visited the school, and knew the book pretty thoroughly. To test their knowledge, Dr. Vater first wrote a number of capitals at random on the board, and called out a boy to tell him words having these capitals as initials. This boy had to call out a girl to do something of the kind, she a boy, and so forth. Everything was done very smartly, both by master and children. The best proof I saw of their accuracy and quickness was this: the master traced words from the book very rapidly with a stick on the

blackboard, and the children always called out the right word, though I could not follow him. He also wrote with chalk words which the children had never seen, and made them name first the vowel sounds, then the consonantal, then combine them.

I have been thus minute in my description of this lesson, because it seems to me an admirable example of the way in which children between six and eight years of age should be taught. The method (see Rüegg's *Pädagogik*, p. 360; also *Die Normalwörtermethode*, published by Orell, Füssli, Zürich, 1876), was arranged and the book prepared by the late Dr. Vogel, who was then Director of the school. Its merits, as its author pointed out to me, are: —1. That it connects the instruction with objects of which the child has already an idea in his mind, and so associates new knowledge with old; 2. That it gives the children plenty to *do* as well as to learn, a point on which the Doctor was very emphatic; 3. That it makes the children go over the same matter in various ways till they have *learnt a little thoroughly*, and then applies their knowledge to the acquirement of more. Here the Doctor seems to have followed Jacotot. But though the method was no doubt a good one, I must say its success at Leipzig was due at least as much to Dr. Vater as to Dr. Vogel. This gentleman had been taking the youngest class in this school for twenty years, and, whether by practice or natural talent, he had acquired precisely the right manner for keeping children's attention. He was energetic without bustle and excitement, and quiet without a suspicion of dulness or apathy. By frequently changing the employment of the class, and requiring smartness in everything that was done, he kept them all on the alert. The lesson I have described was followed without pause by one in arithmetic, the two together occupying an hour and three quarters, and the interest of the children never flagged throughout.

§ 9. Dr. Vater's method for arithmetic I cannot now recall; but I do not doubt that, as a German teacher who had studied his profession, he understood what English teachers and pupil-teachers do not understand, viz., how children should get their first knowledge of numbers. Pestalozzi and Froebel insisted that children should learn about numbers from *things* which they actually counted; and, according to Grubé's method, which I found in Germany over 30 years ago, and which is now extending to the United States, the whole of the first year is given to the relations of numbers not exceeding ten (see *Grubé's Method* by L. Seeley, New York, Kellogg,

and F. L. Soldan's *Grubé's M.*, Chicago). In arithmetic everything depends on these relations becoming thoroughly familiar. The decimal scale is possibly not so good as the scale of eight or of twelve, but the human race has adopted it; and even the French Revolutionists, with all their belief in "reason," and their hatred of the past, recoiled from any attempt to change it. But in accepting it, they endeavoured to remove anomalies, and so should we. Everything must be based on groups of ten; and with children we should do well, as Mr. W. Wooding suggests, to avoid the great anomaly in our nomenclature, and call the numbers between ten and twenty (*i.e.*, twain-tens or two-tens), "ten-one, ten-two, &c." Numeration should by a long way precede any kind of notation, and the main truths about numbers should be got at experimentally with counters or coins. In these truths should be included all that we usually separate under the "First Four Rules," and with integers we may even from the first give a clear conception of the fractional parts of whole numbers, *e.g.*, that one third of 6 is 2.[201]

Actual measuring and weighing, besides actual counting, go towards actual arithmetic for children.

All this teaching, if conducted as Dr. Vater would have conducted it, would not give children any distaste for learning or make them dread the sound of the school bell.

§ 10. I will suppose a child to have passed through such a course as this by the time he is eight or nine years old. Besides having some clear notions of number and form, he can now read and copy easy words. What we next want for him is a series of good reading-books, about things in which he takes an interest. The language must of course be simple, but the matter so good that neither master nor pupils will be disgusted by its frequent repetition.

The first volume may very well be about animals—dogs, horses, &c., of which large pictures should be provided, illustrating the text. The first cost of these pictures would be considerable, but as they would last for years, the expense to the friends of each child taught from them would be a mere trifle.

§ 11. The books placed in the hands of the children should be well printed and strongly bound. In the present penny-wise system, school-books are given out in cloth, and the leaves are loose at the end of a fortnight, so

that children get accustomed to their destruction and treat it as a matter of course. This ruins their respect for books, which is not so unimportant a matter as it may at first appear.

§ 12. After each reading lesson, which should contain at least one interesting anecdote, there should be columns of all the words which occurred for the first time in that lesson. These should be arranged according to their grammatical classification, not that the child should be taught grammar, but this order is as good as any other, and by it the child would learn to observe certain differences in words almost unconsciously. [202]

Here I cannot resist quoting an excellent remark from Helps's *Brevia* (p. 125). "We should make the greatest progress in art, science, politics, and morals, if we could train up our minds to look straight and steadfastly and uninterruptedly at the thing in question that we are observing. This seems a very slight thing to do; but practically it is hardly ever done. Between you and the object rises a mist of technicalities, of prejudices, of previous knowledge, and, above all, of terrible familiarity." Perhaps it is this "terrible familiarity" that has prevented our seeing till quite lately that reading is the art of getting meaning by signs that appeal to the eye, *not* the art of reporting to others the meaning we have thus arrived at. "Accustoming boys to read aloud what they do not first understand," says Benjamin Franklin, "is the cause of those even set tones so common among readers, which, when they have once got a habit of using [them], they find so difficult to correct; by which means, among fifty readers we scarcely find a good one." (*Essays, Sk. of English Sch.*) It seems to have escaped even Franklin's sagacity that reading aloud is a different art to the art of reading, and a much harder one. The two should be studied separately, and most time and attention should be given to silent reading, which is by far the more important of the two. Colonel F. W. Parker, who has successfully cultivated the power of "looking straight at" things, gives us in his *Talks on Teaching* the right rule for reading. "Changing," says he, "the beautiful power of expression, full of melody, harmony, and correct emphasis and inflection, to the slow, painful, almost agonising pronunciation that we have heard so many times in the school-room, is a terrible sin that we should never be guilty of. There is, indeed, not the slightest need of changing a good habit to a miserable one if we would follow the rule that the child has naturally

followed all his life. *Never allow a child to give a thought till he gets it*" (p. 37). Now that the existence of a thought in children is allowed for, we may expect all sorts of improvements. Reading, as a means of ascertaining thought, is second only to hearing, and this art should be cultivated by giving children books of questions (*e.g.*, Horace Grant's *Arithmetic for Young Children*), and requiring the learner silently to get at the question and then give the answer aloud.

§ 13. Easy descriptive and narrative poetry should be learnt by heart at this stage. That the children may repeat it well, they should get their first notions of it from the master *vivâ voce*. According to the usual plan, they get it up with false emphasis and false stops, and the more thoroughly they have learnt the piece, the more difficulty the master has in making them say it properly.

§ 14. Every lesson should be worked over in various ways. The columns of words at the end of the reading lessons may be printed with writing characters, and used for copies. To write an upright column either of words or figures is an excellent exercise in neatness. The columns will also be used as spelling lessons, and the children may be questioned about the meaning of the words. The poetry, when thoroughly learned, may sometimes be written from memory. Sentences from the book may be copied either directly or from the black-board, and afterwards used for dictation.

§ 15. Boys should, as soon as possible, be accustomed to write out fables, or the substance of other reading lessons, in their own words. They may also write descriptions of things with which they are familiar, or any event which has recently happened, such as a country excursion. Every one feels the necessity, on grounds of practical utility at all events, of boys being taught to express their thoughts neatly on paper, in good English and with correct spelling. Yet this is a point rarely reached before the age of fifteen or sixteen, often never reached at all. The reason is, that written exercises must be carefully looked over by the master, or they are done in a slovenly manner. Anyone who has never taught in a school will say, "Then let the master carefully look them over." But the expenditure of time and trouble this involves on the master is so great, that in the end he is pretty sure either to have few exercises written, or to neglect to look them over. The only remedy is for the master not to have many boys to teach, and not to be

many hours in school. Even then, unless he set apart a special time every day for correcting exercises, he is likely to find them "increase upon him."

§ 16. The course of reading-books, accompanied by large illustrations, may go on to many other things which the children see around them, such as trees and plants, and so lead up to instruction in natural history and physiology. But in imparting all knowledge of this kind, we should aim, not at getting the children to remember a number of facts, but at opening their eyes, and extending the range of their interests.

§ 17. I should suggest, then, for children, three books to be used concurrently, viz., a reading book about animals and things, a poetry book, and a prose narrative or Æsop's Fables. With the first commences a series culminating in works of science; with the second, a series that should lead up to Milton and Shakespeare; the third should be succeeded by some of our best writers in prose.

§ 18. But many schoolmasters will shudder at the thought of a child's spending a year or two at school without ever hearing of the Heptarchy or Magna Charta, and without knowing the names of the great towns in any country of Europe. I confess I regard this ignorance with great equanimity. If the child, or the youth even, takes no interest in the Heptarchy and Magna Charta, and knows nothing of the towns but their names, I think him quite as well off without this knowledge as with it—perhaps better, as such knowledge turns the lad into a "wind-bag," as Carlyle might say, and gives him the appearance of being well-informed without the reality. But I neither despise a knowledge of history and geography; nor do I think that these studies should be neglected for foreign languages or science: and it is because I should wish a pupil of mine to become, in the end, thoroughly conversant in history and geography, that I should, if possible, conceal from him the existence of the numerous school manuals on these subjects.

We will suppose that a parent meets with a book which he thinks will be both instructive and entertaining to his children. But the book is a large one, and would take a long time to get through; so instead of reading any part of it to them or letting them read it for themselves, he makes them *learn by heart the table of contents*. The children do *not* find it entertaining; they get a horror of the book, which prevents their ever looking at it afterwards, and they forget what they have learnt as soon as they possibly can. Just such is

the sagacious plan adopted in teaching history and geography in schools, and such are the natural consequences. Every student knows that the use of an epitome is to *systematise* knowledge, not to communicate it, and yet, in teaching, we give the epitome first, and allow it to precede, or rather to supplant, the knowledge epitomised. The children are disgusted, and no wonder. The subjects, indeed, are interesting, but not so the epitomes. I suppose if we could see the skeletons of the Gunnings, we should not find them more fascinating than any other skeletons.[203]

§ 19. The first thing to be aimed at, then, is to excite the children's interest. Even if we thought of nothing but the acquiring of information, this is clearly the true method. What are the facts which we remember? Those in which we feel an interest. If we are told that So-and-so has met with an accident, or failed in business, we forget it directly, unless we know the person spoken of. Similarly, if I read anything about Addison or Goldsmith, it interests me, and I remember it because they are, so to speak, friends of mine; but the same information about Sir Richard Blackmore or Cumberland would not stay in my head for four-and-twenty hours. So, again, we naturally retain anything we learn about a foreign country in which a relation has settled, but it would require some little trouble to commit to memory the same facts about a place in which we had no concern. All this proceeds from two causes. First, that the mind retains that in which it takes an interest; and, secondly, that one of the principal helps to memory is the association of ideas. These were, no doubt, the ground reasons which influenced Dr. Arnold in framing his plan of a child's first history book. This book, he says, should be a picture-book of the memorable deeds which would best appeal to the child's imagination. They should be arranged in order of time, but with no other connection. The letter-press should simply, but fully, tell the *story* of the action depicted. These would form starting-points of interest. The child would be curious to know more about the great men whose acquaintance he had made, and would associate with them the scenes of their exploits; and thus we might actually find our children anxious to learn history and geography! I am sorry that even the great authority of Dr. Arnold has not availed to bring this method into use. Such a book would, of course, be dear. Bad pictures are worse than none at all: and Goethe tells us that his appreciation of Homer was for years destroyed by his having been shown, when a child, absurd pictures of the Homeric heroes. The book would, therefore, cost six or eight

shillings at least; and who would give this sum for an account of single actions of a few great men, when he might buy the lives of all great men, together with ancient and modern history, the names of the planets, and a great amount of miscellaneous information, all for a shilling in “Mangnall’s Questions”?

However, if the saving of a few shillings is more to be thought of than the best method of instruction, the subject hardly deserves our serious consideration.

§ 20. It is much to be regretted that books for the young are so seldom written by distinguished authors. I suppose that of the three things which the author seeks, money, reputation, influence, the first is not often despised, nor the last considered the least valuable. And yet both money and influence are more certainly gained by a good book for the young than by any other. The influence of “Tom Brown,” however different in kind, is probably not smaller in amount than that of “Sartor Resartus.”

§ 21. What we want is a Macaulay for boys, who shall handle historical subjects with that wonderful art displayed in the “Essays,”—the art of elaborating all the more telling portions of the subject, outlining the rest, and suppressing everything that does not conduce to heighten the general effect. Some of these essays, such as the “Hastings” and “Clive,” will be read with avidity by the elder boys; but Macaulay did not write for children, and he abounds in words to them unintelligible. Had he been a married man, we might perhaps have had such a volume of historical sketches for boys as now we must wish for in vain. But there are good story-tellers left among us, and we might soon expect such books as we desiderate, if it were clearly understood what is the right sort of book, and if men of literary ability and experience would condescend to write them.

§ 22. If, in these latter days, “the individual withers, and the world is more and more,” we must not expect our children to enter into this. Their sympathy and their imagination can be aroused, not for nations, but for individuals; and this is the reason why some biographies of great men should precede any history. These should be written after Macaulay’s method. There should be no attempt at completeness, but what is most important and interesting about the man should be narrated in detail, and the rest lightly sketched, or omitted altogether. Painters understand this

principle, and, in taking a portrait, very often depict a man's features minutely without telling all the truth about the buttons on his waistcoat. But, because in a literary picture each touch takes up additional space, writers seem to fear that the picture will be distorted unless every particular is expanded or condensed in the same ratio.

§ 23. At the risk of wearisome repetition, I must again say that I care as little about driving "useful knowledge" into a boy as the most ultra Cambridge man could wish; but I want to get the boy to have wide sympathies, and to teach himself; and I should therefore select the great men from very different periods and countries, that his net of interest (so to speak) may be spread in all waters.

§ 24. When we have thus got our boys to form the acquaintance of great men, they will have certain associations connected with many towns and countries. Constant reference should be made to the map, and the boys' knowledge and interest will thus make settlements in different parts of the globe. These may be extended by a good book of travels, especially of voyages of discovery. There are now many such books suitable for the purpose, but I am still partial to a book which has been a delight to me and to my own children from our earliest years:—Miss Hack's "Winter Evenings; or, Tales of Travelers"; or, as Routledge now calls a part of it, "Travels in Hot and Cold Lands." In studying such travels, the map should, of course, be always in sight; and outline maps may be filled up by the boys as they learn about the places in the traveller's route. Anyone who has had the management of a school library knows how popular "voyage and venture" is with the boys who have passed the stage in which the picture-books of animals were the main attraction. Captain Cook, Mungo Park, and Admiral Byron are heroes without whom boyhood would be incomplete; but as boys are engrossed by the adventures, and never trouble themselves about the map, they often remember the incidents without knowing where they happened.

Of course, school geographies never mention such people as celebrated travellers; if they did, it would be impossible to give all the principal geographical names in the world within the compass of 200 pages.

§ 25. What might we fairly expect from such a course of teaching as I have here suggested?

At the end of a year and a half, or two years, from the age, say, of nine, the boy would read to himself intelligently; he would write fairly; he would spell all common English words correctly; he would be thoroughly familiar with the relations of all common numbers, that is, of all numbers below 100; he would have had his interest aroused, or, to speak more accurately, not stifled but increased in common objects, such as animals, trees, and plants; he would have made the acquaintance of some great men, and traced the voyages of some great travellers; he would be able to say by heart and to write from memory some of the best simple English poetry, and his ear would be familiar with the sound of good English prose. So much, at least, on the positive side. On the negative there might also be results of considerable value. He would *not* have learned to look upon books and school-time as the torment of his life, nor have fallen into the habit of giving them as little of his attention as he could reconcile with immunity from the cane. The benefit of the negative result might outweigh a very glib knowledge of “tables” and Latin Grammar.

XXI.

THE SCHOOLMASTER'S MORAL AND RELIGIOUS INFLUENCE.

§ 1. All who are acquainted with the standard treatises on the theory of education, and also with the management of schools, will have observed that moral and religious training occupies a larger and more prominent space in theory than in practice. On consideration, we shall find perhaps that this might naturally be expected. Of course we are all agreed that morality is more important than learning, and masters who are many of them clergymen, will hardly be accused of under-estimating the value of religion. Why then, does not moral and religious training receive a larger share of the master's attention? The reason I take to be this. Experience shows that it depends directly on the master whether a boy acquires knowledge, but only indirectly, and in a much less degree, whether he grows up a good and religious man. The aim which engrosses most of our time is likely to absorb an equal share of our interest; and thus it happens that masters, especially those who never associate on terms of intimacy with their pupils out of school, throw energy enough into making boys *learn*, but seldom think at all of the development of their character, or about their thoughts and feelings in matters of religion. This statement may indeed be exaggerated, but no one who has the means of judging will assert that it is altogether without foundation. And yet, although a master can be more certain of sending out his pupils well-taught than well-principled, his influence on their character is much greater than it might appear to a superficial observer. I am not speaking of formal religious instruction. I refer now to the teacher's indirect influence. The results of his formal teaching vary as its amount, but he can apply no such gauge to his informal teaching. A few words of earnest advice or remonstrance, which a boy hears at the right time from a man whom he respects, may affect that boy's character for life. Here everything depends, not on the words used, but on the feeling with which they are spoken, and on the way in which the speaker is regarded by the hearer. In such matters the master has a much

more delicate and difficult task than in mere instruction. The words, indeed, are soon spoken, but that which gives them their influence is not soon or easily acquired. Here, as in so many other instances, we may in a few minutes throw down what it has cost us days—perhaps years—to build up. An unkind word will destroy the effects of long-continued kindness. Boys always form their opinion of a man from the worst they know of him. Experience has not yet taught them that good people have their failings, and bad people their virtues. If the scholars find the master at times harsh and testy, they cannot believe in his kindness of heart and care for their welfare. They do not see that he may have an ideal before him to which he is partly, though not wholly true. They judge him by his demeanour in his least guarded moments—at times when he is jaded and dissatisfied with the result of his labours. At such times he is no longer "in touch" with his pupils. He is conscious only of his own power and mental superiority. Feeling almost a contempt for the boys' weakness, he does not care for their opinion of him or think for an instant what impression he is making by his words and conduct. He gives full play to his *arbitrium*, and says or does something which seems to the boys to reveal him in his true character, and which causes them ever after to distrust his kindness.

§ 2. When we consider the way in which masters endeavour to gain influence, we shall find that they may be divided roughly into two parties, whom I will call the open and the reserved. A teacher of the *open* party endeavours to appear to his pupils precisely as he is. He will hear of no restraint except that of decorum. He believes that if he is as much the superior of his pupils as he ought to be, his authority will take care of itself without his casting round it a wall of artificial reserve. "Be natural," he says; "get rid of affectations and shams of all kinds; and then, if there is any good in you, it will tell on those around you. Whatever is bad, would be felt just as surely in disguise; and the disguise would only be an additional source of mischief." The *reserved*, on the other hand, wish their pupils to think of them as they ought to be rather than as they are. Against the other party they urge that our words and actions cannot always be in harmony with our thoughts and feelings, however much we may desire to make them so. We must, therefore, they say, reconcile ourselves to this; and since our words and actions are more under our control than our thoughts and feelings, we must make them as nearly as possible what they should be, instead of debasing them to involuntary thoughts and feelings which are not

worthy of us. Then again, a teacher who is an idealist may say, “The young require some one to look up to. In my better moments I am not altogether unworthy of their respect; but if they knew all my weaknesses, they would naturally, and perhaps justly, despise me. For their sakes, therefore, I must keep my weaknesses out of sight, and the effort to do this demands a certain reserve in all our intercourse.”

§ 3. I suppose an excess in either direction might lead to mischievous results. The “open” man might be wanting in self-restraint, and might say and do things which, though not wrong in themselves, might have a bad effect on the young. Then, again, the lower and more worldly side of his character might show itself in too strong relief; and his pupils seeing this mainly, and supposing that they understood him entirely, might disbelieve in his higher motives and religious feeling. On the other hand, those who set up for being better than they really are, are, as it were, walking on stilts. They gain no real influence by their separation from their pupils, and they are always liable to an accident which may expose them to their ridicule. [204]

§ 4. I am, therefore, though with some limitation, in favour of the *open* school. I am well aware, however, what an immense demand this system makes on the master who desires to exercise a good influence on the moral and religious character of his pupils. If he would have his pupils know him as he is, if he would have them think as he thinks, feel as he feels, and believe as he believes, he must be, at least in heart and aim, worthy of their imitation. He must (with reverence be it spoken) enter, in his humble way, into the spirit of the perfect Teacher, who said, “For their sakes I sanctify myself, that they also may be sanctified in truth.” Are we prepared to look upon our calling in this light? I believe that the school-teachers of this country need not fear comparison with any other body of men, in point of morality, and religious earnestness; but I dare say many have found, as I have, that the occupation is a very *narrowing* one, that the teacher soon gets to work in a groove, and from having his thoughts so much occupied with routine work, especially with small fault-findings and small corrections, he is apt to settle down insensibly into a kind of moral and intellectual stagnation—Philistinism, as Matthew Arnold has taught us to call it—in which he cares as little for high aims and general principles as his most commonplace pupil. Thus it happens sometimes that a man who set out

with the notion of developing all the powers of his pupils' minds, thinks in the end of nothing but getting them to work out equations and do Latin exercises without false concords; and the clergyman even, who began with a strong sense of his responsibility and a confident hope of influencing the boys' belief and character, at length is quite content if they conform to discipline and give him no trouble out of school-hours. We may say of a really good teacher what Wordsworth says of the poet; in his work he must neither

> lack that first great gift, the vital soul,
> Nor general truths, which are themselves a sort
> Of elements and agents, under-powers,
> Subordinate helpers of the living mind.—*Prelude*, i. 9.

But the "vital soul" is too often crushed by excessive routine labour, and then when general truths, both moral and intellectual, have ceased to interest us, our own education stops, and we become incapable of fulfilling the highest and most important part of our duty in educating others.

§ 5. It is, then, the duty of the teacher to resist gravitating into this state, no less for his pupils' sake than for his own. The ways and means of doing this I am by no means competent to point out; so I will merely insist on the importance of teachers not being overworked—a matter which has not, I think, hitherto received due attention.

We cannot expect intellectual activity of men whose minds are compelled "with pack-horse constancy to keep the road" hour after hour, till they are too jaded for exertion of any kind. The man himself suffers, and his work, even his easiest work, suffers also. It may be laid down as a general rule, that no one can teach long and teach well. All satisfactory teaching and management of boys absolutely requires that the master should be *in good spirits*. When the "genial spirits fail," as they must from an overdose of monotonous work, everything goes wrong directly. The master has no longer the power of keeping the boys' attention, and has to resort to punishments even to preserve order. His gloom quenches their interest and mental activity, just as fire goes out before carbonic acid; and in the end teacher and taught acquire, not without cause, a feeling of mutual aversion.

§ 6. And another reason why the master should not spend the greater part of his time in formal teaching is this—his doing so compels him to neglect the informal but very important teaching he may both give and receive by making his pupils his companions.

§ 7. I fear I shall be met here by an objection which has only too much force in it. Most Englishmen are at a loss how to make any use of leisure. If a man has no turn for thinking, no fondness for reading, and is without a hobby, what good shall his leisure do him? he will only pass it in insipid gossip, from which any easy work would be a relief. That this is so in many cases, is a proof to my mind of the utter failure of our ordinary education: and perhaps an improved education may some day alter what now seems a national peculiarity. Meantime the mind, even of Englishmen, is more than a "succedaneum for salt;"[205] and its tendency to bury its sight, ostrich-fashion, under a heap of routine work must be strenuously resisted, if it is to escape its deadly enemies, stupidity and ignorance.

§ 8. I have elsewhere expressed what I believe is the common conviction of those who have seen something both of large schools and of small, viz., that the moral atmosphere of the former is, as a rule, by far the more wholesome;[206] and also that each boy is more influenced by his companions than by his master. More than this, I believe that in many, perhaps in most, schools, one or two boys affect the tone of the whole body more than any master.[207] What are called Preparatory Schools labour under this immense disadvantage, that their ruling spirits are mere children without reflection or sense of responsibility.[208] But where the leading boys are virtually young men, these may be made a medium through which the mind of the master may act upon the whole school. They can enter into the thoughts, feelings, and aims of the master on the one hand, and they know what is said and done among the boys on the other. The master must, therefore, know the elder boys intimately, and they must know him. This consummation, however, will not be arrived at without great tact and self-denial on the part of the master. The youth who is "neither man nor boy" is apt to be shy and awkward, and is not by any means so easy to entertain as the lad who chatters freely of the school's cricket or football, past, present, and to come. But the master who feels how all-important is the *tone* of the school, will not grudge any pains to influence those on whom it chiefly depends.

§ 9. But, allowing the value of all these indirect influences, can we afford to neglect direct formal religious instruction? We have most of us the greatest horror of what we call a secular education, meaning thereby an education without formal religious teaching. But this horror seems to affect our theory more than our practice. Few parents ever enquire what religious instruction their sons get at Eton, Harrow, or Westminster. At Harrow when I was in the Fourth Form there (nearly fifty years ago by the way) we had no religious instruction except a weekly lesson in Watts's Scripture History; and when I was a master some twenty years ago my form had only a Sunday lesson in a portion of the Old Testament, and a lesson in French Testament at "First School" on Monday. Even in some "Voluntary Schools" we do not find "religious instruction" made so much of as the arithmetic.

§ 10. In this matter we differ very widely from the Germans. All their classes have a "religion-lesson" (*Religionstunde*) nearly every day, the younger children in the German Bible, the elder in the Greek Testament or Church History; and in all cases the teacher is careful to instruct his pupils in the tenets of Luther or Calvin. The Germans may urge that if we believe a set of doctrines to be a fitting expression of Divine revelation, it is our first duty to make the young familiar with those doctrines. I cannot say, however, that I have been favourably impressed by the religion-lessons I have heard given in German schools. I do not deny that dogmatic teaching is necessary, but the first thing to cultivate in the young is reverence; and reverence is surely in danger if you take a class in "religion" just as you take a class in grammar. Emerson says somewhere, that to the poet, the saint, and the philosopher, all distinction of sacred and profane ceases to exist, all things become alike sacred. As the schoolboy, however, does not as yet come under any one of these denominations, if the distinction ceases to exist for him, all things will become alike profane.

§ 11. I believe that religious instruction is conveyed in the most impressive way when it is connected with worship. Where the prayers are joined with the reading of Scripture and with occasional simple addresses, and where the congregation have responses to repeat, and psalms and hymns to sing, there is reason to hope that boys will increase, not only in knowledge, but in wisdom and reverence too. Without asserting that the Church of England service is the best possible for the young, I hold that any form for them should at least resemble it in its main features, should be as

varied as possible, should require frequent change of posture, and should give the congregation much to say and sing. Much use might be made as in the Church of Rome, of litanies. The service, whatever its form, should be conducted with great solemnity, and the boys should not sit or kneel so close together that the badly disposed may disturb their neighbours who try to join in the act of worship. If good hymns are sung, these may be taken occasionally as the subject of an address, so that attention may be drawn to their meaning. Music should be carefully attended to, and the danger of irreverence at practices guarded against by never using sacred words more than is necessary, and by impressing on the singers the sacredness of everything connected with Divine worship. Questions combined with instruction may sometimes keep up boys' attention better than a formal sermon. Though common prayer should be frequent, this should not be supposed to take the place of private prayer. In many schools boys have hardly an opportunity for private prayer. They kneel down, perhaps, with all the talk and play of their schoolfellows going on around them, and sometimes fear of public opinion prevents their kneeling down at all. A schoolmaster cannot teach private prayer, but he can at least see that there is opportunity for it.

Education to goodness and piety, as far as it lies in human hands, must consist almost entirely in the influence of the good and pious superior over his inferiors, and as this influence is independent of rules, these remarks of mine cannot do more than touch the surface of this most important subject. [209]

§ 12. In conclusion, I wish to say a word on the education of opinion. Sir Arthur Helps lays great stress on preparing the way to moderation and open-mindedness by teaching boys that all good men are not of the same way of thinking. It is indeed a miserable error to lead a young person to suppose that his small ideas are a measure of the universe, and that all who do not accept his formularies are less enlightened than himself. If a young man is so brought up, he either carries intellectual blinkers all his life, or, what is far more probable, he finds that something he has been taught is false, and forthwith begins to doubt everything. On the other hand, it is a necessity with the young to believe, and we could not, even if we would, bring a youth into such a state of mind as to regard everything about which there is any variety of opinion as an open question. But he may be taught

reverence and humility; he may be taught to reflect how infinitely greater the facts of the universe must be than our poor thoughts about them, and how inadequate are words to express even our imperfect thoughts. Then he will not suppose that all truth has been taught him in his formularies, nor that he understands even all the truth of which those formularies are the imperfect expression.[210]

XXII.

CONCLUSION.

§ 1. When I originally published these essays (more than 22 years ago) the critic of the *Nonconformist* in one of the best, though by no means most complimentary, of the many notices with which the book was favoured, took me to task for being in such a hurry to publish. I had confessed incompleteness. What need was there for me to publish before I had completed my work? Since that time I have spent years on my subject and at least two years on these essays themselves; but they now seem to me even further from completeness than they seemed then. However, I have reason to believe that the old book, incomplete as it was, proved useful to teachers; and in its altered form it will, I hope, be found useful still.

§ 2. It may be useful I think in two ways.

First: it may lead some teachers to the study of the great thinkers on education. There are some vital truths which remain in the books which time cannot destroy. In the world as Goethe says are few voices, many echoes; and the echoes often prevent our hearing the voices distinctly. Perhaps most people had a better chance of hearing the voices when there were fewer books and no periodicals. Speakers properly so called cannot now be heard for the hubbub of the talkers; and as literature is becoming more and more periodical our writers seem mostly employed like children on card pagodas or like the recumbent artists of the London streets who produce on the stones of the pavement gaudy chalk drawings which the next shower washes out.

But if I would have fewer books what business have I to add to the number? I may be told that—

"He who in quest of quiet, 'Silence!' hoots,
Is apt to make the hubbub he imputes."

My answer is that I do not write to expound my own thought, but to draw attention to the thoughts of the men who are best worth hearing. It is not given to us small people to think strongly and clearly like the great people; we, however, gain in strength and clearness by contact with them; and this contact I seek to promote. So long as this book is used, it will I hope be used only as an *introduction* to the great thinkers whose names are found in it.

§ 3. There is another way in which the book may be of use. By considering the great thinkers in chronological order we see that each adds to the treasure which he finds already accumulated, and thus by degrees we are arriving in education, as in most departments of human endeavour, at a *science*. In this science lies our hope for the future. Teachers must endeavour to obtain more and more knowledge of the laws to which their art has to conform itself.

§ 4. It may be of advantage to some readers if I point out briefly what seems to me the course of the main stream of thought as it has flowed down to us from the Renascence.

§ 5. As I endeavoured to show at the beginning of this book, the Scholars of the Renascence fell into a great mistake, a mistake which perhaps could not have been avoided at a time when literature was rediscovered and the printing press had just been invented. This mistake was the idolatry of books, and, still worse, of books in Latin and Greek. So the schoolmaster fell into a bad theory or conception of his task, for he supposed that his function was to teach Latin and Greek; and his practice or way of going to work was not much better, for his chief implements were grammar and the cane.

§ 6. The first who made a great advance were the Jesuits. They were indeed far too much bent on being popular to be "Innovators." They endeavoured to do well what most schoolmasters did badly. They taught Latin and Greek, and they made great use of grammar, but they gave up the cane. Boys were to be made happy. School-hours were to be reduced from

10 hours a day to 5 hours, and in those 5 hours learning was to be made "not only endurable but even pleasurable."

But the pupils were to find this pleasure not in the exercise of their mental powers but in other ways. As Mr. Eve has said, young teachers are inclined to think mainly of stimulating their pupils' minds and so neglect the repetition needed for accuracy. Old teachers on the other hand care so much for accuracy that they require the same thing over and over till the pupils lose zest and mental activity. The Jesuits frankly adopted the maxim "Repetition is the mother of studies," and worked over the same ground again and again. The two forces on which they relied for making the work pleasant were one good—the personal influence of the master ("boys will soon love learning when they love the teacher,") and one bad or at least doubtful—the spur of emulation.

However, the attempt to lead, not drive, was a great step in the right direction. Moreover as they did not hold with the Sturms and Trotzendorfs that the classics in and for themselves were the object of education the Jesuits were able to think of other things as well. They were very careful of the health of the body. And they also enlarged the task of the schoolmaster in another and still more important way. To the best of their lights they attended to the moral and religious training of their pupils. It is much to the credit of the Fathers that though Plautus and Terence were considered very valuable for giving a knowledge of colloquial Latin and were studied and learnt by heart in the Protestant schools, the Jesuits rejected them on account of their impurity. The Jesuits wished the whole boy, not his memory only, to be affected by the master; so the master was to make a study of each of his pupils and to go on with the same pupils through the greater part of their school course.

The Jesuit system stands out in the history of education as a remarkable instance of a school system elaborately thought out and worked as a whole. In it the individual schoolmaster withered, but the system grew, and was, I may say *is*, a mighty organism. The single Jesuit teacher might not be the superior of the average teacher in good Protestant schools, but by their unity of action the Jesuits triumphed over their rivals as easily as a regiment of soldiers scatters a mob.

§ 7. The schoolmaster's theory of the human mind made of it, to use Bartle Massey's simile, a kind of bladder fit only to hold what was poured into it. This pouring-in theory of education was first called in question by that strange genius who seems to have stood outside all the traditions and opinions of his age,

"holding no form of creed,
But contemplating all."

I mean Rabelais.

Like most reformers, Rabelais begins with denunciations of the system established by use and wont. After an account of the school-teaching and school-books of the day, he says—"It would be better for a boy to learn nothing at all than to be taught such-like books by such-like masters." He then proposes a training in which, though the boy is to study books, he is not to do this mainly, but is to be led to look about him, and to use both his senses and his limbs. For instance, he is to examine the stars when he goes to bed, and then to be called up at four in the morning to find the change that has taken place. Here we see a training of the powers of observation. These powers are also to be exercised on the trees and plants which are met with out-of-doors, and on objects within the house, as well as on the food placed on the table. The study of books is to be joined with this study of things, for the old authors are to be consulted for their accounts of whatever has been met with. The study of trades, too, and the practice of some of them, such as wood-cutting, and carving in stone, makes a very interesting feature in this system. On the whole, I think we may say that Rabelais was the first to advocate training as distinguished from teaching; and he was the father of *Anschauungs-unterricht*, teaching by *intuition*, *i.e.*, by the pupil's own senses and the spring of his own intelligence. Rabelais would bestow much care on the body too. Not only was the pupil to ride and fence; we find him even shouting for the benefit of his lungs.

§ 8. Rabelais had now started an entirely new theory of the educator's task, and fifty years afterwards his thought was taken up and put forward with incomparable vigour by the great essayist, Montaigne. Montaigne starts with a quotation from Rabelais—"The greatest clerks are not the wisest men," and then he makes one of the most effective onslaughts on the

pouring-in theory that is to be found in all literature. His accusation against the schoolmasters of his time is twofold. First, he says, they aim only at giving knowledge, whereas they should first think of judgment and virtue. Secondly, in their method of teaching they do not exercise the pupils' own minds. The sum and substance of the charge is contained in these words —"We labour to stuff the memory and in the meantime leave the conscience and understanding impoverished and void." His notion of education embraced the whole man. "Our very exercises and recreations," says he, "running, wrestling, music, dancing, hunting, riding, fencing, will prove to be a good part of our study. I would have the pupil's outward fashion and mien and the disposition of his limbs formed at the same time with his mind. 'Tis not a soul, 'tis not a body, that we are training up, but a *man*, and we ought not to divide him."

§ 9. Before the end of the fifteen hundreds then we see in the best thought of the time a great improvement in the conception of the task of the schoolmaster. Learning is not the only thing to be thought of. Moral and religious training are recognised as of no less importance. And as "both soul and body have been created by the hand of God" (the words are Ignatius Loyola's), both must be thought of in education. When we come to instruction we find Rabelais recommending that at least part of it should be "intuitive," and Montaigne requiring that the instruction should involve an exercise of the intellectual powers of the learner. But the escape even in thought from the Renascence ideal was but partial. Some of Rabelais' directions seem to come from a "Verbal Realist," and Montaigne was far from saying as Joseph Payne has said, "every act of teaching is a mode of dealing with mind and will be successful only in proportion as this is recognised," "teaching is only another name for mental training." But if Rabelais and Montaigne did not reach the best thought of our time they were much in advance of a great deal of our *practice*.

§ 10. The opening of the sixteen hundreds saw a great revolt from the literary spirit of the Renascence. The exclusive devotion to books was followed by a reaction. There might after all be something worth knowing that books would not teach. Why give so much time to the study of words and so little to the observation of things? "Youth," says a writer of the time, "is deluged with grammar precepts infinitely tedious, perplexed, obscure, and for the most part unprofitable, and that for many years." Why not

escape from this barren region? “Come forth, my son,” says Comenius. “Let us go into the open air. There you shall view whatsoever God produced from the beginning and doth yet effect by nature.” And Milton thus expresses the conviction of his day: “Because our understanding cannot in this body found itself but on sensible things, nor arrive so clearly to the knowledge of God and things invisible as by orderly conning over the visible and inferior creature, the same method is necessarily to be followed in all discreet teaching.”

This great revolution which was involved in the Baconian philosophy may be described as a turning from fancy to fact. All the creations of the human mind seemed to have lost their value. The only things that seemed worth studying were the material universe and the laws or sequences which were gradually ascertained by patient induction and experiment.

§ 11. Till the present century this revolution did not extend to our schools and universities. It is only within the last fifty years that natural science has been studied even in the University of Bacon and Newton. The Public School Commission of 1862 found that the curriculum was just as it had been settled at the Renascence. But if the walls of these educational Jerichos were still standing this was not from any remissness on the part of “the children of light” in shouting and blowing with the trumpet. They raised the war-cry “Not words, but things!” and the cry has been continued by a succession of eminent men against the schools of the 17th and 18th centuries and has at length begun to tell on the schools of the 19th. Perhaps the change demanded is best shown in the words of John Dury about 1649: “The true end of all human learning is to supply in ourselves and others the defects which proceed from our ignorance of the nature and use of the creatures and the disorderliness of our natural faculties in using them and reflecting upon them.” So the Innovators required teachers to devote themselves to natural science and to the science of the human mind.

§ 12. The first Innovators, like the people of the fifteen hundreds, thought mainly of the acquisition of knowledge, only the knowledge was to be not of the classics but of the material world. In this they seem inferior to Montaigne who had given the first place to virtue and judgment.

§ 13. But towards the middle of the sixteen hundreds a very eminent Innovator took a comprehensive view of education, and reduced instruction

to its proper place, that is, he treated it as a part of education merely. This man, Comenius, was at once a philosopher, a philanthropist, and a schoolmaster; and in his writings we find the first attempt at a science of education. The outline of his science is as follows:—

"We live a threefold life—a vegetative, an animal, and an intellectual or spiritual. Of these, the first is perfect in the womb, the last in heaven. He is happy who comes with healthy body into the world, much more he who goes with healthy spirit out of it. According to the heavenly idea a man should—1st, Know all things; 2nd, He should be master of things and of himself; 3rd, He should refer everything to God. So that within us Nature has implanted the seeds of learning, of virtue, and of piety. To bring these seeds to maturity is the object of education. All men require education, and God has made children unfit for other employment that they may have time to learn."

Here we have quite a new theory of the educator's task. He is to bring to maturity the seeds of learning, virtue, and piety, which are already sown by Nature in his pupils. This is quite different from the pouring-in theory, and seems to anticipate the notion of Froebel, that the educator should be called not *teacher* but *gardener*. But Comenius evidently made too much of knowledge. Had he lived two centuries later he would have seen the area of possible knowledge extending to infinity in all directions, and he would no longer have made it his ideal that "man should know all things."

§ 14. The next great thinker about education—I mean Locke—seems to me chiefly important from his having taken up the principles of Montaigne and treated the giving of knowledge as of very small importance. Montaigne, as we have seen, was the first to bring out clearly that education was much more than instruction, as the whole was greater than its part, and that instruction was of far less importance than some other parts of education. And this lies at the root of Locke's theory also. The great function of the educator, according to him, is not to *teach*, but to *dispose* the pupil to virtue first, industry next, and then knowledge; but he thinks where the first two have been properly cared for knowledge will come of itself. The following are Locke's own words:—"The great work of a governor is to fashion the carriage and to form the mind, to settle in his pupil good habits and the principles of virtue and wisdom, to give him little by little a view of mankind and work him into a love and imitation of what is

excellent and praiseworthy; and in the prosecution of it to give him vigour, activity, and industry. The studies which he sets him upon are but, as it were, the exercise of his faculties and employment of his time; to keep him from sauntering and idleness; to teach him application and accustom him to take pains, and to give him some little taste of what his own industry must perfect."[211] So we see that Locke agrees with Comenius in his enlarged view of the educator's task, and that he thought much less than Comenius of the importance of the knowledge to be given.

§ 15. We already see a gradual escape from the "idols" of the Renascence. Locke, instead of accepting the learned ideal, declares that learning is the last and least thing to be thought of. He cares little about the ordinary literary instruction given to children, though he thinks they must be taught something and does not know what to put in its place. He provides for the education of those who are to remain ignorant of Greek, but only when they are "gentlemen." In this respect the van is led by Comenius, who thought of education for *all*, boys and girls, rich and poor, alike. Comenius also gave the first hint of the true nature of our task—to bring to perfection the seeds implanted by Nature. He also cared for the little ones whom the schoolmaster had despised. Locke does not escape from a certain intellectual disdain of "my young masters," as he calls them; but in one respect he advanced as far as the best thinkers among his successors have advanced. Knowledge, he says, must come by the action of the learner's own mind. The true teacher is within.

§ 16. We now come to the least practical and at the same time the most influential of all the writers on education—I mean Rousseau. He, like Rabelais, Montaigne, and Locke, was (to use Matthew Arnold's expression) a "child of the idea." He attacked scholastic use and wont not in the name of expedience, but in the name of reason; and such an attack—so eloquent, so vehement, so uncompromising—had never been made before.

Still there remained even in theory, and far more in practice, effects produced by the false ideal of the Renascence. This ideal Rousseau entirely rejected. He proposed making a clean sweep and returning to what he called the state of Nature.

§ 17. Rousseau was by no means the first of the Reformers who advocated a return to Nature. There has been a constant conviction in men's

minds from the time of the Stoics onwards that most of the evils which afflict humanity have come from our not following "Nature." The cry of "Everything according to Nature" was soon raised by educationists. Ratke announced it as one of his principles. Comenius would base all action on the analogy of Nature. Indeed, there has hardly ever been a system of education which did not lay claim to be the "natural" system. And by "natural" has been always understood something different from what is usual. What is the notion that produces this antithesis?

§ 18. When we come to trace back things to their cause we are wont to attribute them to God, to Nature, or to Man. According to the general belief, God works in and through Nature, and therefore the tendency of things apart from human agency must be to good. This faith which underlies all our thoughts and modes of speech, has been beautifully expressed by Wordsworth—

> "A gracious spirit o'er this earth presides,
> And in the heart of man; invisibly
> It comes to works of unreproved delight
> And tendency benign; directing those
> Who care not, know not, think not, what they do."
>
> *Prelude*, v, *ad f.*

But if the tendency of things is to good, why should the usual be in such strong contrast with "the natural"? Here again we may turn to Wordsworth. After pointing to the harmony of the visible world, and declaring his faith that "every flower enjoys the air it breathes," he goes on—

> "If this belief from heaven be sent,
> If this be Nature's holy plan,
> Have I not reason to lament,
> What Man has made of Man?"

This passage might be taken as the motto of Rousseauism. According to that philosophy man is the great disturber and perverter of the natural order. Other animals simply follow nature, but man has no instinct, and is thus left to find his own way. What is the consequence? A very different authority

from Rousseau, the poet Cowper, tells us in language which Rousseau might have adopted—

> "Reasoning at every step he treads,
> Man yet mistakes his way:
> While meaner things whom instinct leads,
> Are seldom known to stray."

Man has to investigate the sequences of Nature, and to arrange them for himself. In this way he brings about a great number of foreseen results, but in doing this he also brings about perhaps even a greater number of unforeseen results; and alas! it turns out that many, if not most, of these unforeseen results are the reverse of beneficial.

§ 19. Another thing is observable. Other animals are guided by instinct; we, for the most part, are guided by tradition. Man, it has been said, is the only animal that capitalises his discoveries. If we capitalised nothing but our discoveries, this accumulation would be an immense advantage to us; but we capitalise also our conjectures, our ideals, our habits, and unhappily, in many cases, our blunders.[212] So a great deal of action which is purely mischievous in its effects, comes not from our own mistakes, but from those of our ancestors. The consequence is, that what with our own mistakes and the mistakes we inherit, we sometimes go far indeed out of the course which "Nature" has prescribed for us.

§ 20. The generation which found a mouthpiece in Rousseau had become firmly convinced, not indeed of its own stupidity, but of the stupidity of all its predecessors; and the vast patrimony bequeathed to it seemed nothing but lumber or worse. So Rousseau found an eager and enthusiastic audience when he proposed a return to Nature, in other words, to give up all existing customs, and for the most part to do nothing and "give Nature a chance." His boy of twelve years old was to have been taught *nothing*. Up to that age the great art of education, says Rousseau, is to do everything by doing nothing. The first part of education should be purely negative.

§ 21. Rousseau then was the first who escaped completely from the notion of the Renascence, that man was mainly a *learning* and *remembering* animal. But if he is not this, what is he? We must ascertain, said Rousseau,

not *a priori*, but by observation. We need a new art, the art of observing children.

§ 22. Now at length there was hope for the Science of Education. This science must be based on a study of the subject on whom we have to act. According to Locke there is such variation not only in the circumstances, but also in the personal peculiarities of individuals, that general laws either do not exist or can never be ascertained. But this variation is no less observable in the human body, and the art of the physician has to conform itself to a science which is still very far from perfect. The physician, however, does not despair. He carefully avails himself of such science as we now have, and he makes a study of the human body in order to increase that science. When a few more generations have passed away, the medical profession will very likely smile at mistakes made by the old Victorian doctors. But, meantime, we profit by the science of medicine in its present state, and we find that this science has considerably increased the average duration of human life. We therefore require every practitioner to have made a scientific study of his calling, and to have had a training in both the theory and practice of it. The science of education cannot be said to have done much for us at present, but it will do more in the future, and might do more now if no one were allowed to teach before he or she had been trained in the best theory and practice we have. Since the appearance of the Emile the best educators have studied the subject on whom they had to act, and they have been learning more and more of the laws or sequences which affect the human mind and the human body. The marvellous strides of science in every other department encourages us to hope that it will make great advances in the field of education where it is still so greatly needed. Perhaps the day may come when a Pestalozzi may be considered even by his contemporaries on an equality with a Napoleon, and the human race may be willing to give to the art of instruction the same amount of time, money, thought, and energy, which in our day have been devoted with such tremendous success to the art of destruction. It is already dawning on the general consciousness that in education as in physical science “we conquer Nature by obeying her,” and we are learning more and more how to obey her.

§ 23. Rousseau’s great work was first, to expose the absurdities of the school-room, and second, to set the educator on studying the laws of nature

in the human mind and body. He also drew attention to the child's restless activity. He would also (like Locke before him), make the young learner his own teacher.

§ 24. There is another way in which the appearance of the Emile was, as the Germans say, "epoch-making." From the time of the earliest Innovators, we have seen that "Things not Words," had been the war-cry of a strong party of Reformers. But *things* had been considered merely as a superior means of instruction. Rousseau first pointed out the intimate relation that exists between children and the material world around them. Children had till then been thought of only as immature and inferior men. Since his day an English poet has taught us that in some ways the man is far inferior to the child, "the things which we have seen we now can see no more," and that

"nothing can bring back the hour
"Of splendour in the grass, of glory in the flower."

Rousseau had not Wordsworth's gifts, but he, too, observed that childhood is the age of strong impressions from without and that its material surroundings affect it much more acutely than they will in after life. Which of us knows as much about our own house and furniture as our children know? Still more remarkable is the sympathy children have with animals. If a cat comes into a room where there are grown people and also a child, which sees the cat first? which observes it most accurately? Now, this intimate relation of the child with its surroundings plays a most important part in its education. The educator may, if so minded, ignore this altogether, and stick to grammar, dates, and county towns, but if he does so the child's real education will not be much affected by him. Rousseau saw this clearly, and wished to use "things" not for instruction but for education. Their special function was to train the senses.

§ 25. Perhaps it is not too much to say of Rousseau that he was the first who gave up thinking of the child as a being whose chief faculty was the faculty of remembering, and thought of him rather as a being who feels and reflects, acts and invents.

§ 26. But if the thought may be traced back to Rousseau, it was, as left by him, quite crude or rather embryonic. Since his time this conception of the

young has been taken up and moulded into a fair commencement of a science of education. This commencement is now occupying the attention of thinkers such as Herbert Spencer, and much may be expected from it even in the immediate future. For the science so far as it exists we are indebted mainly to the two Reformers with whom I will conclude—Pestalozzi and Froebel.

§ 27. Pestalozzi, like Comenius more than 100 years before him, conceived of education for all. "Every human being," said he, "has a claim to a judicious development of his faculties." Every child must go to school.

But the word *school* includes a great variety of institutions. The object these have in view differs immensely. With us the main object in some schools seems to be to prepare boys to compete at an early age for entrance scholarships awarded to the greatest proficients in Latin and Greek. In other schools the object is to turn the children out "good scholars" in another sense; that is, the school is held to be successful when the boys and girls acquire skill in the arts of reading, writing, and arithmetic, and can remember a number of facts—facts of history, of geography, and even of natural science. So the common notion is that what is wanted in the way of education depends entirely on the child's social position. There still linger among us notions derived from the literary men of the Renascence. We still measure all children by their literary and mnemonic attainments. We still consider knowledge of Latin and Greek the highest kind of knowledge. Children are sent to school that they may not be ignorant.[213] Pestalozzi, who had studied Rousseau, entirely denied all this. He required that the school-coach should be turned and started in a new direction. The main object of the school was not to teach, but to develop, not to *put in* but to *draw out*.

§ 28. The study of nature shows us that every animal comes into the world with certain faculties or capabilities. There are a set of circumstances which will develop these capabilities and make the most of them. There are other circumstances which would impede this development, decrease it, or even prevent it altogether. All other animals have this development secured for them by their ordinary environment: but Man, with far higher capacities, and with immeasurably greater faculties both for good and evil, is left far more to his own resources than the other animals. Placed in an almost endless variety of circumstances we have to ascertain how the development

of our offspring may best be brought about. We have to consider what are the inborn faculties of our children, and also what aids and what hinders their development. When we have arrived at this knowledge we must educate them by placing them in the best circumstances in our power, and then superintending, judiciously and lovingly, the development of their faculties and of their higher nature.

§ 29. There is, said Pestalozzi, only one way in which faculty can be developed, and that is by exercise; so his system sought to encourage the activities of children, and in this respect he was surpassed, as we shall see, by Froebel. "Dead" knowledge, as it has been called—the knowledge commonly acquired for examinations, our school-knowledge, in fact—was despised by Pestalozzi as it had been by Locke and Rousseau before him. In its place he would put knowledge acquired by "intuition," by the spring of the learner's own intelligence.

§ 30. The conception of every child as an organism and of education as the process by which the development of that organism is promoted is found first in Pestalozzi, but it was more consistently thought out by Froebel. There is, said Froebel, a divine idea for every human being, for we are all God's offspring. The object of the education of a human being is to further the development of his divine idea. This development is attainable only through action; for the development of every organism depends on its self-activity. Self-activity then, activity "with a will," is the main thing to be cared for in education. The educator has to direct the children's activity in such a way that it may satisfy their instincts, especially the formative and creative instincts. The child from his earliest years is to be treated as a *doer* and even a *creator*.

§ 31. Now, at last, we have arrived at the complete antithesis between the old education and the New. The old education had one object, and that was learning. Man was a being who learnt and remembered. Education was a process by which he *learnt*, at first the languages and literatures of Rome and Greece only; but as time went on the curriculum was greatly extended. The New Education treats the human being not so much a learner as a doer and creator. The educator no longer fixes his eyes on the object—the knowledge, but on the subject—the being to be educated. The success of the education is not determined by what the educated *know*, but by what they *do* and what they *are*. They are well educated when they love what is good,

and have had all their faculties of mind and body properly developed to do it.

§ 32. The New Education then is "passive, following," and must be based on the study of human nature. When we have ascertained what are the faculties to be developed we must consider further how to foster the self-activity that will develop them.

§ 33. We have travelled far from Dr. Johnson, who asserted that education was as well known as it ever could be. Some of us are more inclined to assert that in his day education was not invented. On the other hand, there are those who belittle the New Education and endeavour to show that in it there is nothing new at all. As it seems to me a revolution of the most salutary kind was made by the thinkers who proposed basing education on a study of the subject to be educated, and, more than this, making the process a "following" process with the object of drawing out self-activity.

§ 34. This change of object must in the end be fruitful in changes of every kind. But as yet we are only groping our way; and, if I may give a caution which, in this country at least, is quite superfluous, we should be cautious, and till we see our way clearly we should try no great experiment that would destroy our connexion with the past. Most of our predecessors thought only of knowledge. By a reaction some of our New Educationists seem to despise knowledge. But knowledge is necessary, and without some knowledge development would be impossible. We probably cannot do too much to assist development and encourage "intuition," but there is, perhaps, some danger of our losing sight of truths which schoolroom experience would bring home to us. Even the clearest "concepts" get hazy again and totally unfit for use, unless they are permanently fixed in the mind by repetition, which to be effective must to some extent take the form of *drill*. The practical man, even the crammer, has here mastered a truth of the teaching art which the educationist is prone to overlook. And there are, no doubt, other things which the practical man can teach. But the great thinkers would raise us to a higher standing-point from which we may see much that will make the right road clearer to us, and lead us to press forward in it with good heart and hope.

FINIS.

FOOTNOTES

[1] When the greater part of this volume was already written, Mr. Parker published his sketch of the history of Classical Education (*Essays on a Liberal Education*, edited by Farrar). He seems to me to have been very successful in bringing out the most important features of his subject, but his essay necessarily shows marks of over-compression. Two volumes have also lately appeared on *Christian Schools and Scholars* (Longmans, 1867). Here we have a good deal of information which we want, and also, it seems to me, a good deal which we do not want. The work characteristically opens with a 10th century description of the personal appearance of St. Mark when he landed at Alexandria. The author treats only of the times which preceded the Council of Trent. A very interesting account of early English education has been given by Mr. Furnivall, in the 2nd and 3rd numbers of the *Quarterly Journal of Education* (1867). [I did not then know of Dr. Barnard's works.]

[2] This article is omitted in the last edition.

[3] The rest of this chapter was published in the September, 1880 number of *Education*. Boston, U.S.A.

[4] On the nature of literature see Cardinal Newman's "Lectures on the Nature of a University. University Subjects. II. Literature."

[5] I see Carlyle has used a similar metaphor in the same connexion: "Consider the old schoolmen and their pilgrimage towards Truth! the faithfullest endeavour, incessant unwearied motion; often great natural vigour, only no progress; nothing but antic feats of one limb poised against the other; there they balanced, somerseted, and made postures; at best gyrated swiftly with some pleasure like spinning dervishes and ended where they began."—*Characteristics*, Misc., vol. iii, 5.

[6] This illustration was suggested by a similar one in Prof. J. R. Seeley's essay "On the teaching of English" in his *Lectures and Essays*, 1870.

[7] Miss J. D. Potter, in "Journal of Education." London, June, 1879

[8] See Erasmus's *Ciceronianus*, or account of it, in Henry Barnard's *German Teachers*.

[9] "On Abuse of Human Learning," by Samuel Butler.

[10] Multum ilium profecisse arbitror, qui ante sextum decimum ætatis annum facultatem duarum linguarum mediocrem assecutus est. (Quoted by Parker.)

[11] R. Mulcaster's *Positions*, 1581, p. 30. I have reprinted this book (Longmans, 1888, price 10*s.*).

[12] Sturm's school "had an European reputation: there were Poles and Portuguese, Spaniards, Danes, Italians, French and English. But besides this, it was the model and mother school of a numerous progeny. Sturm himself

organized schools for several towns which applied to him. His disciples became organizers, rectors, and professors. In short, if Melanchthon was the instructor, Sturm was the schoolmaster of Germany. Together with his method, his school-books were spread broadcast over the land. Both were adopted by Ascham in England, and by Buchanan in Scotland. Sturm himself was a great man at the imperial court. No diplomatist passed through Strasburg without stopping to converse with him. He drew a pension from the King of Denmark, another from the King of France, a third from the Queen of England, collected political information for Cardinal Granvella, and was ennobled by Charles V. He helped to negotiate peace between France and England, and was appointed to confer with a commission of Cardinals on reunion of the Church. In short, Sturm knew what he was about as well as most men of his time. Yet few will be disposed to accept his theory of education, even for the sixteenth century, as the best. Wherein then lay the mistake?... Sturm asserted that the proper end of school education is eloquence, or in modern phrase, a masterly command of language, and that the knowledge of things mainly belongs to a later stage ... Sturm assumed that Latin is the language in which eloquence is to be acquired."

This is from Mr. Charles Stuart Parker's excellent account of Sturm in *Essays on a Liberal Education*, edited by Farrar, Essay I., *On History of Classical Education*, p. 39.

I find from Herbart (*Päd. Schriften*, O. Wilmann's edition, vol. ij, 229 ff; Beyer's edition, ij, 321) that the historian, F. H. Ch. Schwarz, took a very favourable view of Sturm's work; and both he and Karl Schmidt give Sturm credit for introducing the two ways of studying an author that may be carried on at the same time—1st, *statarisch*, *i.e.*, reading a small quantity accurately, and 2nd, *cursorisch*, *i.e.*, getting over the ground. These two kinds, of reading were made much of by J. M. Gesner (1691-1761). Ernst Laas has written *Die Pädagogik J. Sturms* which no doubt does him justice, but I have not seen the book.

[13] Why did Bacon, who spoke slightingly of Sturm (see Parker, in *Essays on Lib. Ed.*), rate the Jesuits so highly? "Consule scholas Jesuitarum: nihil enim quod in usum venit his melius," *De Aug.*, lib. iv, cap. iv. See, too, a longer passage in first book of *De Aug.* (about end of first 1/4), "Quæ nobilissima pars priscæ disciplinæ revocata est aliquatenus, quasi postliminio, in Jesuitarum collegiis; quorum cum intueor industriam solertiamque tam in doctrina excolenda quam in moribus informandis, illud occurrit Agesilai de Pharnabazo, 'Talis cum sis, utinam noster esses.'"

[14] (1) Joseph Anton Schmid's "Niedere Schulen der Jesuiten:" Regensburg, 1852. (2) Article by Wagenmann in K. A. Schmid's "Encyclopädie des Erziehungs-und Unterrichtswesens." (3) "Ratio atque Institutio Studiorum Soc. Jesu." The first edition of this work, published at Rome in 1585, was suppressed as heretical, because it contemplated the possibility of differing from St. Thomas Aquinas. The book is now very scarce. There is a copy in the British Museum. On comparing it with the folio edition ("Constitutiones," &c., published at Prag in 1632), I find many omissions in the latter, some of which are curious, *e.g.*, under "De Matrimonio:"—"Matremne an uxorem occidere sit gravius, non est hujus loci." (4) "Paræ nesis ad Magistros Scholarum Inferiorum Soc. Jesu, scripta a P. Francisco Sacchino, ex eâdem Societate." (5) "Juvencius de Ratione Discendi et Docendi." Crétineau-Joly's "Histoire de la Compagnie de Jésus"

(Paris, 1844), I have not made much use of. Sacchini and Jouvency were both historians of the Order. The former died in 1625, the latter in 1719. There is a good sketch of the Jesuit schools, by Andrewes, in Barnard's *American Journal of Education*, vol. xiv, 1864, reprinted in the best book I know of in English on the History of Education, Barnard's *German Teachers*.

[15] "L'exécution des décrets de 1880 a eu pour résultat la fermeture de leurs collèges. Mais malgré leur dispersion apparente ils sont encore plus puissants qu'on ne le croit, et ce serait une erreur de penser que le dernier mot est dit avec eux."—*Compayré, in Buisson*, ij, p. 1420.

[16] According to the article in K. A. Schmid's "Encyclopädie," the usual course was this—the two years' novitiate was over by the time the youth was between fifteen and seventeen. He then entered a Jesuit college as Scholasticus. Here he learnt literature and rhetoric for two years, and then philosophy (with mathematics) for three more. He then entered on his Regency, *i.e.*, he went over the same ground as a *teacher*, for from four to six years. Then followed a period of theological study, ending with a year of trial, called the *Tertiorat*. The candidate was now admitted to Priest's Orders, and took the vows either as *professus quatuor votorum*, professed father of four vows, or as a *coadjutor*. If he was then sent back to teach, he gave only the higher instruction. The *fourth* vow placed him at the disposal of the Pope.

[17] Karl Schmidt (Gesch. d. Päd., iij. 199, 200), says that however much teachers were wanted, a two years' course of preparation was considered indispensable. When the Novitiate was over the candidate became a "Junior" (*Gallicè* "Juveniste"). He then continued his studies *in literis humanioribus*, preparatory to teaching. When in the "Juvenat" or "Juniorate" he had rubbed up his classics and mathematics, he entered the "Seminary," and two or three times a week he expounded to a class the matter of the previous lecture, and answered questions, &c. For this information I am indebted to the courtesy of Father Eyre (S. J.), of Stonyhurst.

[18] So says Andrewes (*American Journal of Education*), but other authorities put the age of entrance as high as fourteen. The *studia superiora* were begun before twenty-four.

[19] "Non gratia nobilium officiat culturæ vulgarium: cum sint natales omnium pares in Adam et hæreditates quoque pares in Christo."

[20] Even junior masters were not to be much addicted to their own language. "Illud cavendum imprimis juniori magistro ne vernaculis nimium libris indulgeat, præsertim poetis, in quibus maximam temporis ac fortasse morum jacturam faceret."—*Jouvency.*

[21] "Multum proderit si magister non tumultuario ac subito dicat, sed quæ domi cogitate scripserit.—It will be a great gain if the master does not speak in a hurry and without forethought, but is ready with what he has thought out and written out in his own room."—*Ratio Studd.*, quoted by Schmid. And Sacchini says: "Ante omnia, quæ quisque docturus est, egregie calleat. Tum enim bene docet, et facile docet, et libenter docet; bene, quia sine errore; facile, quia sine labore; libenter, quia ex pleno.... Memoriæ minimum fidat: instauret eam refricetque iterata lectione antequam quicquam doceat, etiamsi idem sæpe docuerit. Occurret non raro quod addat vel commodius proponat.—Before all

things let everyone be thoroughly skilled in what he is going to teach; for then he teaches well, he teaches easily, he teaches readily: well, because he makes no mistakes; easily, because he has no need to exert himself; readily, because, like wealthy men he cares not how he gives.... Let him be very distrustful of his memory; let him renew his remembrance and rub it up by repeated reading before he teaches anything, though he may have often taught it before. Something will now and then occur to him which he may add, or put more neatly."

[22] In a school (not belonging to the Jesuits) where this plan was adopted, the boys, by an ingenious contrivance, managed to make it work very smoothly. The boy who was "hearing" the lessons held the book upside down in such a way that the others *read* instead of repeating by heart. The masters finally interfered with this arrangement.

[23] Since the above was written, an account of these concertations has appeared in the Rev. G. R. Kingdon's evidence before the Schools Commission, 1867 (vol. v, Answers 12, 228 ff.) Mr. Kingdon, the Prefect of Studies at Stonyhurst, mentions that the side which wins in most concertations gets an extra half-holiday.

[24] "The grinding over and over of a subject after pupils have attained a fair knowledge of it, is nothing less than stultifying—killing out curiosity and the desire of knowledge, and begetting mechanical habits."—*Supt. J. Hancock*, Dayton, Ohio. Every teacher of experience knows how true this is.

[25] "Stude potius ut pauciora clare distincteque percipiant, quam obscure atque confuse pluribus imbuantur.—Care rather for their seeing a few things vividly and definitely, than that they should get filled with hazy and confusing notions of many things." (There are few more valuable precepts for the teacher than this.)

[26] Sacchini writes in a very high tone on this subject. The following passage is striking: "Gravitatem sui muneris summasque opportunitates assidue animo verset (magister).... 'Puerilis institutio mundi renovatio est;' hæc gymnasia Dei castra sunt, hic bonorum omnium semina latent. Video solum fundamentumque republicæ quod multi non videant interpositu terræ.—Let the mind of the master dwell upon the responsibilities of his office and its immense opportunities.... The education of the young is the renovation of the world. These schools are the camp of God: in them lie the seeds of all that is good. There I see the foundation and ground-work of the commonwealth, which many fail to see from its being underground." Perhaps he had read of Trotzendorf's address to a school, "Hail reverend divines, learned doctors, worshipful magistrates, &c."

[27] "Circa illorum valetudinem peculiari cura animadvertat (Rector) ut et in laboribus mentis modum servent, et in iis quæ ad corpus pertinent, religiosa commoditate tractentur, ut diutius in studiis perseverare tam in litteris addiscendis quam in eisdem exercendis ad Dei gloriam possint."—*Ratio Studd.*, quoted by Schmid. See also *infra* p. 62.

[28] The following, from the *Ratio Studd.*, sounds Jesuitical: "Nec publicé puniant flagitia quædam secretiora sed privatim; aut si publicé, *alias obtendant causas*, et satis est eos qui plectuntur conscios esse causarum."

[29] As the Public Schools Commission pointed out, the Head Master often thinks of nothing but the attainment of University honours, *even when the great majority of his pupils are not going to the University*.

[30] The advantages of learning by heart are twofold, says Sacchini: “Primum memoriam ipsam perficiunt, quod est in totam ætatem ad universa negotia inæstimabile commodum. Deinde suppellectilem inde pulcherrimam congregant verborum ac rerum: quæ item, quamdiu vivant, usui futura sit: cum quæ ætate illa insederint indelebilia soleant permanere. Magnam itaque, ubi adoleverint, gratiam Praeceptori habebunt, cui memoriæ debebunt profectum, magnamque lætitiam capient invenientes quodammodo domi thesaurum quem, in ætate cæteroqui parum fructuosa, prope non sentientes parârint. Enim vero quam sæpe viros graves atque præstantes magnoque jam natu videre et audire est, dum in docta ac nobili corona jucundissime quædam promunt ex iis quæ pueri condiderunt?—First, they strengthen the memory itself and so gain an inestimable advantage in affairs of every kind throughout life. Then they get together by this means the fairest furniture for the mind, both of thoughts and words, a stock that will be of use to them as long as they live, since that which settles in the mind in youth mostly stays there. And when the lads have grown up they will feel gratitude to the master to whom they are indebted for their good memory; and they will take delight in finding within them a treasure which at a time of life otherwise unfruitful they have been preparing almost without knowing it. How often we see and hear eminent men far advanced in life, when in learned and noble company, take a special delight in quoting what they stored up as boys!” The master, he says, must point out to his pupils the advantages we derive from memory; that we only know and possess that which we retain, that this cannot be taken from us, but is with us always and is always ready for use, a living library, which may be studied even in the dark. Boys should therefore be encouraged to run over in their minds, or to say aloud, what they have learnt, as often as opportunity offers, as when they are walking or are by themselves: “Ita numquam in otio futuros otiosos; ita minus fore solos cum soli erunt, consuetudine fruentes sapientum.... Denique curandum erit ut selecta quædam ediscant quæ deinde in quovis studiorum genere ac vita fere omni usui sint futura.—So they will never be without employment when unemployed, never less alone than when alone, for then they profit by intercourse with the wise.... To sum up, take care that they thoroughly commit to memory choice selections which will for ever after be of use to them in every kind of study, and nearly every pursuit in life.”—(Cap. viij.) This is interesting and well put, but we see one or two points in which we have now made an advance. Learning by heart will give none of the advantages mentioned unless the boys understand the pieces and delight in them. Learning by heart strengthens, no doubt, a faculty, but nothing large enough to be called “the memory.” And the Renascence must indeed have blinded the eyes of the man to whom childhood and youth seemed an “ætas parum fructuosa”! Similarly, Sturm speaks of the small fry “qui in extremis latent classibus.” (Quoted by Parker.) But when Pestalozzi and Froebel came these lay hid no longer.

[31] Ranke, speaking of the success of the Jesuit schools, says: “It was found that young persons learned more under them in half a year than with others in two years. Even Protestants called back their children from distant schools, and

put them under the care of the Jesuits."—*Hist. of Popes*, book v, p. 138. Kelly's Trans.

In France, the University in vain procured an *arrêt* forbidding the Parisians to send away their sons to the Jesuit colleges: "Jesuit schools enjoyed the confidence of the public in a degree which placed them beyond competition." (Pattison's *Casaubon*, p. 182.)

Pattison remarks elsewhere that such was the common notion of the Jesuits' course of instruction that their controversialists could treat anyone, even a Casaubon, who had not gone through it, as an uneducated person.

[32] "Sapientum hoc omnium seu veterum seu recentum constans judicium est, institutionem puerilem tum fore optimam cum jucundissima fuerit, inde enim et ludum vocari. Meretur ætatis teneritas ut ne oneretur: meretur innocentia ut ei parcatur ... Quæ libentibus auribus instillantur, ad ea velut occurrit animus, avide suscipit, studiose recondit, fideliter servat."

[33] "Conciliabit facilè studiis quos primùm sibi conciliârit. Det itaque omnem operam illorum erga se observantionem ut sapienter colligat et continenter enutriat. Ostendat, sibi res eorum curæ esse non solum quæ ad animum sed etiam quæ ad alia pertinent. Gaudeat cum gaudentibus, nec dedignetur flere cum flentibus. Instar Apostoli inter parvulos parvulus fiat quo magnos in Christo et magnum in eis Christum efficiat ... Seriam comitatem et paternam gravitatem cum materna benignitate permisceat." Unfortunately, the Jesuits' kind manner loses its value from being due not so much to kind feeling as to some ulterior object, or to a rule of the Order. I think it is Jouvency who recommends that when a boy is absent from sickness or other sufficient reason, the master should send daily to inquire after him, *because the parents will be pleased by such attention*. When the motive of the inquiry is suspected, the parents will be pleased no longer.

[34] "Errorem existimo statim initio spinosiores quasdam grammaticæ difficultates inculcare ... cum enim planioribus insueverint difficiliora paulatim usus explanabit. Quin et capacior subinde mens ac firmius cum ætate judicium, quod alio monstrante perægre unquam percepisset per sese non raro intelliget. Exempla quoque talium rerum dum praelegitur autor facilius in orationis contextu agnoscentur et penetrabunt in animos quam si solitaria et abscissa proponantur. Quamobrem faciendum erit ut quoties occurrunt diligenter enucleentur."

[35] See, *e.g.*, marvellous instances of their self-devotion in that most interesting book, Francis Parkman's *Jesuits in N. America* (Boston, Little & Co., 10th edition, 1876).

[36] I have referred to Francis Parkman, who has chronicled the marvellous self-devotion and heroism of the Jesuit missionaries in Canada. Such a witness may be trusted when he says: "The Jesuit was as often a fanatic for his Order as for his faith; and oftener yet, the two fanaticisms mingled in him inextricably. Ardently as he burned for the saving of souls, he would have none saved on the Upper Lakes except by his brethren and himself. He claimed a monopoly of conversion with its attendant monopoly of toil, hardships, and martyrdom. Often disinterested for himself, he was inordinately ambitious for the great corporate power in which he had merged his own personality; and here lies one of the

causes among many, of the seeming contradictions which abound in the annals of the Order."—*The Discovery of the Great West*, by F. Parkman, London, 1869, p. 28.

[37] In a letter dated from Stonyhurst, 22nd April, 1880.

[38] The best account I have seen of life in a Jesuit school is in *Erinnerungen eines chemaligen Jesuitenzöglings* (Leipzig, Brockhaus, 1862). The writer (Köhler?) says that he has become an evangelical clergyman, but there is no hostile feeling shown to his old instructors, and the narrative bears the strongest internal evidence of accuracy. Some of the Jesuit devices mentioned are very ingenious. All house masters who have adopted the cubicle arrangement of dormitories know how difficult it is to keep the boys in their own cubicles. The Jesuits have the cubicles barred across at the top, and the locks on the doors are so constructed that though they can be opened from the inside *they cannot be shut again*. The Fathers at Freiburg (in Breisgau) opened a "tuck-shop" for the boys, and gave "week's-pay" in counters which passed at their own shop and nowhere else. The author speaks warmly of the kindness of the Fathers and of their care for health and recreation. But their ways were inscrutable and every boy felt himself in the hands of a *human* providence. As the boys go out for a walk, one of them is detained by the porter, who says "the Rector wants to speak to you." On their way back the boys meet a diligence in which sits their late comrade waving adieus. *He has been expelled.*

Another book which throws much light on Jesuit pedagogy is by a Jesuit—*La Discipline*, par le R. P. Emmanuel Barbier (Paris, V. Palmé, 2nd edition, 1888). I will give a specimen in a loose translation, as it may interest the reader to see how carefully the Jesuits have studied the master's difficulties. "The master in charge of the boys, especially in play-time, in his first intercourse with them, has no greater snare in his way than taking his power for granted, and trusting to the strength of his will and his knowledge of the world, especially as he is at first lulled into security by the deferential manner of his pupils.

"That master who goes off with such ease from the very first, to whom the carrying out of all the rules seems the simplest thing in the world, who in the very first hour he is with them has already made himself liked, almost popular, with his pupils, who shows no more anxiety about his work than he must show to keep his character for good sense, that master is indeed to be pitied; he is most likely a lost man. He will soon have to choose one of two things, either to shut his eyes and put up with all the irregularities he thought he had done away with, or to break with a past that he would wish forgotten, and engage in open conflict with the boys who are inclined to set him at defiance. These cases are we trust rare. But many believe with a kind of rash ignorance and in spite of the warnings of experience that the good feelings of their pupils will work together to maintain their authority. They have been told that this authority should be mild and endeared by acts of kindness. So they set about crowning the edifice without making sure of the foundations; and taking the title of authority for its possession they spend all their efforts in lightening a yoke of which no one really bears the weight.

"In point of fact the first steps often determine the whole course. For this reason you will attach extreme importance to what I am now going to advise:

"The chief characteristic in your conduct towards the boys during the first few weeks should be *an extreme reserve*. However far you go in this, you can hardly overdo it. So your first attitude is clearly defined.

"You have everything to observe, the individual character of each boy and the general tendencies and feelings of the whole body. But be sure of one thing, viz., that *you* are observed also, and a careful study is made both of your strong points and of your weak. Your way of speaking and of giving orders, the tone of your voice, your gestures, disclose your character, your tastes, your failings, to a hundred boys on the alert to pounce upon them. One is summed up long before one has the least notion of it. Try then to remain impenetrable. You should never give up your reserve till you are master of the situation.

"For the rest, let there be no affectation about you. Don't attempt to put on a severe manner; answer politely and simply your pupils' questions, but let it be in few words, and *avoid conversation*. All depends on that. Let there be no chatting with them in these early days. You cannot be too cautious in this respect. Boys have such a polite, such a taking way with them in drawing out information about your impressions, your tastes, your antecedents; don't attempt the diplomate; don't match your skill against theirs. You cannot chat without coming out of your shell, so to speak. Instead of this, you must puzzle them by your reserve, and drive them to this admission: 'We don't know what to make of our new master.'

"Do I advise you then to be on the defensive throughout the whole year and like a stranger among your pupils? No! a thousand times, No! It is just to make their relations with you simple, confiding, I might say cordial, without the least danger to your authority, that I endeavour to raise this authority at first beyond the reach of assault."—*La Discipline*, chap, v, pp. 31 ff.

In this book we see the best side of the Jesuits. They believe in their "mission," and this belief throws light on many things. Those who hate the Jesuits have often extolled the wisdom of Montaigne, when he says: "We have not to train up a soul, nor yet a body, but a man; and we cannot divide him." Can they see no wisdom in *this*? "Let your mind be filled with the thought that both soul and body have been created by the Hand of God: we must account to Him for these two parts of our being; and we are not required to weaken one of them out of love for the Creator. We should love the body in the same degree that He could love it." This is what Loyola wrote in 1548 to Francis Borgia (Compayré, *Doctrines, &c.*, vol. j, 179). But if we wish to see the other side of the Jesuit character, we have only to look at the Jesuit as a controversialist. We sometimes see children hiding things and then having a pretence hunt for them. The Jesuits are no children, but in arguing they pretend to be searching for conclusions which are settled before arguments are thought of. See, *e.g.*, the attack on the Port Royalists in *Les Jésuites Instituteurs*, par le P. Ch. Daniel, 1880, in which the Jesuit sets himself to maintain this thesis: "D'une source aussi profondément infectée du poison de l'hérésie, il ne pouvait sortir rien d'absolument bon" (p. 123). One good point he certainly makes, and in my judgment one only, in comparing the Port Royalist schools with the schools of Jesuits. Methods which answer with very small numbers may not do with large numbers: "You might as well try to extend your gardening operations to agriculture" (p. 102).

[39] I am sorry to use a German word, but educational matters have been so little considered among us that we have no English vocabulary for them. The want of a word for *Realien* was felt over 200 years ago. “Repositories for *visibles* shall be prepared by which from beholding the things gentlewomen may learn the names, natures, values, and use of herbs, shrubs, trees, mineral-juices (*sic*), metals, and stones.” (*Essay to Revive the Antient Education of Gentlewomen.* London, 1672.)

[40] See the very interesting *Essay on Montaigne* by Dean R. W. Church.

[41] Perhaps the saying of Montaigne’s which is most frequently quoted is the paradox *Savoir par cœur n’est pas savoir*: (“to know by heart is not to *know*.”) But these words are often misunderstood. The meaning, as I take it, is this: When a thought has entered into the mind it shakes off the words by which it was conveyed thither. Therefore so long as the words are indispensable the thought is not known. Knowing and knowing by heart are not necessarily opposed, but they are different things; and as the mind most easily runs along sequences of words a knowledge of the words often conceals ignorance or neglect of the thought. I once asked a boy if he thought of the meaning when he repeated Latin poetry and I got the instructive answer: “Sometimes, *when I am not sure of the words*.” But there are cases in which we naturally connect a particular form of words with thoughts that have become part of our minds. We then know, and know by heart also.

[42] Lord Armstrong has perhaps never read Montaigne’s *Essay on Pedantry*; certainly, he has not borrowed from it; and yet much that he says in discussing “The Cry for Useless Knowledge” (*Nineteenth Century Magazine*, November, 1888), is just what Montaigne said more than three centuries ago. “The aphorism that knowledge is power is so constantly used by educational enthusiasts that it may almost be regarded as the motto of the party. But the first essential of a motto is that it be true, and it is certainly not true that knowledge is the same as power, seeing that it is only an aid to power. The power of a surgeon to amputate a limb no more lies in his knowledge than in his knife. In fact, the knife has the better claim to potency of the two, for a man may hack off a limb with his knife alone, but not with his knowledge alone. Knowledge is not even an aid to power in all cases, seeing that useless knowledge, which is no uncommon article in our popular schools, has no relation to power. The true source of power is the originative action of the mind which we see exhibited in the daily incidents of life, as well as in matters of great importance.... A man’s success in life depends incomparably more upon his capacities for useful action than upon his acquirements in knowledge, and the education of the young should therefore be directed to the development of faculties and valuable qualities rather than to the acquisition of knowledge.... Men of capacity and possessing qualities for useful action are at a premium all over the world, while men of mere education are at a deplorable discount.” (p. 664).

“There is a great tendency in the scholastic world to underrate the value and potency of self-education, which commences on leaving school and endures all through life.” (p. 667).

“I deprecate plunging into doubtful and costly schemes of instruction, led on by the *ignis fatuus* that ‘knowledge is a power.’ For where natural capacity is

wasted in attaining knowledge, it would be truer to say that knowledge is weakness." (p. 668).

[43] In another matter, also, we find that the masters of these schools subsequently departed widely from the intention of the great men who fostered the revival of learning. Wolsey writes: "Imprimis hoc unum admonendum censuerimus, ut neque plagis severioribus neque vultuosis minis, aut ulla tyrannidis specie, tenera pubes afficiatur: hac enim injuria ingenii alacritas aut extingui aut magna ex parte obtundi solet." Again he says: "In ipsis studiis sic voluptas est intermiscenda ut puer ludum potius discendi quam laborem existimet." He adds: "Cavendum erit ne immodica contentione ingenia discentium obruantur aut lectione prolonga defatigentur; utraque enim juxta offenditur."

[44] Professor Arber is one of the very few editors who give accurate and sufficient bibliographical information about the books they edit. All students of our old literature are under deep obligations to him.

[45] Mayor's is beautifully printed and costs 1*s.* (London, Bell and Sons.)

[46] "Utile imprimis ut multi præcipiunt, vel ex Græco in Latinum vel ex Latino vertere in Græcum; quo genere exercitationis proprietas splendorque verborum, copia figurarum, vis explicandi, præterea imitatione optimorum similia inveniendi facultas paratur: simul quæ legentem fefellissent transferentem fugere non possunt. Intelligentia ex hoc et judicium acquiritur."—*Epp.* vii. 9, § 2. So the passage stands in Pliny. Ascham quotes "*et* ex Græco in Latinum *et* ex Latino vertere in Græcum." with other variations.

[47] *Teaching of Languages in Schools*, by W. H. Widgery, p. 6.

[48] Much information about our early books, with quotations from some of them, will be found in Henry Barnard's *English Pedagogy*, 1st and 2nd series. Some notice of rare books is given in *Schools, School-books, and Schoolmasters*, by W. Carew Hazlitt (London, Jarvis, 1888), but in this work there are strange omissions.

[49] The paging is that of the reprint. It differs slightly from that of first edition.

[50] Mulcaster goes on to talk about the brain, &c. Of course he does not anticipate the discoveries of science, but his language is very different from what we should expect from a writer in the pre-scientific age, *e.g.*, "To serve the turn of these two, both *sense* and *motion*, Nature hath planted in our body a *brain*, the prince of all our parts, which by spreading sinews of all sorts throughout all our parts doth work all those effects which either *sense* is seen in or *motion* perceived by." (*El.*, p. 32.) But much as he thinks of the body Mulcaster is no materialist. "Last of all our soul hath in it an imperial prerogative of understanding beyond sense, of judging by reason, of directing by both, for duty towards God, for society towards men, for conquest in affections, for purchase in knowledge, and such other things, whereby it furnisheth out all manner of uses in this our mortal life, and bewrayeth in itself a more excellent being than to continue still in this roaming pilgrimage." (p. 33.) The grand thing, he says, is to bring all these abilities to perfection "which so heavenly a benefit is begun by education, confirmed by use, perfected with continuance which crowneth the whole work." (p. 34.) "Nature makes the boy toward; nurture sees him forward."

(p. 35.) The neglect of the material world which has been for ages the source of mischief of all kinds in the schoolroom, and which has not yet entirely passed away, would have been impossible if Mulcaster's elementary course had been adopted. "Is the body made by Nature nimble to run, to ride, to swim, to fence, to do anything else which beareth praise in that kind for either profit or pleasure? And doth not the Elementary help them all forward by precept and train? The hand, the ear, the eye be the greatest instruments whereby the receiving and delivery of our learning is chiefly executed, and doth not this Elementary instruct the hand to write, to draw, to play; the eye to read by letters, to discern by line, to judge by both; the ear to call for voice and sound with proportion for pleasure, with reason for wit? Generally whatsoever gift Nature hath bestowed upon the body, to be brought forth or bettered by the mean of train for any profitable use in our whole life, doth not this Elementary both find it and foresee it?" (*El.*, p. 35). "*The hand, the ear, the eye, be the greatest instruments*," said the Elizabethan schoolmaster. So says the Victorian reformer.

[51] I wish some good author would write a book on *Unpopular Truths*, and show how, on some subjects, wise men go on saying the same thing in all ages and nobody listens to them. Plato said "In every work the beginning is the most important part, especially in dealing with anything young and tender." (*Rep.*, bk. ii, 377; Davies and Vaughan, p. 65.) And the complaints about "bad grounding" prove our common neglect of what Mulcaster urged three centuries ago: "For the *Elementarie* because good scholars will not abase themselves to it, it is left to the meanest, and therefore to the worst. For that the first grounding would be handled by the best, and his reward would be greatest, because both his pains and his judgment should be with the greatest. And it would easily allure sufficient men to come down so low, if they might perceive that reward would rise up. No man of judgment will contrary this point, neither can any ignorant be blamed for the contrary: the one seeth the thing to be but low in order, the other knoweth the ground to be great in laying, not only for the matter which the child doth learn: which is very small in show though great for process: but also for the manner of handling his wit, to hearten him for afterward, which is of great moment. The first master can deal but with a few, the next with more, and so still upward as reason groweth on and receives without forcing. It is the foundation well and soundly laid, which makes all the upper building muster, with countenance and continuance. If I were to strike the stroke, as I am but to give counsel, the first pains truly taken should in good truth be most liberally recompensed; and less allowed still upward, as the pains diminish and the ease increaseth. Whereat no master hath cause to repine, so he may have his children well grounded in the *Elementarie*. Whose imperfection at this day doth marvellously trouble both masters and scholars, so that we can hardly do any good, nay, scantly tell how to place the too too raw boys in any certain form, with hope to go forward orderly, the ground-work of their entry being so rotten underneath." (*PP.*, pp. 233, 4.)

[52] Quaint as we find Mulcaster in his mode of expression, the thing expressed is sometimes rather what we should expect from Herbert Spencer than from a schoolmaster of the Renascence. I have met with nothing more modern in thought than the following: "In time all learning may be brought into one tongue, and that natural to the inhabitant: so that schooling for tongues may prove needless, as once they were not needed; but it can never fall out that arts

and sciences in their right nature shall be but most necessary for any commonwealth that is not given over unto too too much barbarousness." (*PP.*, 240.)

[53] "Subject to a regulation like that of the ancient Spartans, the theft of knowledge in our sex is only connived at while carefully concealed, and if displayed [is] punished with disgrace." So says Mrs. Barbauld, and I have met with similar passages in other female writers.

[54] John Brinsley (the elder) who married a sister of Bishop Hall's and kept school at Ashby-de-la-Zouch (was it the *Grammar School*?) was one of the best English writers on education. In his *Consolation for our Grammar Schooles*, published early in the sixteen hundreds, he says: "Amongst others myself having first had long experience of the manifold evils which grow from the ignorance of a right order of teaching, and afterwards some gracious taste of the sweetness that is to be found in the better courses truly known and practised, I have betaken me almost wholly, for many years unto this weighty work, and that not without much comfort, through the goodness of our blessed God." (p. 1.) "And for the most part wherein any good is done, it is ordinarily effected by the endless vexation of the painful master, the extreme labour and terror of the poor children with enduring far overmuch and long severity. Now whence proceedeth all this but because so few of those who undertake this function are acquainted with any good method or right order of instruction fit for a grammar school?" (p. 2.) It is sad to think how many generations have since suffered from teachers "unacquainted with any good method or right order of instruction." And it seems to justify Goethe's dictum, "*Der Engländer ist eigentlich ohne Intelligenz*," that for several generations to come this evil will be but partially abated.

[55] At Cambridge (as also in London and Edinburgh) there is already a Training College for Women Teachers in Secondary Schools.

[56] All we know of his life may soon be told. Richard Mulcaster was a Cumberland man of good family, an "esquier borne," as he calls himself, who was at Eton, then King's College, Cambridge, then at Christ Church, Oxford. His birth year was probably 1530 or 1531, and he became a student of Christ Church in 1555. In 1558 he settled as a schoolmaster in London, and was elected first headmaster of Merchant Taylors' School, which dates from 1561. Here he remained twenty-five years, *i.e.* till 1586. Whether he then became, as H. B. Wilson says, surmaster of St. Paul's, I cannot determine, but "he came in" highmaster in 1596, and held that office for twelve years. Though in 1598 Elizabeth made him rector of Stanford Rivers, there can be no doubt that he did not give up the highmastership till 1608, when he must have been about 77 years old. He died at Stanford Rivers three years later. While at Merchant Taylors', viz., in 1581 and 1582, he published the two books which have secured for him a permanent place in the history of education in England. The first was his *Positions*, the second "The first part" (and, as it proved, the only part) of his *Elementarie*. Of his other writings, his *Cato Christianus* seems to have been the most important, and a very interesting quotation from it has been preserved in Robotham's Preface to the *Janua* of Comenius; but the book itself is lost: at least I never heard of a copy, and I have sought in vain in the British Museum, and at the University Libraries of Oxford and Cambridge. His *Catechismus Paulinus* is a rare book, but Rev. J. H. Lupton has found and described a copy in the Bodleian.

[57] *Lectures and Essays*: *English in School*, by J. R. Seeley, p. 222. Elsewhere in the same lecture (p. 229) Professor Seeley says: "The schoolmaster might set this right. Every boy that enters the school is a *talking* creature. He is a performer, in his small degree, upon the same instrument as Milton and Shakespeare. Only do not sacrifice this advantage. Do not try by artificial and laborious processes to give him a new knowledge before you have developed that which he has already. Train and perfect the gift of speech, unfold all that is in it, and you train at the same time the power of thought and the power of intellectual sympathy, you enable your pupil to think the thoughts and to delight in the words of great philosophers and poets." I wish this lecture were published separately.

[58] *Rep.* bk. vii, 536, *ad f.*; Davies and Vaughan, p. 264.

[59] In Buisson (*Dictionnaire*) No. 7 is "The children must have frequent play, and a break after every lesson." Raumer connects this with No. 6, and says: "breaks were rendered necessary by Ratke's plan, which kept the learners far too silent."

[60] In the matter of grammar Ratke's advice, so long disregarded, has recently been followed in the "Parallel Grammar Series," published by Messrs. Sonnenschein.

[61] The ordinary teaching of almost every subject offers illustrations of the neglect of this principle. Take, *e.g.*, the way in which children are usually taught to read. First, they have to say the alphabet—a very easy task as it seems to us, but if we met with a strange word of *twenty-six syllables*, and that not a compound word, but one of which every syllable was new to us, we might have some difficulty in remembering it. And yet such a word would be to us what the alphabet is to a child. When he can perform this feat, he is next required to learn the visual symbols of the sounds and to connect these with the vocal symbols. Some of the vocal symbols bring the child in contact with the sound itself, but most are simply conventional. What notion does the child get of the aspirate from the name of the letter *h*? Having learnt twenty-six visual and twenty-six vocal symbols, and connected them together, the child *finally comes to the sounds* (over 40 in number) *which the symbols are supposed to represent*.

[62] See Mr. E. E. Bowen's vigorous essay on "Teaching by means of Grammar," in *Essays on a Liberal Education*, 1867.

I have returned to the subject of language-learning in § 15 of *Jacotot* in the *note*. See page 426.

[63] Preface to the *Prodromus*.

[64] Preface to *Prodromus*, first edition, p. 40; second edition (1639), p. 78. The above is Hartlib's translation, see *A Reformation of Schools, &c.*, pp. 46, 47.

[65] Preface to *Prodromus*, first edition, p. 40; second edition, p. 79. *A Reformation, &c.*, p. 47.

[66] Very interesting are the "immeasurable labours and intellectual efforts" of Master Samuel Hartlib, whom Milton addresses as "a person sent hither by some good providence from a far country, to be the occasion and incitement of great good to this island." (*Of Education*, A.D. 1644.) See Masson's *Life of Milton*, vol. iii; also biographical and bibliographical account of Hartlib by H. Dircks, 1865.

Hartlib's mother was English. His father, when driven out of Poland by triumph of the Jesuits, settled at Elbing, where there was an English "Company of Merchants" with John Dury for their chaplain. Hartlib came to England not later than 1628, and devoted himself to the furtherance of a variety of schemes for the public good. He was one of those rare beings who labour to promote the schemes of others as if they were their own. He could, as he says, "contribute but little" himself, but "being carried forth to watch for the opportunities of provoking others, who can do more, to improve their talents, I have found experimentally that my endeavours have not been without effect." (Quoted by Dircks, p. 66.) The philosophy of Bacon seemed to have introduced an age of boundless improvement; and men like Comenius, Hartlib, Petty, and Dury, caught the first unchecked enthusiasm. "There is scarce one day," so Hartlib wrote to Robert Boyle, "and one hour of the day or night, being brim full with all manner of objects of the most public and universal nature, but my soul is crying out 'Phosphore redde diem! Quid gaudia nostra moraris? Phosphore redde diem!'"

But in this world Hartlib looked in vain for the day. The income of £300 a year allowed him by Parliament was £700 in arrears at the Restoration, and he had then nothing to hope. His last years were attended by much physical suffering and by extreme poverty. He died as Evelyn thought at Oxford in 1662, but this is uncertain.

[67] *Dilucidatio*, Hartlib's trans., p. 65.

[68] The *Dilucidation*, as he calls it, is added. All the books above mentioned are in the Library of the British Museum under *Komensky*.

[69] Masson's *Milton*, vol. iii, p. 224, Prof. Masson is quoting *Opera Didactica*, tom. ii, Introd.

[70] *Unum Necessarium*, quoted by Raumer.

Compare George Eliot: "By desiring what is perfectly good, even when we don't quite know what it is, and cannot do what we would, we are part of the Divine power against evil—widening the skirts of light and making the struggle with darkness narrower."—*Middlemarch*, bk. iv, p. 308 of first edition.

[71] Compare Mulcaster, *supra*, p. 94.

[72] Comenius here follows Ratke, who, as I have mentioned above (p. 116), required beginners to study the translation *before the original*.

[73] Professor Masson (*Life of Milton*, vol. iii, p. 205, *note*) gives us the following from chap. ix (cols. 42-44), of the *Didactica Magna*:—

"Nor, to say something particularly on this subject, can any sufficient reason be given why the weaker sex [*sequior sexus*, literally the *later* or *following* sex, is his phrase, borrowed from Apuleius, and, though the phrase is usually translated the inferior sex, it seems to have been chosen by Comenius to avoid that implication] should be wholly shut out from liberal studies whether in the native tongue or in Latin. For equally are they God's image; equally are they partakers of grace, and of the Kingdom to come; equally are they furnished with minds agile and capable of wisdom, yea, often beyond our sex; equally to them is there a possibility of attaining high distinction, inasmuch as they have often been employed by God Himself for the government of peoples, the bestowing of

wholesome counsels on Kings and Princes, the science of medicine and other things useful to the human race, nay even the prophetical office, and the rattling reprimand of Priests and Bishops [etiam ad propheticum munus, et increpandos Sacerdotes Episcoposque, are the words; and as the treatise was prepared for the press in 1638 one detects a reference, by the Moravian Brother in Poland to the recent fame of Jenny Geddes, of Scotland]. Why then should we admit them to the alphabet, but afterwards debar them from books? Do we fear their rashness? The more we occupy their thoughts, the less room will there be in them for rashness, which springs generally from vacuity of mind."

[74] Translated by Daniel Benham as *The School of Infancy*. London, 1858.

[75] Here Comenius seems to be thinking of the intercourse of children when no older companion is present; Froebel made more of the very different intercourse when their thoughts and actions are led by some one who has studied how to lead them. Children constantly want help from their elders even in amusing themselves. On the other hand, it is only the very wisest of mortals who can give help enough and *no more*. Self-dependence may sometimes be cultivated by "a little wholesome neglect."

[76] Comical and at the same time melancholy results follow. In an elementary school, where the children "took up" geography for the Inspector, I once put some questions about St. Paul at Rome. I asked in what country Rome was, but nobody seemed to have heard of such a place. "It's geography!" said I, and some twenty hands went up directly: their owners now answered quite readily, "In Italy."

[77] "A talent for History may be said to be born with us, as our chief inheritance. In a certain sense all men are historians. Is not every memory written quite full of annals...? Our very speech is curiously historical. Most men, you may observe, speak only to narrate." (Carlyle on *History*. Miscellanies.)

[78] South Kensington, which controls the drawing of millions of children, says precisely the opposite, and prescribes a kind of drawing, which, though it may give manual skill to adults, does not "afford delight" to the mind of children.

[79] "Generalem nos intendimus institutionem omnium qui homines nati sunt, ad omnia humana.... Vernaculæ (scholæ) scopus metaque erit, ut omnis juventus utriusque sexus, intra annum sextum et duodecimum seu decimum tertium, ea addoceatur quorum usus per totam vitam se extendat." I quote this Latin from the excellent article *Coménius* (by several writers) in Buisson's *Dictionnaire*. It is a great thing to get an author's exact words. Unfortunately the writer in the *Dictionnaire* follows custom and does not give the means of verifying the quotation. Comenius in Latin I have never seen except in the British Museum.

[80] In Sermon on Charity Schools, A.D. 1745. The Bishop points out that "training up children is a very different thing from merely teaching them some truths necessary to be known or believed." He goes into the historical aspect of the subject. As since the days of Elizabeth there has been legal provision for the maintenance of the poor, there has been "need also of some particular legal provision in behalf of poor children for their *education*; this not being included in what we call maintenance." "But," says the Bishop, "it might be necessary that a burden so entirely new as that of a poor-tax was at the time I am speaking

of, should be as light as possible. Thus the legal provision for the poor was first settled without any particular consideration of that additional want in the case of children; as it still remains with scarce any alteration in this respect." And *remained* for nearly a century longer. Great changes naturally followed and will follow from the extension of the franchise; and another century will probably see us with a Folkschool worthy of its importance. By that time we shall no longer be open to the sarcasm of "the foreign friend:" "It is highly instructive to visit English elementary schools, for there you find everything that should be avoided." (M. Braun quoted by Mr. A. Sonnenschein. The *Old* Code was in force.)

[81] "Adhuc sub judice lis est." I find the editor of an American educational paper brandishing in the face of an opponent as a quotation from Professor N. A. Calkins' "Ear and Voice Training": "The senses are the only powers by which children can gain the elements of knowledge; and until these have been trained to act, no definite knowledge can be acquired." But Calkins says, "act, under direction of the mind."

[82] "What do you learn from 'Paradise Lost'? Nothing at all. What do you learn from a cookery book? Something new, something that you did not know before, in every paragraph. But would you therefore put the wretched cookery book on a higher level of estimation than the divine poem? What you owe to Milton is not any *knowledge*, of which a million separate items are but a million of advancing steps on the same earthly level; what you owe is *power*, that is, exercise and expansion to your own latent capacity of sympathy with the infinite, where every pulse and each separate influx is a step upward—a step ascending as upon a Jacob's ladder from earth to mysterious altitudes above the earth. All the steps of knowledge from first to last carry you further on the same plane, but could never raise you one foot above your ancient level of earth; whereas the very *first* step in power is a flight, is an ascending into another element where earth is forgotten." I have met with this as a quotation from De Quincey.

[83] When I visited (some years ago) the "École Modèle" at Brussels I was told that books were used for *nothing* except for learning to read. Comenius was saved from this consequence of his realism by his fervent Christianity. He valued the study of the Bible as highly as the Renascence scholars valued the study of the classics, though for a very different reason. He cared for the Bible not as literature, but as the highest authority on the problems of existence. Those who, like Matthew Arnold, may attribute to it far less authority may still treasure it as literature, while those who despise literature and recognise no authority above things would limit us to the curriculum of the "École Modèle" and care for natural science only.

In this country we are fortunately able to advocate some reforms which were suggested by the realism of Comenius without incurring any suspicion of rejecting his Christianity. It is singular to see how the highest authorities of to-day—men conversant with the subject on the side of practice as well as theory—hold precisely the language which practical men have been wont to laugh at as "theoretical nonsense" ever since the days of Comenius. A striking instance will be found in a lecture by the Principal of the Battersea Training College (Rev. Canon Daniel) as reported in *Educational Times*, July, 1889. Compare what Comenius said (*supra* p. 151) with the following: "Children are not sufficiently

required to use their senses. They are allowed to observe by deputy. They look at Nature through the spectacles of Books, and through the eyes of the teacher, but do not observe for themselves. It might be expected that in object lessons and science lessons, which are specially intended to cultivate the observing faculty, this fault would be avoided, but I do not find that such is the case. I often hear lessons on objects that are not object lessons at all. The object is not allowed to speak for itself, eloquent though it is, and capable though it is of adapting its teaching to the youngest child who interrogates it. The teacher buries it under a heap of words and second-hand statements, thereby converting the object lesson into a verbal lesson and throwing away golden opportunities of forming the scientific habit of mind. Now mental science teaches us that our knowledge of the sensible qualities of the material world can come to us only through our senses, and through the right senses. If we had no senses we should know nothing about the material world at all; if we had a sense less we should be cut off from a whole class of facts; if we had as many senses as are ascribed to the inhabitants of Sirius in Voltaire's novel, our knowledge would be proportionately greater than it is now. Words cannot compensate for sensations. The eloquence of a Cicero would not explain to a deaf man what music is, or to a blind man what scarlet is. Yet I have frequently seen teachers wholly disregard these obvious truths. They have taught as though their pupils had eyes that saw not, and ears that heard not, and noses that smelled not, and palates that tasted not, and skins that felt not, and muscles that would not work. They have insisted on taking the words out of Nature's mouth and speaking for her. They have thought it derogatory to play a subordinate part to the object itself."

This subject has been well treated by Mr. Thos. M. Balliet in a paper on shortening the curriculum (*New York School Journal*, 10th Nov., 1888). "Studies," says he, "are of two kinds (1) studies which supply the mind with thoughts of images, and (2) those which give us 'labels,' *i.e.* the means of indicating and so communicating thought. Under the last head come the study of language, writing (including spelling), notation, &c." Mr. Balliet proposes, as Comenius did, that the symbol subjects shall not be taken separately, but in connexion with the thought subjects. Especially in the mother-tongue, we should study language for thought, not thought for the sake of language.

But after all though we may and *should* bring the young in connexion with the objects of thought and not with words merely, we must not forget that the scholastic aspect of things will differ from the practical. When brought into the schoolroom the thing must be divested of details and surroundings, and used to give a conception of one of a class. The fir tree of the schoolboy cannot be the fir tree of the wood-cutter. The "boiler" becomes a cylinder subject to internal or external pressure. It is not the thing that the engine-driver knows will burn and corrode, get foul in its tubes and loose in its joints, and be liable to burst. (See Mr. C. H. Benton on "Practical and Theoretical Training" in *Spectator*, 10th Nov., 1888). The school knowledge of things no less than of words may easily be over-valued. It should be given not for itself but to excite interest and draw out the powers of the mind.

[84] Ruskin seems to be echoing Comenius (of whom perhaps he never heard) when he says "To be taught to see is to gain word and thought at once, and both true." (*Address at Camb. Sch. of Art*, Oct. 1858.)

[85] As far as my experience goes there are few men capable both of teaching and being taught, and of these rare beings Comenius was a noble example. The passage in which he acknowledges his obligation to the Jesuits' *Janua* is a striking proof of his candour and open-mindedness.

As an experiment in language-teaching this *Janua* is a very interesting book, and will be well worth a note. From Augustin and Alois de Backer's *Bibliothèque des Ecrivains de la C. de Jésus*, I learn that the author William Bath or Bathe [Latin Bateus] was born in Dublin in 1564, and died in Madrid in 1614. "A brief introduction to the skill of song as set forth by William Bathe, gent." is attributed to him; but we know nothing of his origin or occupation till he entered on the Jesuit noviciate at Tournai in 1596. Either before or after this "he ran" as he himself tells us "the pleasant race of study" at Beauvais. After studying at Padua he was sent as Spiritual Father to the Irish College at Salamanca. Here, according to C. Sommervogel he wrote two Latin books. He also designed the *Janua Linguarum*, and carried out the plan with the help of the other members of the college. The book was published at Salamanca "apud de Cea Tesa" 1611, 4to. Four years afterwards an edition with English version added was published in London edited by Wm. Welde. I have never seen the Spanish version, but a copy of Welde's edition (wanting title page) was bequeathed to me by a friend honoured by all English-speaking students of education, Joseph Payne. The *Janua* must have had great success in this country, and soon had other editors. In an old catalogue I have seen "*Janua Linguarum Quadrilinguis*, or a Messe of Tongues, Latine, English, French, Spanish, neatly served up together for a wholesome repast to the worthy curiositie of the studious, sm. 4to, Matthew Lowndes, 1617." This must have been the early edition of Isaac Habrecht. I have his "*Janua Linguarum Silinguis*. *Argentinæ* (Strassburg), 1630," and in the Preface he says that the first English edition came out in 1615, and that he had added a French version and published the book at London in four languages in 1617. I have seen "sixth edition 1627," also published by Lowndes, and edited "opera I. H. (John Harmar, called in Catalogue of British Museum 'Rector of Ewhurst') Scholæ Sancti Albani Magistri primarii." Harmar, I think, suppressed all mention of the author of the book, but he kept the title. This seems to have been altered by the celebrated Scioppius who published the book as *Pascasii Grosippi Mercurius bilinguis*.

This Jesuits' *Janua* is one of the most interesting experiments in language teaching I ever met with. Bathe and his co-adjutors collected as they believed all the common root words in the Latin language; and these they worked up into 1,200 short sentences in the form of proverbs. After the sentences follows a short Appendix *De ambiguis* of which the following is a specimen: "Dum malum comedis juxta malum navis, de malo commisso sub malo vetita meditare. While thou eatest an apple near the mast of a ship, think of the evil committed under the forbidden apple tree." An alphabetical index of all the Latin words is then given, with the number of the sentence in which the word occurs.

Prefixed to this *Janua* we find some introductory chapters in which the problem: What is the best way of learning a foreign language? is considered and some advance made towards a solution. "The body of every language consisteth of four principal members—words, congruity, phrases, and elegancy. The dictionary sets down the words, grammar the congruities, Authors the phrases, and Rhetoricians (with their figures) the elegancy. We call phrases the proper

forms or peculiar manners of speaking which every Tongue hath." (Chap. 1 *ad f.*) Hitherto, says Bathe, there have been in use, only two ways of learning a language, "regular, such as is grammar, to observe the congruities; and irregular such as is the common use of learners, by reading and speaking in vulgar tongues." The "regular" way is more certain, the "irregular" is easier. So Bathe has planned a middle way which is to combine the advantages of the other two. The "congruities" are learnt regularly by the grammar. Why are not the "words" learned regularly by the dictionary? 1st, Because the Dictionary contains many useless words; 2nd, because compound words may be known from the root words without special learning; 3rd, because words as they stand in the Dictionary bear no sense and so cannot be remembered. By the use of this *Janua* all these objections will be avoided. Useful words and root words only are given, and they are worked up into sentences "easy to be remembered." And with the exception of a few little words such as *et*, *in*, *qui*, *sum*, *fio* no word occurs a second time; thus, says Bathe, the labour of learning the language will be lightened and "as it was much more easy to have known all the living creatures by often looking into Noe's Ark, wherein was a selected couple of each kind, than by travelling over all the world until a man should find here and there a creature of each kind, even in the same manner will all the words be far more easily learned by use of these sentences than by hearing, speaking or reading until a man do accidentally meet with every particular word." (Proeme *ad f.*) "We hope no man will be so ingrateful as not to think this work very profitable," says the author. For my own part I feel grateful for such an earnest attempt at "retrieving of the curse of Babylon," but I cannot show my gratitude by declaring "this work very profitable." The attempt to squeeze the greater part of a language into 1,200 short sentences could produce nothing better than a curiosity. The language could not be thus squeezed into the memory of the learner.

[86] This book must have had a great sale in England. Anchoran's version (the Latin title of which is *Porta* not *Janua*) went through several editions. I have a copy of *Janua Linguarum Reserata* "formerly translated by Tho. Horn: afterwards much corrected and amended by Joh. Robotham: now carefully reviewed and exactly compared with all former editions, foreign and others, and much enlarged both in the Latine and English: together with a Portall ... by G. P. 1647." "W. D." was a subsequent editor, and finally it was issued by Roger Daniel, to whom Comenius dedicates from Amsterdam in 1659 as "Domino Rogero Danieli, Bibliopolæ ac Typographo Londinensi celeberrimo."

[87] Eilhardus Lubinus or Eilert Lueben, born 1565; was Professor first of Poetry then of Theology at Rostock, where he died in 1621. This projector of the most famous school-book of modern times seems not to be mentioned in K. A. Schmid's great *Encyklopädie*, at least in the first edition. (I have not seen the second.) I find from F. Sander's *Lexikon d. Pädagogik* that Ratke declared he learnt nothing from Lubinus, while Comenius recognised him gratefully as his predecessor. This is just what we should have expected from the character of Ratke and of Comenius. Lubinus advocated the use of interlinear translations and published (says Sander) such translations of the New Testament, of Plautus, &c. The very interesting Preface to the New Test., was translated into English by Hartlib and published as "The True and Readie Way to Learne the Latine Tongue by E. Lubinus," &c., 1654. The date given for Lubinus' preface is 1614. L. finds

fault with the grammar teaching which is thrashed into boys so that they hate their masters. He would appeal to the senses: "For from these things falling under the sense of the eyes, and as it were more known, we will make entrance and begin to learn the Latin speech. Four-footed living creatures, creeping things, fishes and birds which can neither be gotten nor live well in these parts ought to be painted. Others also, which because of their bulk and greatness cannot be shut up in houses may be made in a lesser form, or drawn with the pencil, yet of such bigness as they may be well seen by boys even afar off." He says he has often counselled the Stationers to bring out a book "in which all things whatsoever which may be devised and written and seen by the eyes, might be described, so as there might be also added to all things and all parts and members of things, its own proper word, its own proper appellation or term expressed in the Latin and Dutch tongues" (pp. 22, 23). "Visible things are first to be known by the eyes" (p. 23), and the joining of seeing the thing and hearing the name together "is by far the profitablest and the bravest course, and passing fit and applicable to the age of children." Things themselves if possible, if not, pictures (p. 25). There are some capital hints on teaching children from things common in the house, in the street, &c. One Hadrianus Junius has made a "nomenclator" that may be useful. In the pictures of the projected book there are to be lines under each object, and under its printed name. (The excellent device of corresponding numbers seems due to Comenius.) For printing below the pictures L. also suggests sentences which are simpler and better for children than those in the Vestibulum, *e.g.* "Panis in Mensa positus est, Felis vorat Murem."

In the Brit. Museum there is a copy of *Medulla Linguæ Græcæ* in which L. works up the root words of Greek into sentences. He was evidently a man with ideas. Comenius thought of them so highly that he tried to carry out another at Saros-Patak, the plan of a "Cœnobium" or Roman colony in which no language should be used but Latin.

[88] For full titles of the books referred to see p. 195.

[89] The solitaries of Port-Royal used to vary their mental toil with manual. A Jesuit having maliciously asked whether it was true that Monsieur Pascal made shoes, met with the awkward repartee, "Je ne sais pas s'il fait des souliers, mais je crois qu'il *vous a porté une fameuse botte*."

[90] A master in a great public school once stated in a school address what masters and boys felt to be true. "It would hardly be too much to say that the whole problem of education is how to surround the young with good influences. I believe we must go on to add that if the wisest man had set himself to work out this problem without the teaching of experience, he would have been little likely to hit upon the system of which we are so proud, and which we call "the Public School System." If the real secret of education is to surround the young with good influences, is it not a strange paradox to take them at the very age when influences act most despotically and mass them together in large numbers, where much that is coarsest is sure to be tolerated, and much that is gentlest and most refining—the presence of mothers and sisters for example—is for a large part of the year a memory or an echo rather than a living voice? I confess I have never seen any answers to this objection which *apart from the test of experience* I should have been prepared to pronounce satisfactory. It is a simple truth that the moral dangers of our Public School System are enormous. It is the simple truth that do what you will in the way of precaution, you do give to boys of low,

animal natures, the very boys who ought to be exceptionally subject to almost despotic restraint, exceptional opportunities of exercising a debasing influence over natures far more refined and spiritual than their own. And it is further the simple but the sad truth, that these exceptional opportunities are too often turned to account, and that the young boy's character for a time—sometimes for a long time—is spoiled or vulgarized by the influence of unworthy companions." This is what public schoolmasters, if their eyes are not blinded by routine, are painfully conscious of. But they find that in the end good prevails; the average boy gains a manly character and contributes towards the keeping up a healthy public opinion which is of great effect in restraining the evil-doer.

[91] "The number of boarders was never very great, because to a master were assigned no more than he could have beds for in his room." (Fontaine's *Mémoire*, Carré, p. 24.)

[92] "Plerisque placet media quædam ratio, ut apud unum Præceptorem quinque sexve pueri instituantur: ita nec sodalitas deerit ætati, cui convenit alacritas; neque non sufficiet singulis cura Præceptoris; et facile vitabitur corruptio quam affert multitudo. Many take up with a middle course, and would have five or six boys placed with one preceptor; in this way they will not be without companionship at an age when from their liveliness they seem specially to need it, and the master may give sufficient care to each individual; moreover, there will be an easy avoidance of the moral corruption which numbers bring." Erasmus on *Christian Marriage* quoted by Coustel in Sainte-Beuve, P.Riij, bk. 4, p. 404.

[93] Lancelot's "New way of easily learning Latin (*Nouvelle Méthode pour apprendre facilement la langue Latine*)" was published in 1644, his method for Greek in 1655. This was followed in 1657 by his "Garden of Greek Roots (*Jardin des racines grecques*)" (see Cadet, pp. 15 ff.)

The Port-Royalists seem to me in some respects far behind Comenius, but they were right in rejecting him as a methodiser in language-learning. Lancelot in the preface to his "Garden of Greek Roots," says that the *Janua* of Comenius is totally wanting in method. "It would need," says he, "an extraordinary memory; and from my experience I should say that few children could learn this book, for it is long and difficult; and as the words in it are not repeated, those at the beginning would be forgotten before the learner reached the end. So he would feel a constant discouragement, because he would always find himself in a new country where he would recognize nothing. And the book is full of all sorts of uncommon and difficult words, and the first chapters throw no light on those which follow." To this well-grounded criticism he adds: "The *entrances to the Tongues*, to deserve its name, should be nothing but a short and simple way leading us as soon as possible to read the best books in the language, so that we might not only acquire the words we are in need of, but also all that is most characteristic in the idiom and pure in the phraseology, which make up the most difficult and most important part of every language." (Quoted by Cadet, p. 17).

[94] Lemaître, a nephew of La Mère Angélique, was one of the most celebrated orators in France. In renouncing the world for Port-Royal, he retired from a splendid position at the Bar. Such men had qualifications out of the reach of ordinary schoolmasters. Dufossé, in after years, told how, when he was a boy, Lemaître called him often to his room and gave him solid instruction in learning

and piety. “He read to me and made me read pieces from poets and orators, and saw that I noticed the beauties in them both in thought and diction. Moreover he taught me the right emphasis and articulation both in verse and prose, in which he himself was admirable, having the charm of a fine voice and all else that goes to make a great orator. He gave me also many rules for good translation and for making my progress in that art easy to me.” (Dufossé’s *Mémoires, &c.*, quoted by Cadet, p. 9.) It was Lemaître who instructed Racine (born 1639, admitted at Les Granges, Port Royal des Champs, in 1655).

[95] In 1670 the General of the Jesuits issued a letter to the Society against the Cartesian philosophy. The University in this agreed with its rivals, and petitioned the Parliament to prohibit the Cartesian teaching. This produced the burlesque *Arrêt* by Boileau (1675). “Whereas it is stated that for some years past a stranger named Reason has endeavoured to make entry by force into the Schools of the University ... where Aristotle has always been acknowledged as judge without appeal and not accountable for his opinions.... Be it known by these presents that this Court has maintained and kept and does maintain and keep the said Aristotle in perfect and peaceable possession of the said schools ... and in order that for the future he may not be interfered with in them, it has banished Reason for ever from the Schools of the said University, and forbids his entry to disturb and disquiet the said Aristotle in the possession and enjoyment of the aforesaid schools, under pain and penalty of being declared a Jansenist and a lover of innovations.” (Quoted by Cadet, p. 34.)

[96] Although so much time is given to the study of words, practice in the use of words is almost entirely neglected, and the English schoolboy remains inarticulate.

[97] Rollin somewhat extends Quintilian’s statement: “The desire of learning rests in the will which you cannot force.” About attempts to coerce the will in the absence of interest, I may quote a passage from a lecture of mine at Birmingham in 1884, when I did not know that I had behind me such high authorities as Quintilian and Rollin: “I should divide the powers of the mind that may be cultivated in the school-room into two classes: in the first I should put all the higher powers—grasp of meaning, perception of analogy, observation, reflection, imagination, intellectual memory; in the other class is one power only, and that is a kind of memory that depends on the association of sounds. How is it then that in most school-rooms far more time is spent in cultivating this last and least-valuable power than all the rest put together? The explanation is easy. All the higher powers can be exercised only when the pupils are interested, or, as Mr. Thring puts it, ‘care for what they are about.’ The memory that depends on associating sounds is independent of interest and can be secured by simple repetition. Now it is very hard to awaken interest, and still harder to maintain it. That magician’s wand, the cane, with which the schoolmasters of olden time worked such wonders, is powerless here or powerful only in the negative direction; and so is every form of punishment. You may tell a boy—‘If you can’t say your lesson you shall stay in and write it out half-a-dozen times!’ and the threat may have effect; but no ‘*instans tyrannus*’ from Orbilius downwards has ever thought of saying, ‘If you don’t take an interest in your work, I’ll keep you in till you do!’ So teachers very naturally prefer the kind of teaching in which they can make sure of success.”

[98] Here as usual Rollin uses Quintilian without directly quoting him. He gives in a note the passage he had in his mind. “Id imprimis cavere oportebit, ne studia qui amare nondum potest oderit; et amaritudinem semel præceptam etiam ultra rudes annos reformidet (Quint., lib. j, cap. 1.)”

[99] Rousseau, Pestalozzi and Froebel were also in this sense realists, but they held that the educational value of knowledge lay not in itself, but only in so far as it was an instrument for developing the faculties of the mind.

[100] Henry Barnard (*English Pedagogy*, second series, p. 192), speaks of Hoole as “one of the pioneer educators of his century.” According to Barnard he was born at Wakefield, in 1610, and died in 1666, rector of “Stock Billerica” (perhaps Stock with Billericay), in Essex.

[101] A very interesting suggestion of Cowley’s is that another house be built for poor men’s sons who show ability. These shall be brought up “with the same conveniences that are enjoyed even by rich men’s children (though they maintain the fewer for that cause), there being nothing of eminent and illustrious to be expected from a low, sordid, and hospital-like education.”

[102] It would seem as if these Puritans were more active in body than in mind: even the seniors, like the children at Port-Royal, *tombent dans la nonchalance*. Dury has to lay it down that “the Governour and Ushers and Steward if they be in health should not go to bed till ten.” (p. 30.)

[103] It is a sign of the failure of all attempts to establish educational science in England that though the meaning of “real” and “realities” which connected them with *res* seemed established in the sixteen hundreds, our language soon lost it again. According to a writer in *Meyer’s Conversations Lexicon* (first edition) “*reales*” in this sense occurs first in Taubmann, 1614. Whether this is correct or not it was certainly about this time that there arose a contest between *Humanismus* and *Realismus*, a contest now at its height in the *Gymnasien* and *Realschulen* of Germany. For a discussion of it, *see* M. Arnold’s “Literature and Science,” referred to above (p. 154).

[104] Many of Petty’s proposals are now realized in the South Kensington Museum.

[105] Later in the century Locke recommended that “working schools should be set up in every parish,” (*see* Fox-Bourne’s *Locke*, or Cambridge edition of the *Thoughts c. Ed.*, App. A, p. 189). The Quakers seem to have early taken up “industrious education.” John Bellers, whose *Proposals for Raising a College of Industry* (1696) was reprinted by Robt. Owen, has some very good notions. After advising that boys and girls be taught to knit, spin, &c., and the bigger boys turning, &c., he says, “Thus the Hand employed brings Profit, *the Reason used in it makes wise*, and the Will subdued makes them good” (*Proposals*, p. 18). Years afterwards in a Letter to the Yearly Meeting (dated 1723), he says, “It may be observed that some of the Boys in Friends’ Workhouse in Clerkenwell by their present employment of spinning are capable to earn their own living.”

[106] Petty does not lose sight of the body. The “educands” are to “use such exercises whether in work or for recreation as tend to the health, agility, and strength of their bodies.”

I have quoted Petty from the very valuable collection of English writings on Education reprinted in Henry Barnard's *English Pedagogy*, 2 vols. Petty is in Vol. I. In this vol. we have plenty of evidence of the working of the Baconian spirit; *e.g.*, we find Sir Matthew Hale in a *Letter of Advice to his Grandchildren*, written in 1678, saying that there is little use or improvement in "notional speculations in logic or philosophy delivered by others; the rather because bare speculations and notions have little experience and external observation to confirm them, and they rarely fix the minds especially of young men. But that part of philosophy that is real may be improved and confirmed by daily observation, and is more stable and yet more certain and delightful, and goes along with a man all his life, whatever employment or profession he undertakes."

[107] "In this respect," says Professor Masson, "the passion and the projects of Comenius were a world wider than Milton's." (*L. of M.* iij, p. 237.)

[108] *Of Education. To Master Samuel Hartlib* ("the Tractate" as it is usually called), was published by Milton first in 1644, and again in 1673. *See* Oscar Browning's edition, Cambridge Univ. Press.

[109] The University of Cambridge. The first examination was in June, 1880.

[110] "Believe it, my good friend, to love truth for truth's sake is the principal part of human perfection in this world and the seed-plot of all other virtues." L. to Bolde, quoted by Fowler, *Locke*, p. 120. This shows us that according to Locke "the principal part of human perfection" is to be found in the intellect.

[111] Lady Masham seems to consider these two characteristics identical. She wrote to Leclerc of Locke after his death: "He was always, in the greatest and in the smallest affairs of human life, as well as in speculative opinions, disposed to follow reason, whosoever it were that suggested it; he being ever a faithful servant, I had almost said a slave, to truth; never abandoning her for anything else, and following her for her own sake purely" (quoted by Fox-Bourne). But it is one thing to desire truth, and another to think one's own reasoning power the sole means of obtaining it.

[112] "I am far from imagining myself infallible; but yet I should be loth to differ from any thinking man; being fully persuaded there are very few things of pure speculation wherein two thinking men who impartially seek truth can differ if they give themselves the leisure to examine their hypotheses and understand one another" (L. to W. M., 26 Dec., 1692). Again he writes: "I am persuaded that upon debate you and I cannot be of two opinions, nor I think any two men used to think with freedom, who really prefer truth to opiniatrety and a little foolish vain-glory of not having made a mistake" (L. to W. M., 3 Sept., 1694).

[113] Compare Carlyle:—"Except thine own eye have got to see it, except thine own soul have victoriously struggled to clear vision and belief of it, what is the thing seen or the thing believed by another or by never so many others? Alas, it is not thine, though thou look on it, brag about it, and bully and fight about it till thou die, striving to persuade thyself and all men how much it is thine! Not *it* is thine, but only a windy echo and tradition of it bedded [an echo *bedded*?] in hypocrisy, ending sure enough in tragical futility is thine." Froude's *Thos. Carlyle*, ij, 10. Similarly Locke wrote to Bolde in 1699:—"To be learned in the lump by other men's thoughts, and to be right by saying after others is much the

easier and quieter way; but how a rational man that should enquire and know for himself can content himself with a faith or religion taken upon trust, or with such a servile submission of his understanding as to admit all and nothing else but what fashion makes passable among men, is to me astonishing." Quoted by Fowler, *Locke*, p. 118.

[114] For Rabelais, *see* p. 67 *supra*.

In the notes to the Cambridge edition of the *Thoughts* Locke's advice on physical education is discussed and compared with the results of modern science by Dr. J. F. Payne.

[115] "Examinations directed, as the paper examinations of the numerous examining boards now flourishing are directed, to finding out what the pupil knows, have the effect of concentrating the teacher's effort upon the least important part of his function." Mark Pattison in *N. Quart. M.*, January, 1880.

[116] Michelet (*Nos fils*, chap. ij. *ad f.* p. 170), says of Montaigne's essay: "c'est déjà une belle esquisse, vive et forte, une tentative pour donner, *non l'objet*, le savoir, mais *le sujet*, c'est l'homme."

[117] Pope seems to contrast Montaigne and Locke:

> "But ask not to what doctors I apply!
> "Sworn to no master, of no sect am I:
> "As drives the storm, at any door I knock,
> "And house with Montaigne now, or now with Locke."
>
> *Satires* iij., 26.

Perhaps as Dr. Abbott suggests he took Montaigne as representing active and Locke contemplative life.

[118] *See* "An introduction to the History of Educational Theories," by Oscar Browning.

[119] "History and the mathematics, I think, are the most proper and advantageous studies for persons of your quality; the other are fitter for schoolmen and people that must live by their learning, though a little insight and taste of them will be no burthen or inconvenience to you, especially Natural Philosophy." *Advice to a young Lord written by his father*, 1691, p. 29.

[120] "Il n'y a point avant la raison de véritable éducation pour l'homme." (*N. H.*, 5th P., Lett. 3. Conf. *supra*, p. 227.)

[121] "La première éducation doit donc être purement négative. Elle consiste, non point à enseigner la vertu ni la vérité, mais à garantir le cœur du vice et l'esprit de l'erreur. Si vous pouviez ne rien faire et ne rien laisser faire; si vous pouviez amener votre élève sain et robuste à l'âge de douze ans, sans qu'il sût distinguer sa main droite de sa main gauche, dès vos premières leçons les yeux de son entendement s'ouvriraient à la raison; sans préjugés, sans habitudes, il n'aurait rien en lui qui pût contrarier l'effet de vos soins. Bientôt il deviendrait entre vos mains le plus sage des hommes; et, en commençant par ne rien faire, vous auriez fait un prodige d'éducation." *Ém.* ij., 80.

[122] "Exercez son corps, ses organes, ses sens, ses forces, mais tenez son âme oisive aussi longtemps qu'il se pourra. Redoutez tous les sentiments

antérieurs au jugement qui les apprécie. Retenez, arrêtez les impressions étrangères: et, pour empêcher le mal de naître, ne vous pressez point de faire le bien; car il n'est jamais tel que quand la raison l'éclaire. Regardez tous les délais comme des avantages: c'est gagner beaucoup que d'avancer vers le terme sans rien perdre; laissez mûrir l'enfance dans les enfants. Enfin quelque leçon leur devient-elle nécessaire, gardez-vous de la donner aujourd'hui, si vous pouvez différer jusqu'à demain sans danger." *Ém.* ij., 80.

[123] "Effrayez-vous donc peu de cette oisiveté prétendue. Que diriez-vous d'un homme qui, pour mettre toute la vie à profit, ne voudrait jamais dormir? Vous diriez: Cet homme est insensé; il ne jouit pas du temps, il se l'ôte; pour fuir le sommeil il court à la mort. Songez donc que c'est ici la même chose, et que l'enfance est le sommeil de la raison." *Ém.* ij., 99.

[124] "Il n'y a pas de philosophie plus superficielle que celle qui, prenant l'homme comme un être égoïste et viager, prétend l'expliquer et lui tracer ses devoirs en dehors de la société dont il est une partie. Autant vaut considérer l'abeille abstraction faite de la ruche, et dire qu'à elle seule l'abeille construit son alvéole." Renan, *La Réforme*, 312.

[125] "Tout est bien, sortant des mains de l'Auteur des choses; tout dégénère entre les mains de l'homme."

[126] "Nous naissons faibles, nous avons besoin de forces; nous naissons dépourvus de tout, nous avons besoin d'assistance; nous naissons stupides, nous avons besoin de jugement. Tout ce que nous n'avons pas à notre naissance, et dont nous avons besoin étant grands, nous est donné par l'éducation. Cette éducation nous vient ou de la nature, ou des hommes, ou des choses. Le développement interne de nos facultés et de nos organes est l'éducation de la nature; l'usage qu'on nous apprend à faire de ce développement est l'éducation des hommes; et l'acquis de notre propre expérience sur les objets qui nous affectent est l'éducation des choses." *Ém.* j., 6.

[127] "Puisque le concours des trois éducations est nécessaire à leur perfection, c'est sur celle à laquelle nous ne pouvons rien qu'il faut diriger les deux autres." *Ém.* j., 7.

[128] "Vivre ce n'est pas respirer, c'est agir; c'est faire usage de nos organes, de nos sens, de nos facultés, de toutes les parties de nous-mêmes qui nous donnent le sentiment de notre existence. L'homme qui a le plus vécu n'est pas celui qui a compté le plus d'années, mais celui qui a le plus senti la vie." *Ém.* j., 13.

[129] "On ne connaît point l'enfance: sur les fausses idées qu'on en a, plus on va, plus on s'égare. Les plus sages s'attachent à ce qu'il importe aux hommes de savoir, sans considérer ce que les enfants sont en état d'apprendre. Ils cherchent toujours l'homme dans l'enfant, sans penser à ce qu'il est avant que d'être homme. Voilà l'étude à laquelle je me suis le plus appliqué, afin que, quand toute ma méthode serait chimérique et fausse, on pût toujours profiter de mes observations. Je puis avoir très-mal vu ce qu'il faut faire; mais je crois avoir bien vu le sujet sur lequel on doit opérer. Commencez donc par mieux étudier vos élèves; car très-assurément vous ne les connaissez point."

[130] "La nature veut que les enfants soient enfants avant que d'être hommes. Si nous voulons pervertir cet ordre, nous produirons des fruits précoces qui

n’auront ni maturité ni saveur, et ne tarderont pas à se corrompre: nous aurons de jeunes docteurs et de vieux enfants. L’enfance a des manières de voir, de penser, de sentir, qui lui sont propres; rien n’est moins sensé que d’y vouloir substituer les nôtres.” *Ém.* ij., 75; also in *N. H.*, 478.

[131] “Nous ne savons jamais nous mettre à la place des enfants; nous n’entrons pas dans leurs idées, nous leur prêtons les nôtres; et, suivant toujours nos propres raisonnements, avec des chaînes de vérités nous n’entassons qu’extravagances et qu’erreurs dans leur tête.” *Ém.* iij., 185.

[132] “Je voudrais qu’un homme judicieux nous donnât un traité de l’art d’observer les enfants. Cet art serait très-important à connaître: les pères et les maîtres n’en ont pas encore les éléments.” *Ém.* iij., 224.

[133] Rousseau says: “Full of what is going on in your own head, you do not see the effect you produce in their head: Pleins de ce qui se passe dans votre tête vous ne voyez pas l’effet que vous produisez dans la leur.” (*Ém.* lib. ij., 83.)

[134] “Or, toutes les études forcées de ces pauvres infortunés tendent à ces objets entièrement étrangers à leurs esprits. Qu’on juge de l’attention qu’ils y peuvent donner. Les pédagogues qui nous étalent en grand appareil les instructions qu’ils donnent à leurs disciples sont payés pour tenir un autre langage: cependant on voit, par leur propre conduite, qu’ils pensent exactement comme moi. Car que leur apprennent-ils enfin? Des mots, encore des mots, et toujours des mots. Parmi les diverses sciences qu’ils se vantent de leur enseigner, ils se gardent bien de choisir celles qui leur seraient véritablement utiles, parce que ce seraient des sciences de choses, et qu’ils n’y réussiraient pas; mais celles qu’on paraît savoir quand on en sait les termes, le blason, la géographie, la chronologie, les langues, etc.; toutes études si loin de l’homme, et surtout de l’enfant, que c’est une merveille si rien de tout cela lui peut être utile une seule fois en sa vie.” *Ém.* ij., 100.

[135] “En quelque étude que ce puisse être, sans l’idée des choses représentées, les signes représentants ne sont rien. On borne pourtant toujours l’enfant à ces signes, sans jamais pouvoir lui faire comprendre aucune des choses qu’ils représentent.” *Ém.* ij., 102.

[136] “Non, si la nature donne au cerveau d’un enfant cette souplesse qui le rend propre à recevoir toutes sortes d’impressions, ce n’est pas pour qu’on y grave des noms de rois, des dates, des termes de blason, de sphère, de géographie, et tous ces mots sans aucun sens pour son âge et sans aucune utilité pour quelque âge que ce soit, dont on accable sa triste et stérile enfance; mais c’est pour que toutes les idées qu’il peut concevoir et qui lui sont utiles, toutes celles qui se rapportent à son bonheur et doivent l’éclairer un jour sur ses devoirs, s’y tracent de bonne heure en caractères ineffaçables, et lui servent à se conduire pendant sa vie d’une manière convenable à son être et à ses facultés.” *Ém.* ij., 105; also *N. H.*, P. v., L. 3.

Sans étudier dans les livres, l’espèce de mémoire que peut avoir un enfant ne reste pas pour cela oisive; tout ce qu’il voit, tout ce qu’il entend le frappe, et il s’en souvient; il tient registre en lui-même des actions, des discours des hommes; et tout ce qui l’environne est le livre dans lequel, sans y songer, il enrichit continuellement sa mémoire, en attendant que son jugement puisse en profiter. C’est dans le choix de ces objets, c’est dans le soin de lui présenter sans

cesse ceux qu'il peut connaître, et de lui cacher ceux qu'il doit ignorer, que consiste le véritable art de cultiver en lui cette première faculté; et c'est par là qu'il faut tâcher de lui former un magasin de connaissances qui servent à son éducation durant sa jeunesse, et à sa conduite dans tous les temps. Cette méthode, il est vrai, ne forme point de petits prodiges et ne fait pas briller les gouvernantes et les précepteurs; mais elle forme des hommes judicieux, robustes, sains de corps et d'entendement, qui, sans s'être fait admirer étant jeunes, se font honorer étant grands.

[137] "L'activité défaillante se concentre dans le cœur du vieillard; dans celui de l'enfant elle est surabondante et s'étend au dehors; il se sent, pour ainsi dire, assez de vie pour animer tout ce qui l'environne. Qu'il fasse ou qu'il défasse, il n'importe; il suffit qu'il change l'état des choses, et tout changement est une action. Que s'il semble avoir plus de penchant à détruire, ce n'est point par méchanceté, c'est que l'action qui forme est toujours lente, et que celle qui détruit, étant plus rapide, convient mieux à sa vivacité." *Ém.* j., 47.

[138] It would be difficult to find a man more English, in a good sense, than the present Lord Derby or, whether we say it in praise or dispraise, a man less like Rousseau. So it is interesting to find him in agreement with Rousseau in condemning the ordinary restraints of the school-room. "People are beginning to find out what, if they would use their own observation more, and not follow one another like sheep, they would have found out long ago, that it is doing positive harm to a young child, mental and bodily harm, to keep it learning or pretending to learn, the greater part of the day. Nature says to a child, 'Run about,' the schoolmaster says, 'Sit still;' and as the schoolmaster can punish on the spot, and Nature only long afterwards, he is obeyed, and health and brain suffer."—*Speech in 1864.*

[139] All this is very crude, and so is the artifice by which Julie in the *Nouvelle Héloïse* entraps her son into learning to read. No doubt Rousseau is right when he says that where there is a desire to read the power is sure to come. But "reading" is one thing in the lives of the labouring classes to whom it means reading aloud in school, and quite another in families of literary tastes and habits with whom the range of thought is in a great measure dependent on books. In such families the children learn to read as surely as they learn to talk. They mostly have access to books which they read to themselves for pleasure; and of course it is absurdly untrue to say that they learn nothing but words and do not think. In my opinion it may be questioned whether the world of fiction into which their reading gives them the *entrée* does not withdraw them too much from the actual world in which they live. The elders find it very convenient when the child can always be depended on to amuse himself with a book; but noise and motion contribute more to health of body and perhaps of mind also. While children of well-to-do parents often read too much, the children of our schools "under government" hardly get a notion what reading is. In these schools "reading" always stands for vocal reading, and the power and the habit of using books for pleasure or for knowledge (other than verbal) are little cultivated.

[140] "Il veut tout toucher, tout manier; ne vous opposez point à cette inquiétude; elle lui suggère un apprentissage très-nécessaire. C'est ainsi qu'il apprend à sentir la chaleur, le froid, la dureté, la mollesse, la pesanteur, la légèreté des corps; à juger de leur grandeur, de leur figure et de toutes leurs qualités sensibles, en regardant, palpant, écoutant, surtout en comparant la vue

au toucher, en estimant à l'œil la sensation qu'ils feraient sous ses doigts." *Ém.* j., 43.

[141] "Voyez un chat entrer pour la première fois dans une chambre: il visite, il regarde, il flaire, il ne reste pas un moment en repos, il ne se fie à rien qu'après avoir tout examiné, tout connu. Ainsi fait un enfant commençant à marcher, et entrant pour ainsi dire dans l'espace du monde. Toute la différence est qu'à la vue, commune à l'enfant et au chat, le premier joint, pour observer, les mains que lui donna la nature, et l'autre l'odorat subtil dont elle l'a doué. Cette disposition, bien ou mal cultivée, est ce qui rend les enfants adroits ou lourds, pesants ou dispos, étourdis ou prudents. Les premiers mouvements naturels de l'homme étant donc de se mesurer avec tout ce qui l'environne, et d'éprouver dans chaque objet qu'il aperçoit toutes les qualités sensibles qui peuvent se rapporter à lui, sa première étude est une sorte de physique expérimentale relative à sa propre conservation, et dont on le détourne par des études spéculatives avant qu'il ait reconnu sa place ici-bas. Tandis que ses organes délicats et flexibles peuvent s'ajuster aux corps sur lesquels ils doivent agir, tandis que ses sens encore purs sont exempts d'illusion, c'est le temps d'exercer les uns et les autres aux fonctions qui leur sont propres; c'est le temps d'apprendre à connaître les rapports sensibles que les choses ont avec nous. Comme tout ce qui entre dans l'entendement humain y vient par les sens, la première raison de l'homme est une raison sensitive; c'elle qui sert de base à la raison intellectuelle: nos premiers maîtres de philosophie sont nos pieds, nos mains, nos yeux. Substituer des livres à tout cela, ce n'est pas nous apprendre à raisonner, c'est nous apprendre à nous servir de la raison d'autrui; c'est nous apprendre à beaucoup croire, et à ne jamais rien savoir. Pour exercer un art, il faut commencer par s'en procurer les instruments; et, pour pouvoir employer utilement ces instruments, il faut les faire assez solides pour résister à leur usage. Pour apprendre à penser, il faut donc exercer nos membres, nos sens, nos organes, qui sont les instruments de notre intelligence; et pour tirer tout le parti possible de ces instruments, il faut que le corps, qui les fournit, soit robuste et sain. Ainsi, loin que la véritable raison de l'homme se forme indépendamment du corps, c'est la bonne constitution du corps qui rend les opérations de l'esprit faciles et sûres." *Ém.* ij., 123.

[142] "Exercer les sens n'est pas seulement en faire usage, c'est apprendre à bien juger par eux, c'est apprendre, pour ainsi dire, à sentir; car nous ne savons ni toucher, ni voir, ni entendre, que comme nous avons appris. Il y a un exercice purement naturel et mécanique, qui sert à rendre le corps robuste sans donner aucune prise au jugement: nager, courir, sauter, fouetter un sabot, lancer des pierres; tout cela est fort bien: mais n'avons-nous que des bras et des jambes? n'avons-nous pas aussi des yeux, des oreilles? et ces organes sont-ils superflus à l'usage des premiers? N'exercez donc pas seulement les forces, exercez tous les sens qui les dirigent; tirez de chacun d'eux tout le parti possible, puis vérifiez l'impression de l'un par l'autre. Mesurez, comptez, pesez, comparez." *Ém.* ij., 133.

[143] *E.g.*—What can be better than this about family life? "L'attrait de la vie domestique est le meilleur contrepoison des mauvaises mœurs. Le tracas des enfants qu'on croit importun devient agréable; il rend le père et la mère plus nécessaires, plus chers l'un à l'autre; il resserre entre eux le lien conjugal. Quand la famille est vivante et animée, les soins domestiques font la plus chère

occupation de la femme et le plus doux amusement du mari. Ainsi de ce seul abus corrigé résulterait bientôt une réforme générale; bientôt la nature aurait repris tous ses droits. Qu'une fois les femmes redeviennent mères bientôt les hommes redeviendront pères et maris." *Ém.* j., 17. Again he says in a letter quoted by Saint-Marc Girardin (ij., 121)—"L'habitude la plus douce qui puisse exister est celle de la vie domestique qui nous tient plus près de nous qu'aucune autre." We may say of Rousseau what Émile says of the Corsair:—"Il savait à fond toute la morale; il n'y avait que la pratique qui lui manquât." (*Ém. et S.* 636). And yet he himself testifies:—"Nurses and mothers become attached to children by the cares they devote to them; it is the exercise of the social virtues that carries the love of humanity to the bottom of our hearts; it is in doing good that one becomes good; I know no experience more certain than this: Les nourrices, les mères, s'attachent aux enfants par les soins qu'elles leur rendent; l'exercice des vertus sociales porte au fond des cœurs l'amour de l'humanité; c'est en faisant le bien qu'on devient bon; je ne connais point de pratique plus sure." *Ém.* iv., 291.

[144] Elsewhere he asserts in his fitful way that there is inborn in the heart of man a feeling of what is just and unjust. Again, after all his praise of negation he contradicts himself, and says: "I do not suppose that he who does not need anything can love anything; and I do not suppose that he who does not love anything can be happy: Je ne conçois pas que celui qui n'a besoin de rien puisse aimer quelque chose; je ne conçois pas que celui qui n'aime rien puisse être heureux." *Ém.* iv., 252.

[145] This part of Rousseau's scheme is well discussed by Saint-Marc Girardin (*J. J. Rousseau*, vol. ij.). The following passage is striking: "How is it that Madame Necker-Saussure understood the child better than Rousseau did? She saw in the child two things, a creation and a ground-plan, something finished and something begun, a perfection which prepares the way for another perfection, a child and a man. God, Who has put together human life in several pieces, has willed, it is true, that all these pieces should be related to each other; but He has also willed that each of them should be complete in itself, so that every stage of life has what it needs as the object of that period, and also what it needs to bring in the period that comes next. Wonderful union of aims and means which shews itself at every step in creation! In everything there is aim and also means, everything exists for itself and also for that which lies beyond it! (Tout est but et tout est moyen; tout est absolu et tout est relatif.)" *J. J. R.*, ij., 151.

[146] "Je n'aime point les explications en discours; les jeunes gens y font peu d'attention et ne les retiennent guère. Les choses! les choses! Je ne répéterai jamais assez que nous donnons trop de pouvoir aux mots: avec notre éducation babillarde nous ne faisons que des babillards." *Ém.* iij., 198.

[147] "Forcé d'apprendre de lui-même, il use de sa raison et non de celle d'autrui; car, pour ne rien donner à l'opinion, il ne faut rien donner à l'autorité; et la plupart de nos erreurs nous viennent bien moins de nous que des autres. De cet exercice continuel il doit résulter une vigueur d'esprit semblable à celle qu'on donne au corps par le travail et par la fatigue. Un autre avantage est qu'on n'avance qu'à proportion de ses forces. L'esprit, non plus que le corps, ne porte que ce qu'il peut porter. Quand l'entendement s'approprie les choses avant de les déposer dans la mémoire, ce qu'il en tire ensuite est à lui: au lieu qu'en

surchargeant la mémoire, à son insu, on s'expose à n'en jamais rien tirer qui lui soit propre." *Ém.* iij., 235.

[148] "Sans contredit on prend des notions bien plus claires et bien plus sûres des choses qu'on apprend ainsi de soi-même, que de celles qu'on tient des enseignements d'autrui; et, outre qu'on n'accoutume point sa raison à se soumettre servilement à l'autorité, l'on se rend plus ingénieux à trouver des rapports, à lier des idées, à inventer des instruments, que quand, adoptant tout cela tel qu'on nous le donne, nous laissons affaisser notre esprit dans la nonchalance, comme le corps d'un homme qui, toujours habillé, chaussé, servi par ses gens et traîné par ses chevaux, perd à la fin la force et l'usage de ses membres. Boileau se vantait d'avoir appris à Racine à rimer difficilement. Parmi tant d'admirables méthodes pour abréger l'étude des sciences, nous aurions grand besoin que quelqu'un nous en donnât une pour les apprendre avec effort." *Ém.* iij., 193.

[149] I avail myself of the old substantival use of the word *elementary* to express its German equivalent *Elementarbuch*.

[150] "Who has not met with some experience such as *this*? A child with an active and inquiring mind accustomed to chatter about everything that interests him is sent to school. In a few weeks his vivacity is extinguished, his abundance of talk has dried up. If you ask him about his studies, if you desire him to give you a specimen of what he has learnt, he repeals to you in a sing-song voice some rule for the formation of tenses or some recipe for spelling words. Such are the results of the teaching which should be of all teaching the most fruitful and the most attractive!" Translated from *Quelques Mots*, &c., by M. Bréal.

[151] In these visits he observed how the children suffered from working in factories. These observations influenced him in after years.

[152] In these aphorisms Pestalozzi states the main principles at work in his own mind; but this bare statement is not well suited to communicate these principles to the minds of others. For most readers the aphorisms have as little attraction as the enunciations, say, of a book of Euclid would have for those who knew no geometry. But as his future life was guided by the principles he has formulated in this paper it seems necessary for us to bear some of these in mind.

What he mainly insists upon is that all wise guidance must proceed from a knowledge of the nature of the creature to be guided; further that there is a simple wisdom which must direct the course of all men. "The path of Nature," says he, "which brings out the powers of men must be open and plain; and human education to true peace-giving wisdom must be simple and available for all. Nature brings out all men's powers by practice, and their increase springs from *use*." The powers of children should be strengthened by exercise on what is close at hand; and this should be done without hardness or pressure. A forced and rigid sequence in instruction is not Nature's method, says he: this would make men one-sided, and truth would not penetrate freely and softly into their whole being. The pure feeling for truth grows in a small area; and human wisdom must be grounded on a perception of our closest relationships, and must show itself in skilled management of our nearest concerns. Everything we do against our consciousness of right weakens our perception of truth and disturbs the purity of our fundamental conceptions and experiences. On this account all wisdom of man rests in the strength of a good heart that follows after truth, and

all the blessing of man in the sense of simplicity and innocence. Peace of mind must be the outcome of right training. To get out of his surroundings all he needs for life and enjoyment, to be patient, painstaking, and in every difficulty trustful in the love of the Heavenly Father, this comes of a man's true education to wisdom. Nothing concerns the human race so closely and intimately as—God. "God as Father of thy household, as source of thy blessing—God as thy Father; in this belief thou findest rest and strength and wisdom, which no violence nor the grave itself can overthrow." Belief in God which is a part of our nature, like the sense of right and wrong and the feeling we can never quench of what is just and unjust, must be made the foundation in educating the human race. The subject of that belief is that God is the Father of men, men are the children of God. To this divine relationship Pestalozzi refers all human relationships as those of parent and child, of ruler and subject. The priest is appointed to declare the fatherhood of God and the brotherhood of men.

The only text I have seen is that reprinted by Raumer (*Gesch. d. Päd.*). From Otto Fischer (*Wichtigste Pädagogen*), I learn that this is the edition of 1807, which differs, at least by omission, from the original of 1780.

[153] There are now four parts, first published respectively in 1781, 1783, 1785, and 1787 (O. Fischer). The English translation in two small vols. (1825) ends with the First Part, but Miss Eva Channing has recently sought to weld the four parts into one (Boston, U.S.—D.C. Heath & Co.), and in this form the book seems to me not only very instructive but very entertaining also. Not many readers who look into it will fail to reach the end, and few are the books connected with education of which this could prudently be asserted. "All good teachers should read it with care," says Stanley Hall in his Introduction, and if they thus read it and catch anything of the spirit of Pestalozzi both they and their pupils will have reason to rejoice.

[154] In the pages of this Journal Pestalozzi taught that it was "the domestic virtues which determine the happiness of a nation." Again he says: "On the throne and in the cottage man has equal need of religion, and becomes the most wretched being on the earth if he forget his God." "The child at his mother's breast is weaker and more dependent than any creature on earth, and yet he already feels the first moral impressions of love and gratitude." "*Morality is nothing but a result of the development of the first sentiments of love and gratitude felt by the infant.* The first development of the child's powers should come from his participation in the work of his home; for this work is what his parents understand best, what most absorbs their attention, and what they can best teach. But even if this were not so, work undertaken to supply real needs would be just as truly the surest foundation of a good education. *To engage the attention of the child, to exercise his judgment, to raise his heart to noble sentiments, these I think the chief ends of education*: and how can these ends be reached so surely as by training the child as early as possible in the various daily duties of domestic life?" It would seem then that at this time Pestalozzi was for basing education on domestic labour and would teach the child to be useful. But it is hard to see how this principle could always be applied.

[155] One of these I have already given (*supra* p. 292). I will give another, not as by any means one of the best, but as a fit companion to Rousseau's "two dogs."

"26. THE TWO COLTS.

"Two colts as like as two eggs, fell into different hands. One was bought by a peasant whose only thought was to harness it to his plough as soon as possible: this one turned out a bad horse. The other fell to the lot of a man who by looking after it well and training it carefully, made a noble steed of it, strong and mettlesome. Fathers and mothers, if your children's faculties are not carefully trained and directed right, they will become not only useless, but hurtful; and the greater the faculties the greater the danger."

Compare Rousseau: "Just look at those two dogs; they are of the same litter, they have been brought up and treated precisely alike, they have never been separated; and yet one of them is sharp, lively, affectionate, and very intelligent: the other is dull, lumpish, surly, and nobody could ever teach him anything. Simply a difference of temperament has produced in them a difference of character, just as a simple difference of our interior organisation produces in us a difference of mind." *N. Héloise.* 5me P. Lettre iii.

[156] Pestalozzi was with the children at Stanz only during the first half of 1799.

[157] As Pestalozzi wrote to Gessner (*How Gertrude, &c.*): "You see street-gossip is not always entirely wrong; I really could not write properly, nor read, nor reckon. But people always jump to wrong conclusions from such 'notorious facts.' At Stanz you saw that I could teach writing without myself being able to write properly." He here anticipates a paradox of Jacotot's.

[158] Years afterwards Napoleon, though he could not foresee Sedan, got a notion that after all there was *something* in Pestalozzi; and that the aim of the system was to put the freedom and development of the individual in the place of the mechanical routine of the old schools, which tended to produce a mass of dull uniformity. With this aim, as Guimps says, Napoleon was quite out of sympathy, and whenever the subject was mentioned he would say, "The Pestalozzians are Jesuits"; thus very inaccurately expressing an accurate notion that there was more in them than could be understood at the first glance.

[159] Pestalozzi had from this country some more discerning visitors, *e.g.*, J. P. Greaves, to whom Pestalozzi addressed *Letters*, which were translated and published in this country; also Dr. Mayo, who was at Yverdun with his pupils for three years from 1818 and afterwards conducted a celebrated Pestalozzian school at Cheam. Dr. Mayo in 1826 lectured on Pestalozzi's system at the Royal Institution. Sir Jas. Kay-Shuttleworth and Mr. Tufnell also drew attention to it in the "Minutes of Council on Education."

[160] The disciple is not above his master, and if parents and teachers are without sympathy and religious feeling the children will also be without faith and love. This cannot be urged too strongly on those who have charge of the young. But there is no test by which we can ascertain that a master has these essential qualifications. As in the Christian ministry the unfit can be shut out only by their own consciences. But let no one think to understand education if he loses sight of what Joseph Payne has called "Pestalozzi's simple but profound discovery—the teacher must have a heart." "Soul is kindled only by soul," says Carlyle; "to *teach* religion the first thing needful and also the last and only thing is finding of a man who *has* religion. All else follows."

[161] In 1872, a Congress in which more than 10,000 German elementary teachers were represented, petitioned the Prussian Government for "the organization of training schools in accordance with the pedagogic principles of Pestalozzi, which formerly enjoyed so much favour in Prussia and so visibly contributed to the regeneration of the country."

[162] Did Pestalozzi make due allowance for the system of thought which every child inherits? Croom Robertson in "How we came by our Knowledge" (*Nineteenth Century*, No. 1, March, 1877), without mentioning Pestalozzi, seems to differ from him. Croom Robertson says that "Children being born into the world are born into society, and are acted on by overpowering social influences before they have any chance of being their proper selves.... The words and sentences that fall upon a child's ear and are soon upon his lips, express not so much his subjective experience as the common experience of his kind, which becomes as it were an objective rule or measure to which his shall conform.... He does, he must, accept what he is told; and in general he is only too glad to find his own experience in accordance with it.... We use our incidental, by which I mean our natural subjective experience, mainly to decipher and verify the ready-made scheme of knowledge that is given us *en bloc* with the words of our mother-tongue" (pp. 117, 118).

[163] One of the most interesting and most difficult problems in teaching is this:—How long should the beginner be kept to the rudiments? With young children, to whom ideas come fast, the main thing is no doubt to take care that these ideas become distinct and are made "the intellectual property" of the learners. But after a year or two children will be impatient to "get on," and if they seem "marking time" will be bored and discouraged. Then again in some subjects the elementary parts seem clear only to those who have a conception of the whole. As Diderot says in a passage I have seen quoted from *Le Neveu de Rameau*, "Il faut être profond dans l'art ou dans la science pour en bien posséder les éléments." "C'est le milieu et la fin qui éclaircissent les ténèbres du commencement." The greatest "coach" in Cambridge used to "rush" his men through their subjects and then go back again for thorough learning. To be sure, the "scientific method" suitable for young men differs greatly from the "heuristic" or "method of investigation," which is best for children. (See Joseph Payne's Lecture on Pestalozzi.) But even with children we should bear in mind Niemeyer's caution, "Thoroughness itself may become superficial by exaggeration; for it may keep too long to a part and in this way fail to complete and give any notion of the whole" (Quoted by O. Fischer, *Wichtigste Päd.* 213).

[164] Nearly 20 years ago (1871) appeared a paper on "Elementary National Education" in which "John Parkin, M.D.," advocated making all our elementary schools industrial, not only for practical purposes, but still more for the sake of physical education. The paper attracted no notice at the time, but now we are beginning to see that the body is concerned in education as well as the mind, and that the mind learns through it "without book." The application of this truth will bring about many changes.

[165] Herbart, when he visited Pestalozzi at Burgdorf, observed that though Pestalozzi's kindness was apparent to all, he took no pains in his teaching to mix the *dulce* with the *utile*. He never talked to the children, or joked, or gave them an anecdote. This, however, did not surprise Herbart, whose own experience had taught him that when the subject requires earnest attention the children do not

like it the better for the teacher's "fun." "The feeling of clear apprehension," says he, "I held to be the only genuine condiment of instruction" (Herbart's *Päd. Schriften*, ed. by O. Willmann, j. 89).

[166] *First* look to himself, but there may be other causes of failure as well. The great thing is never to put up contentedly, or even discontentedly, with failure. In teaching classes of lads from ten to sixteen years old, when I have found the lessons in any subject were not going well, I have sometimes taken the class into my confidence, told them that they no doubt felt as I did that this lesson was a dull one, and asked them each to put on paper what he considered to be the reasons, and also to make any suggestions that occurred to him. In this way I have got some very good hints, and I have always been helped in my effort to understand how the work seemed to the pupils. Every teacher should make this effort. As Pestalozzi says, "Could we conceive the indescribable tedium which must oppress the young mind while the weary hours are slowly passing away one after another in occupations which it can neither relish nor understand ... we should no longer be surprised at the remissness of the schoolboy creeping like snail unwillingly to school" (To G., xxx, 150).

[167] With Morf's summing-up it is interesting to compare Joseph Payne's, given at the end of his lecture on *Pestalozzi*:

I. The principles of education are not to be devised *ab extra*; they are to be sought for in human nature.

II. This nature is an organic nature—a plexus of bodily, intellectual and moral capabilities, ready for development, and struggling to develop themselves.

III. The education conducted by the formal educator has both a negative and a positive side. The negative function of the educator consists in removing impediments, so as to afford free scope for the learner's self-development. His positive function is to stimulate the learner to the exercise of his powers, to furnish materials and occasion for the exercise, and to superintend and maintain the action of the machinery.

IV. Self-development begins with the impressions received by the mind from external objects. These impressions (called sensations), when the mind becomes conscious of them, group themselves into perceptions. These are registered in the mind as conceptions or ideas, and constitute that elementary knowledge which is the basis of all knowledge.

V. Spontaneity and self-activity are the necessary conditions under which the mind educates itself and gains power and independence.

VI. Practical aptness or faculty, depends more on habits gained by the assiduous oft-repeated exercise of the learner's active powers than on knowledge alone. Knowing and doing (*Wissen und Können*) must, however, proceed together. The chief aim of all education (including instruction) is the development of the learner's powers.

VII. All education (including instruction) must be grounded on the learner's own observation (*Anschauung*) at first hand—on his own personal experience. This is the true basis of all his knowledge. First the reality, then the symbol; first the thing, then the word, not *vice versâ*.

VIII. That which the learner has gained by his own observation (*Anschauung*) and which, as a part of his personal experience, is incorporated with his mind, he *knows* and can describe or explain in his own words. His competency to do this is the measure of the accuracy of his observation, and consequently of his knowledge.

IX. Personal experience necessitates the advancement of the learner's mind from the near and actual, with which he is in contact, and which he can deal with himself, to the more remote; therefore from the concrete to the abstract, from particulars to generals, from the known to the unknown. This is the method of elementary education; the opposite proceeding—the usual proceeding of our traditional teaching—leads the mind from the abstract to the concrete, from generals to particulars, from the unknown to the known. This latter is the Scientific method—a method suited only to the advanced learner, who it assumes is already trained by the Elementary method.

[168] Most parents do not seem to think with Jean Paul, "If we regard all life as an educational institution, a circumnavigator of the world is less influenced by all the nations he has seen than by his nurse." (*Levana*, quoted in Morley's *Rousseau*.)

[169] I will quote the first paragraph of this work which is still considered mental pabulum suited to the digestions of young ladies and children:—

"*Name some of the most Ancient Kingdoms.*—Chaldēa, Babylonia, Assyria, China in Asia, and Egypt in Africa. Nimrod, the grandson of Ham, is supposed to have founded the first of these B.C. 2221, as well as the famous cities of Babylon and Nineveh; his kingdom being within the fertile plains of Chaldēa, Chalonītis, and Assyria, was of small extent compared with the vast empires that afterwards arose from it, but included several large cities. In the district called Babylonia were the cities of Babylon, Barsīta, Idicarra, and Vologsia," &c., &c.

[170] I shall always feel gratitude and affection for the two old ladies (sisters) to whom I was entrusted over half a century ago. More truly Christian women I never met with. But of the science and art of education they were totally ignorant; and moreover the premises they occupied were unfit for a school. As all the boys were under ten years old, it will seem strange, but is alas! too true, that there were vices among them which are supposed to be unknown to children and which if discovered would have made the old ladies close their school. The want of subjects in which the children can take a healthy interest will in a great measure account for the spread of evil in such schools. On this point some mistresses and most parents are dangerously ignorant.

[171] Having watched the "teaching" of pupil-teachers, I find that some of them (I may say many) never address more than one child at a time, and never attempt to gain the attention of more than a single child. So, by a very simple calculation, we can get at the maximum time each child is "under instruction." If the pupil-teacher has but three-quarters of the pupils for whom the Department supposes him "sufficient," each child cannot be under instruction *more* than two minutes in the hour. The rest of the time the children must sit quiet, or be cuffed if they do not. What is called "simultaneous" teaching in, say, reading, consists in the pupil-teacher reading from the book, and as he pronounces each word, the children shout it after him; but no one except the pupil-teacher knows the place in the book.

But perhaps the dangers from employing boys and girls to teach and govern children are greater morally than intellectually. Whether he report on it or not, the Inspector has less influence on the moral training than the youngest pupil-teacher. Channing has well said: "A child compelled for six hours each day to see the countenance and hear the voice of an unfeeling, petulant, passionate, unjust teacher is placed in a school of vice." Those who have never taught day after day, week after week, month after month, little know what demands school-work makes on the temper and the sense of justice. The harshest tyrants are usually those who are raised but a little way above those whom they have to control; and when I think of the pupil-teacher with his forty pupils to keep in order, I heartily pity both him and them. Is there not too much reason to fear lest in many cases the school should prove for both what Channing has well described as "a school of vice"? (R. H. Q. in *Spectator*, 1st March, 1890.)

[172] Since the above was written, another "New Code" has appeared (March, 1890), in which the system of measuring by "passes," a system maintained (in spite of the remonstrances of all interested in *education*) for nearly 30 years, is at length abandoned. We are certainly travelling, however slowly, away from Mr. Lowe. Far as we are still from Pestalozzi there seems reason to hope that the distance is diminishing.

[173] This short sketch of Froebel's life is mainly taken, with Messrs. Black's permission, from the *Encyclopædia Britannica*, for which I wrote it.

[174] This office was first filled by Langethal and afterwards by Ferdinand Froebel. I learned this at Burgdorf from Herr Pfarrer Heuer, whose father had himself been Waisenvater.

[175] For this quotation, and for much besides (as will appear later on), I am indebted to Mr. H. Courthope Bowen. See his paper *Froebel's Education of Man*.

[176] The educator *as teacher* has his activity limited, according to DeGarmo, to these two things; "(1) The *preparation* of the child's mind for a rapid and effective assimilation of new knowledge; (2) The *presentation* of the matter of instruction in such order and manner as will best conduce to the most effective assimilation" (*Essentials of Method* by Chas. DeGarmo, Boston, U.S., D. C. Heath, 1889). Besides this he must make his pupils *use* their knowledge both new and old, and reproduce it in fresh connexions.

[177] "Little children," says Joseph Payne, "are scarcely ever contented with simply doing nothing; and their fidgetiness and unrest, which often give mothers and teachers so much anxiety, are merely the strugglings of the soul to get, through the body, some employment for its powers. Supply this want, give them an object to work upon, and you solve the problem. The divergence and distraction of the faculties cease as they converge upon the work, and the mind is at rest in its very occupation." *V. to German Schools.*

[178] I entirely agree with Joseph Payne that where the language spoken is not German, it would be well to discard *Kindergarten*, *Kindergärtner*, and *Kindergärtnerin*. All who have to do with children should master some great principles taught by Froebel, but there is no need for them to learn German or to use German words. The French seem satisfied with *Jardin d'Enfants*, but we are not likely to be with *Children-Garden*. *Playschool might* do.

[179] Contrast this with what has been said by an eminent thinker of our time: "No art of equal importance to mankind has been so little investigated scientifically as the art of teaching." Sir H. S. Maine, quoted in J. H. Hoose's *M. of Teaching*.

[180] Here Jacotot's notion of teaching reminds one of the sophism quoted by Montaigne—"A Westphalia ham makes a man drink. Drink quenches thirst. Therefore a Westphalia ham quenches thirst."

[181] *See* H. Courthope Bowen on "Connectedness in Teaching" (*Educational Times*, June, 1890). Mr. Bowen quotes from H. Spencer—"Knowledge of the lowest kind is *un-unified* knowledge: science is *partially unified* knowledge: philosophy is *completely unified* knowledge."

[182] As I have said above (p. 89) these methodizers in language-learning may, with regard to the first stage, be divided into two parties which I have called *Complete Retainers* and *Rapid Impressionists*. Two Complete Retainers, Robertson and Prendergast, have, as it seems to me, made, since Jacotot, a great advance on his method and that of his predecessor Ascham. As I have had a good deal of experience with beginners in German, I will give from an old lecture of mine the main conclusions at which I have arrived:—"My principle is to attack the most vital part of the language, and at first to keep the area small, or rather to enlarge it very slowly; but within that area I want to get as much variety as possible. The study of a book written in the language should be carried on *pari passu* with drill in its common inflexions. Now arises the question, Should the book be made with the object of teaching the language, or should it be selected from those written for other purposes? I see much to be said on either side. The three great facts we have to turn to account in teaching a language, are these:—first, a few words recur so constantly that a knowledge of them and grasp of them gives us a power in the language quite out of proportion to their number; second, large classes of words admit of many variations of meaning by inflection, which variations we can understand from analogy; third, compound words are formed *ad infinitum* on simple laws, so that the root word supplies the key to a whole family. Now, if the book is written by the language-teacher, he has the whole language before him, and he can make the most of all these advantages. He can use only the important words of the language; he can repeat them in various connections; he can bring the main facts of inflection and construction before the learner in a regular order, which is a great assistance to the memory; he can give the simple words before introducing words compounded of them; and he can provide that, when a word occurs for the first time, the learners shall connect it with its root meaning. A short book securing all these advantages would, no doubt, be a very useful implement, but I have never seen such a book. Almost all delectuses, &c., bury the learner with a pile of new words, under which he feels himself powerless. So far as I know, the book has yet to be written. And even if it were written, with the greatest success from a linguistic point of view, it would of course make no pretension to a meaning. Having myself gone through a course of Ahn and of Ollendorf, I remember, as a sort of nightmare, innumerable questions and answers, such as "Have you my thread stockings? No, I have your worsted stockings." Still more repulsive are the long sentences of Mr. Prendergast:—"How much must I give to the cabdriver to take my father to the Bank in New Street before his second breakfast, and to bring him home again before half-past two o'clock?" I cannot

forget Voltaire's *mot*, which has a good deal of truth in it,—"Every way is good but the tiresome way." And most of the books written for beginners are inexpressibly tiresome. No doubt it will be said, "Unless you adopt the rapid-impressionist plan, any book *must* be tiresome. What is a meaning at first becomes no meaning by frequent repetition." This, however, is not altogether true. I myself have taught Niebuhr's *Heroengeschichten* for years, and I know some chapters by heart; but the old tales of Jason and Hercules as they are told in Niebuhr's simple language do not bore me in the least.

"Ein Begriff muss bei dem Worte sein,"

says the Student in Faust; and a notion—a very pleasing notion, too—remains to me about every word in the *Heroengeschichten*.

These, then, would be my books to be worked at the same time by a beginner, say in German:—A book for drill in the principal inflexions, followed by the main facts about gender, &c., and a book like the *Heroengeschichten*. This I would have prepared very much after the Robertsonian manner. It should be printed, as should also the Primer, in good-sized Roman type; though, in an appendix, some of it should be reprinted in German type. The book should be divided into short lessons. A translation of each lesson should be given in parallel columns. Then should come a vocabulary, in which all useful information should be given about the really important words, *the unimportant words being neglected*. Finally should come *variations*, and exercises in the lessons; and in these the important words of that and previous lessons should be used exclusively. The exercises should be such as the pupils could do in writing out of school, and *vivâ voce* in school. They should be very easy—real exercises in what is already known, not a series of linguistic puzzles. The object of the exercises, and also of a vast number of *vivâ voce* questions, should be to accustom the pupil to use his knowledge *readily*. (But some teachers, young teachers especially, are always *cross*-examining, and seem to themselves to fail when their questions are answered without difficulty.) The ear, the voice, the hand, should all be practised on each lesson. When the construing is known, transcription of the German is not by any means to be despised. A good variety of transcription is, for the teacher to write the German clause by clause on the black-board, and rub out each clause before the pupils begin to write it. Then a known piece may be prepared for dictation. In reading this as dictation, the master may introduce small variations, to teach his pupils to keep their ears open. He may, as another exercise, read the German aloud, and stop here and there for the boys to give the English of the last sentence read; or he may read to them either the exact German in the book or small variations on it, and make the pupils translate *vivâ voce*, clause by clause. He may then ask questions on the piece in German and require answers in English.

For exercises, there are many devices by which the pupil may be trained to observation, and also be confirmed in his knowledge of back lessons. The great teacher, F. A. Wolf, used to make his own children ascertain how many times such and such a word occurred in such and such pages. As M. Bréal says, children are collectors by nature; and, acting on this hint, we might say, "Write in column all the dative cases on pages *a* to *c*, and give the English and the corresponding nominatives." Or, "Copy from those pages all the accusative prepositions with the accusatives after them." Or, "Write out the past participles,

with their infinitives." Or, "Translate such and such sentences, and explain them with reference to the context." Or, questions may be asked on the subject-matter of the book. There is no end to the possible varieties of such exercises.

As soon as they get any feeling of the language, the pupils should learn by heart some easy poetry in it. I should recommend their learning the English of the piece first, and then getting the German *vivâ voce* from the teacher. To quicken the German in their minds, I think it is well to give them in addition a German prose version, using almost the same words. Variations of the more important sentences should be learnt at the same time.

In all these suggestions you will see what I am aiming at. I wish the learner to get a feeling of, and a power over, the main words of the language and the machinery in which they are employed.

[183] I append in a note a passage from the old edition of this book referring to the Cambridge man of forty years ago. "The typical Cambridge man studies mathematics, not because he likes mathematics, or derives any pleasure from the perception of mathematical truth, still less with the notion of ever using his knowledge; but either because, if he is "a good man," he hopes for a fellowship, or because, if he cannot aspire so high, he considers reading the thing to do, and finds a satisfaction in mental effort just as he does in a constitutional to the Gogmagogs. When such a student takes his degree, he is by no means a highly cultivated man; but he is not the sort of man we can despise for all that. He has in him, to use one of his own metaphors, a considerable amount of *force*, which may be applied in any direction. He has great power of concentration and sustained mental effort even on subjects which are distasteful to him. In other words, his mind is under the control of his will, and he can bring it to bear promptly and vigorously on anything put before him. He will sometimes be half through a piece of work, while an average Oxonian (as we Cambridge men conceive of him at least) is thinking about beginning. But his training has taught him to value mental force without teaching him to care about its application. Perhaps he has been working at the gymnasium, and has at length succeeded in "putting up" a hundredweight. In learning to do this, he has been acquiring strength for its own sake. He does not want to put up hundredweights, but simply to be able to put them up, and his reward is the consciousness of power. Now the tripos is a kind of competitive examination in putting up weights. The student who has been training for it, has acquired considerable mental vigour, and when he has put up his weight he falls back on the consciousness of strength which he seldom thinks of using. Having put up the heavier, he despises the lighter weights. He rather prides himself on his ignorance of such things as history, modern languages, and English literature. He "can get those up in a few evenings," whenever he wants them. He reminds me, indeed, of a tradesman who has worked hard to have a large balance at his banker's. This done, he is satisfied. He has neither taste nor desire for the things which make wealth valuable; but when he sees other people in the enjoyment of them, he hugs himself with the consciousness that he can write a cheque for such things whenever he pleases."

[184] On this interesting subject I will quote three men who said nothing *inepte*—De Morgan, Helps, and the first Sir James Stephen. De Morgan, speaking of Jacotot's plan, wrote:—"There is much truth in the assertion that new knowledge hooks on easily to a little of the old thoroughly mastered. The

day is coming when it will be found out that crammed erudition got up for examination, does not cast out any hooks for more." (*Budget of Paradoxes*, p. 3.) Elsewhere he says:—"When the student has occupied his time in learning a moderate portion of many different things, what has he acquired—extensive knowledge or useful habits? Even if he can be said to have varied learning, it will not long be true of him, for nothing flies so quickly as half-digested knowledge; and when this is gone, there remains but a slender portion of useful power. A small quantity of learning quickly evaporates from a mind which never held any learning except in small quantities; and the intellectual philosopher can perhaps explain the following phenomenon—that men who have given deep attention to one or more liberal studies, can learn to the end of their lives, and are able to retain and apply very small quantities of other kinds of knowledge; while those who have never learnt much of any one thing seldom acquire new knowledge after they attain to years of maturity, and frequently lose the greater part of that which they once possessed."

Sir Arthur Helps in *Reading* (*Friends in C.*) says:—"All things are so connected together that a man who knows one subject well, cannot, if he would, have failed to have acquired much besides; and that man will not be likely to keep fewer pearls who has a string to put them on than he who picks them up and throws them together without method. This, however, is a very poor metaphor to represent the matter; for what I would aim at producing not merely holds together what is gained, but has vitality in itself—is always growing. And anybody will confirm this who in his own case has had any branch of study or human affairs to work upon; for he must have observed how all he meets seems to work in with, and assimilate itself to, his own peculiar subject. During his lonely walks, or in society, or in action, it seems as if this one pursuit were something almost independent of himself, always on the watch, and claiming its share in whatever is going on."

In his Lecture on *Desultory and Systematic Reading*, Sir James Stephen said:—"Learning is a world, not a chaos. The various accumulations of human knowledge are not so many detached masses. They are all connected parts of one great system of truth, and though that system be infinitely too comprehensive for any one of us to compass, yet each component member of it bears to every other component member relations which each of us may, in his own department of study, search out and discover for himself. A man is really and soundly learned in exact proportion to the number and to the importance of those relations which he has thus carefully examined and accurately understood."

[185] This essay, which was written nearly twenty-five years ago, I leave as it stands. I take some credit to myself for having early recognised the importance of a book now famous. (June, 1890.)

[186] This proposition has been ably discussed by President W. H. Payne. *Contributions to the Science of Education.* "Education Values."

[187] "The brewer," as Mr. Spencer himself tells us, "if his business is very extensive, finds it pay to keep a chemist on the premises"—pay a good deal better, I suspect, than learning chemistry at school.

[188] Helps, who by taste and talent is eminently literary, put in this claim for science more than 20 [now nearer 50] years ago. "The higher branches of method cannot be taught at first; but you may begin by teaching orderliness of

mind. Collecting, classifying, contrasting, and weighing facts are some of the processes by which method is taught.... Scientific method may be acquired without many sciences being learnt; but one or two great branches of science must be accurately known." (*Friends in Council, Education.*) Helps, though by his delightful style he never gives the reader any notion of over compression, has told us more truth about education in a few pages than one sometimes meets with in a complete treatise.

[189] J. S. Mill (who by the way, would leave history entirely to private reading, *Address at St. Andrews*, p. 21), has pointed out that "there is not a fact in history which is not susceptible of as many different explanations as there are possible theories of human affairs," and that "history is not the foundation but the verification of the social science." But he admits that "what we know of former ages, like what we know of foreign nations, is, with all its imperfectness, of much use, by correcting the narrowness incident to personal experience." (Dissertations, Vol. I, p. 112.)

[190] It is difficult to treat seriously the arguments by which Mr. Spencer endeavours to show that a knowledge of science is necessary for the practice or the enjoyment of the fine arts. Of course, the highest art of every kind is based on science, that is, on truths which science takes cognizance of and explains; but it does not therefore follow that "without science there can be neither perfect production nor full appreciation." Mr. Spencer tells us of mistakes which John Lewis and Rossetti have made for want of science. Very likely; and had those gentlemen devoted much of their time to science we should never have heard of their blunders—or of their pictures either. If they were to paint a piece of woodwork, a carpenter might, perhaps, detect something amiss in the mitring. If they painted a wall, a bricklayer might point out that with their arrangement of stretchers and headers the wall would tumble down for want of a proper bond. But even Mr. Spencer would not wish them to spend their time in mastering the technicalities of every handicraft, in order to avoid these inaccuracies. It is the business of the painter to give us form and colour as they reveal themselves to the eye, not to prepare illustrations of scientific text-books. The physical sciences, however, are only part of the painter's necessary equipment, according to Mr. Spencer. "He must also understand how the minds of spectators will be affected by the several peculiarities of his work—a question in psychology!" Still more surprising is Mr. Spencer's dictum about poetry. "Its rhythm, its strong and numerous metaphors, its hyperboles, its violent inversions, are simply exaggerations of the traits of excited speech. To be good, therefore, poetry must pay attention to those laws of nervous action which excited speech obeys." It is difficult to see how poetry can pay attention to anything. The poet, of course must not violate those laws, but, if he *has paid attention* to them in composing, he will do well to present his MS. to the local newspaper. [It seems the class is not extinct of whom Pope wrote:—

> "Some drily plain, without invention's aid
> "Write dull receipts how poems may be made."
> *Essay on Criticism.*]

[191] Speaking of law, medicine, engineering, and the industrial arts, J. S. Mill remarks: "Whether those whose speciality they are will learn them as a branch of intelligence or as a mere trade, and whether having learnt them, they

will make a wise and conscientious use of them, or the reverse, depends less on the manner in which they are taught their profession, than upon *what sort of mind they bring to it—what kind of intelligence and of conscience the general system of education has developed in them*."—Address at St. Andrews, p. 6.

[192] "Comme vous n'avez pas su ou comme vous n'avez pas voulu atteindre la pensée de l'enfant, vous n'avez aucune action sur son développement moral et intellectuel. Vous êtes le maître de latin et de grec." Bréal. *Quelques Mots, &c.*, p. 243.

[193] Mr. Spencer does not mention this principle in his enumeration, but, no doubt, considers he implies it.

[194] "Si l'on partageait toute la science humaine en deux parties, l'une commune à tous les hommes, l'autre particulière aux savants, celle-ci serait très-petite en comparaison de l'autre. Mais nous ne songeons guère aux acquisitions générales, parce qu'elles se font sans qu'on y pense, et même avant l'âge de raison; que d'ailleurs le savoir ne se fait remarquer que par ses différences, et que, comme dans les équations d'algèbre, les quantités communes se comptent pour rien."—*Émile*, livre i.

[195] This is well said in Dr. John Brown's admirable paper *Education through the Senses*. (Horæ Subsecivæ, pp. 313, 314.)

[196] After remarking on the wrong order in which subjects are taught, he continues, "What with perceptions unnaturally dulled by early thwartings, and a coerced attention to books, what with the mental confusion produced by teaching subjects before they can be understood, and in each of them giving generalisations before the facts of which they are the generalisations, what with making the pupil a mere passive recipient of others' ideas and not in the least leading him to be an active inquirer or self-instructor, and what with taxing the faculties to excess, there are very few minds that become as efficient as they might be."

[197] A class of boys whom I once took in Latin Delectus denied, with the utmost confidence, when I questioned them on the subject, that there were any such things in English as verbs and substantives. On another occasion, I saw a poor boy of nine or ten caned, because, when he had said that *proficiscor* was a deponent verb, he could not say what a deponent verb was. Even if he had remembered the inaccurate grammar definition expected of him, "A deponent verb is a verb with a passive form and an active meaning," his comprehension of *proficiscor* would have been no greater. It is worth observing that, even when offending grievously in great matters against the principle of connecting fresh knowledge with the old, teachers are sometimes driven to it in small. They find that it is better for boys to see that *lignum* is like *regnum*, and *laudare* like *amare*, than simply to learn that *lignum* is of the Second Declension, and *laudare* of the First Conjugation. If boys had to learn by a mere effort of memory the particular declension or conjugation of Latin words before they were taught anything about declensions and conjugations, this would be as sensible as the method adopted in some other instances, and the teachers might urge, as usual, that the information would come in useful afterwards.

[198] Mr. Spencer and Professor Tyndall appeal to the results of experience as justifying a more rational method of teaching. Speaking of geometrical

deductions, Mr. Spencer says: “It has repeatedly occurred that those who have been stupefied by the ordinary school-drill—by its abstract formulas, its wearisome tasks, its cramming—have suddenly had their intellects roused by thus ceasing to make them passive recipients, and inducing them to become active discoverers. The discouragement caused by bad teaching having been diminished by a little sympathy, and sufficient perseverance excited to achieve a first success, there arises a revolution of feeling affecting the whole nature. They no longer find themselves incompetent; they too can do something. And gradually, as success follows success, the incubus of despair disappears, and they attack the difficulties of their other studies with a courage insuring conquest.”

[199] On this subject I can quote the authority of a great observer of the mind —no less a man, indeed, than Wordsworth. He speaks of the “grand elementary principal of pleasure, by which man knows, and feels, and lives, and moves. We have no sympathy,” he continues, “but what is propagated by pleasure—I would not be misunderstood—but wherever we sympathise with pain, it will be found that the sympathy is produced and carried on by subtile combinations with pleasure. We have no knowledge, that is, no general principles drawn from the contemplation of particular facts, but what has been built up by pleasure, and exists in us by pleasure alone. The man of science, the chemist, and mathematician, whatever difficulties and disgusts they may have to struggle with, know and feel this. However painful may be the objects with which the anatomist’s knowledge may be connected, he feels that his knowledge is pleasure, and *when he has no pleasure he has no knowledge*.”—Preface to second edition of *Lyrical Ballads*. So Wordsworth would have agreed with Tranio: (*T. of Shrew*, j. 1.)

> “No profit grows where is no pleasure ta’en;
> In brief, Sir, study what you most affect.”

[200] This remark, I am glad to say, is much less true now (1890) than when first published. Indeed some purveyors of books for children are getting to rely too exclusively on the pictures, just as I have noticed that an organ-grinder with a monkey seldom or never has a good organ. Of large pictures for class teaching, some of the best I have seen (both for history and natural history) are published by the S.P.C.K.

[201] Tillich’s boxes of bricks (sold by the B’ham Midland Educational Supply Company, and by Arnold, Briggate, Leeds), are very useful for “intuitive” arithmetic: for higher stages one might say the same of W. Wooding’s “Decimal Abacus” with vertical wires.

[202] The grammar question is still a perplexing one. There are Inspectors who require children (as I once heard in a remote country school) to distinguish “7 kinds of adverbs.” Then we have children discriminating after the fashion of one of my own pupils, (I quote from a grammar paper,) “Parse *it*.” “*It* is a prepreition. Almost all small words are prepreitions.” In such cases it is very hard indeed to find any common ground for the minds of the old and the young. The true way I believe is to lead the young to make their own observations. The way is very very slow, but it developes power. I have lately seen an interesting

little book on these lines, called *Language Work* by Dr. De Garmo (Bloomington, Ill., U.S.A.)

[203] Books for a beginner should contain a little matter in much space, and, as they are usually written, they contain much matter in a little space. Nothing can be truer than the saying of Lakanal, "L'abrégé est le contraire de l'éléméntaire: That which is abridged is just the opposite of that which is elementary." When shall we learn what seems obvious in itself and what is taught us by the great authorities? "Epitome," says Ascham, "is good privately for himself that doth work it, but ill commonly for all others that use other men's labour therein. A silly poor kind of study, not unlike to the doing of those poor folk which neither till, nor sow, nor reap themselves, but glean by stealth upon other's grounds. Such have empty barns for dear years." (*School Master*, Book ij.) Bacon says (*De Aug.*, lib. vj., cap. iv.), "Ad pædagogicam quod attinet brevissimum foret dictu.... Illud imprimis consuluerim ut caveatur a compendiis: Not much about pedagogics.... My chief advice is, keep clear of compendiums." And yet "the table of contents" method which I suggested in irony I afterwards found proposed in all seriousness in an announcement of Dr. J. F. Bright's *English History*: "The marginal analysis has been collected at the beginning of the volume so as to form an abstract of the history *suitable for the use of those who are beginning the study*."

I would rather listen to Oliver Goldsmith: "In history, such stories alone should be laid before them as might catch the imagination: instead of this, they are too frequently obliged to toil through the four Empires, as they are called, where their memories are burthened by a number of disgusting names that destroy all their future relish for our best historians." (Letter on *Education* in *the Bee*: a letter containing so much new truth that Goldsmith in re-publishing it had to point out that it had appeared before Rousseau's *Emile*.) A modern authority on education has come to the same conclusion as Goldsmith. "The first teaching in history will not give dates, but will show the learner men and actions likely to make an impression on him. Der erste Geschichtsunterricht wird nicht Jahreszahlen geben, sondern eindrucksvolle Personen und Thaten vorführen." (L. Wiese's *Deutsche Bildungsfragen*, 1871.)

[204] Dr. Jas. Donaldson has well said of the educator:—"The most unguarded of his acts, those which come from the depth of his nature, uncalled for and unbidden, are the actions which have the most powerful influence." *Chambers' Information* sub v. *Education*, p. 565.

[205]

> "That you are wife
> To so much bloated flesh *as scarce hath soul*
> *Instead of salt to keep it sweet*, I think
> Will ask no witnesses to prove."
> BEN JONSON: *The Devil is an Ass*, Act i. sc. 3.

[206] I fortify myself with the following quotation from the *Book about Dominies* by "Ascott Hope" (Hope Moncrieff). He says that a school of from twenty to a hundred boys is too large to be altogether under the influence of one man, and too small for the development of a healthy condition of public opinion among the boys themselves. "In a community of fifty boys, there will always be

found so many bad ones who will be likely to carry things their own way. Vice is more unblushing in small societies than in large ones. *Fifty boys will be more easily leavened by the wickedness of five, than five hundred by that of fifty.* It would be too dangerous an ordeal to send a boy to a school where sin appears fashionable, and where, if he would remain virtuous, he must shun his companions. There may be middle-sized schools which derive a good and healthy tone from the moral strength of their masters or the good example of a certain set of boys, but I doubt if there are many. Boys are so easily led to do right or wrong, that we should be very careful at least to set the balance fairly" (p. 167); and again he says (p. 170), "The moral tone of a middle-sized school will be peculiarly liable to be at the mercy of a set of bold and bad boys."

[207] As I have been thought to express myself too strongly on this point, I will give a quotation from a master whose opinion will go far with all who know him. "The moral tone of the school is made what it is, not nearly so much by its rules and regulations, or its masters, as by the leading characters among the boys. They mainly determine the public opinion amongst their schoolfellows—their personal influence is incalculable." Rev. D. Edwardes, of Denstone.

[208] About Preparatory Schools I find I am at issue with my friend the Head Master of Harrow (See *Public Schools*, by Rev. J. E. C. Welldon, in *Contemporary R.*, May, 1890). I do indeed incline to his opinion that very young boys should not be at a public school, but I cannot agree that they should be at a middle-sized boarding school. I hold that they should live in a *family* (their own if possible) and go to a day school. Day Schools have now been provided for girls, but for young boys they do not seem in demand. English parents who can afford it send their sons to boarding schools from eight years old onwards. This seems to me a great mistake of theirs.

[209] "What is education? It is that which is imbibed from the moral atmosphere which a child breathes. It is the involuntary and unconscious language of its parents and of all those by whom it is surrounded, and not their set speeches and set lectures. It is the words which the young hear fall from their seniors when the speakers are off their guard: and it is by these unconscious expressions that the child interprets the hearts of its parents. That is education."—Drummond's *Speeches in Parliament*.

[210] In what I have said on this subject, the incompleteness which is noticeable enough in the preceding essays, has found an appropriate climax. I see, too, that if anyone would take the trouble, the little I have said might easily be misinterpreted. I am well aware, however, that if the young mind will not readily assimilate sharply defining religious formulæ, still less will it feel at home among the "immensities" and "veracities." The great educating force of Christianity I believe to be due to this, that it is not a set of abstractions or vague generalities, but that in it God reveals Himself to us in a Divine Man, and raises us through our devotion to Him. I hold, therefore, that religious teaching for the young should neither be vague nor abstract. Mr. Froude, in commenting on the use made of hagiology in the Church of Rome, has shown that we lose much by not following the Bible method of instruction. (See *Short Studies: Lives of the Saints*, and *Representative Men*.)

[211] This theory of the educator's task which makes him a disposer or director of influence rather than a teacher, led Locke to decry our public schools,

for in them the traditions and tone of the school seem the source of influence, and the masters are to all appearance mainly teachers. Locke's own words are these:—"The difference is great between two or three pupils in the same house and three or four score boys lodged up and down; for let the master's industry and skill be never so great, it is impossible he should have fifty or a hundred scholars under his eye any longer than they are in the school together, nor can it be expected that he should instruct them successfully in anything but their books; the forming of their minds and manners requiring a constant attention and particular application to every single boy which is impossible in a numerous flock, and would be wholly in vain (could he have time to study and correct everyone's particular defects and wrong inclinations) when the lad was to be left to himself or the prevailing infection of his fellows the greatest part of the four-and-twenty hours." But the educator who considers himself a director of influences must remember that he is not the only force. The boy's companions are a force at least as great; and if he were brought up in private on Locke's system, he would be entirely without a kind of influence much more valuable than Locke seems to think—the influence of boy companions, and of the traditions of a great school. On the other hand, it cannot be denied that our public schools used to be, and perhaps are still to some extent, under-mastered, and that the masters should not be the mere teachers which, from overwork and other causes, they often tend to become. The consequence has been that the real education of the boys has in a great measure passed out of their hands. What has been the result? A long succession of able teachers have aimed at giving literary instruction and making their pupils classical scholars. Both manners and bodily training have been left to take care of themselves. Yet such is the irony of Fate that the majority of youths who leave our great schools are not literary and are not much of classical scholars, but they are decidedly gentlemanly and still more decidedly athletic.

[212] I append a note written from a different point of view—"*With how little wisdom!*" certainly seems to cover most departments of life. *Seems?* Yes; but are we not apt to overlook the wisdom that lies in the great mass of people? In some small department we may have investigated further than our class-mates, and may see, or think we see, a good deal of stupidity in what goes on. But in most matters we do not investigate for ourselves, but just do the usual thing; and this seems to work all right. There must be a good deal of wisdom underlying the complex machinery of civilised life. Carlyle's "Mostly fools!" will by no means account for it. At times one has a dim perception that people in general are not so stupid as they seem. Perhaps a long life would in the end lead us to say like Tithonus,

> "Why should a man desire in any way
> "To vary from the kindly race of men?"

There is a higher wisdom than the disintegrating individualism of Carlyle. Far better to believe with Mazzini in "the collective existence of humanity," and remembering that we work in a medium fashioned for us by the labours of all who have preceded us, regard our collective powers as "grafted upon those of all foregoing humanity." (Mazzini's *Essays*: *Carlyle*.) This is the point of view to which Wordsworth would raise us:—

"Among the multitudes
"Of that huge city, oftentimes was seen
".....the unity of man,
"One spirit over ignorance and vice
"Predominant, in good and evil hearts;
"One sense for moral judgements, as one eye
"For the sun's light. The soul when smitten thus
"By a sublime *idea*, whence soe'er
"Vouchsafed for union or communion, feeds
"On the pure bliss and takes her rest with God."
Prelude viij, *ad f.*

Though unable to share in "the pure bliss" of Wordsworth we may take refuge with Goethe in the thought that "humanity is the true man," and enjoy much to which we have no claim as individuals. Tradition, blind tradition, must rule our actions through by far the greatest part of our lives; and seeing we owe it so much, we should be tolerant, even grateful.

[213] Professor Jebb has lately given us the main ideas of the great Scholar Erasmus. "In all his work," says the Professor, "he had an educational aim.... The evils of his age, in Church, in State, in the daily lives of men, seemed to him to have their roots in *ignorance*; ignorance of what Christianity meant, ignorance of what the Bible taught, ignorance of what the noblest and most gifted minds of the past, whether Christian or pagan, had contributed to the instruction of the human race." (Rede Lecture, 1890.) Erasmus evidently fell into the error against which Pestalozzi and Froebel lift up their voices, often in vain—the error of forgetting that knowledge is of no avail without intelligence. What is the use of lighting additional candles for the blind?

APPENDIX.

History of this Book.—Some wise man has advised us never to find fault with ourselves, for, says he, you may always depend on your friends to do it for you. So, having looked through the proofs of this book, I abstain from fault-finding. I fancy I *could* find fault more effectively than my friends or even my professional critics. As the *Spectator's* "Correspondent in an easy chair" says very truly; the author has read his book many times; the critic has read it *at most* once. In fact the critic gives to the book (in some cases to the subject of the book also) no greater number of hours than the author has given months, perhaps years. Partiality blinds the author, no doubt, but unless he is a fatuous person it does not blind him so much as his haste blinds the critic. An author of note said of a book of his, which had been much criticised: "The book has faults, but I am the only person who has discovered them," to which a friend maliciously appended: "For *faults* read *merits*." Whatever was the truth here, I am inclined to think the author has the best chance of putting his finger on the weak places.

But if I see weaknesses in the foregoing book, why do I not make it better? Just for two reasons: to improve the book I should have to spend more time on it and more money. The more I read and think about any one of my subjects, the more I want to go on reading and thinking. Perhaps I hear of an old book that has escaped my notice, or a new book comes out, sometimes an important book like Pinloche's *Basedow*. So I can never finish an essay to my satisfaction, and the only way of getting it off my hands is to send the copy to the printer. By the time the proof comes in there is something that I should like to add or alter; but then the dread of a long bill for "corrections" restrains me. However, now the book is all in type, I see here and there something that suggests a note by way of explanation or addition, so I add this appendix. Taking a hint from one of my favourite authors, Sir Arthur Helps, I throw my notes into the form of a dialogue, but being entirely destitute of Helps's dramatic skill I confine myself to **E.** (the Essayist) and **A.** (Amicus), who is only too clearly an *alter ego*.

A. So the Americans have kept alive your old book for you, and at last you have rewritten it. You at least have no reason to complain that there is no international copyright. Your book would have been forgotten long ago if a lady in Cincinnati had not persuaded an American publisher there to reprint it. **E.** Yes, I very readily allow that I have been a gainer. The Americans have done more for me than my own countrymen. To be sure neither have "praised with the hands" (as Molière's *professeur* has it); and, in money at least, the book has never paid *me* its expenses; but three American publishers have done for themselves what no Englishman would do for me, viz., publish at their own risk. In 1868 when my MS. was ready, I went to my old friend, Mr. Alexander Macmillan; but he would not even look at it. "Books on education," said he, "don't pay. Why there is Thring's *Education and School*, a capital book" (I assented heartily, for I was very fond of it), "well, *that* doesn't sell." I was forced to admit that in that case I had little chance. "But," I said, "I suppose you would publish at my risk?" "No," said Mr. Macmillan. "The author is never satisfied when his book doesn't pay." "What would you advise?" I asked. "I'll give you a letter of introduction to Mr. William Longman," said Mr. Macmillan; "I dare say he'll publish for you." With this letter I went to Mr. William Longman (who has since those days been gathered to his ancestors, formerly of Paternoster Row). Mr. Longman said he would put the MS. in the hands of his reader. If the reader's report was favourable the firm would offer me terms; if not, they would publish for me on commission. I sent the MS. accordingly, and soon after I had a letter from the firm offering to publish "on commission." When the book was in type, Mr. Longman advised me to have only 500 printed, and to publish at a high price. "I should charge 9*s.*," he said. "Very few people will buy, and they won't consider the price." This was not my opinion, but in such a matter I felt that the weight of authority was enormously against me. So I consented to the publishing price of 7*s.* 6*d.* And at first it seemed that Mr. Longman was right—at least about the small number of purchasers. £30 was spent in advertising, and the book was very generally and I may say very favourably reviewed; but when about 100 copies had been sold, it almost entirely ceased "to move." I think 13 copies were sold in six months. So to get rid of the remainder of my 500 copies (some 300 of them) I put down the price to 3*s.* 6*d.* Then it seemed that Mr. Longman had made a mistake about the price. Without another advertisement the 300 were sold in a month or two. Some time after, I heard

that the book had been republished in Cincinnati, and on my writing to the publishers, Messrs. Robert Clarke & Co., they presented me with half-a-dozen copies. This proved to be a perfect reprint, which is more than I can say of those which years afterwards were issued by Mr. Bardeen and Messrs. Kellogg. I have therefore from time to time purchased from Messrs. Clarke and imported the copies (I suppose about 1500 in all) that have been wanted for the English market. I hope these details do not bore you. **A.** Not at all. The history of any book interests me, and your book has had some odd experiences. It has lived, I own, much longer than I expected, and for this you have to thank the Americans. **A.** In my case the absence of international copyright has done no harm certainly; but after all copyright has its advantages, international copyright included. Specialists suffer severely from the want of it. Perhaps the "special" public in this country is so small that an important book for it cannot be published. If to our special public were joined the special public of the U.S., the book might be fairly remunerative to its author. Take, *e.g.*, Joseph Payne's writings. These would have been lost to the world had not Dr. Payne published them as an act of filial piety. With an international copyright these works would be very good property. **E.** You think then that in the long run "honesty is the best policy" even internationally? **A.** I must say my opinion does incline in that direction.

Class Matches (p 42).—**A.** I think you have had a good deal to do with class matches? **E.** Yes. One must be careful not to overdo them, but I have found an occasional match a capital way of enlivening school-work. Some time before the match takes place the master lets the two best boys pick up sides, the second boy having the first choice. The subject for the match is then arranged, and to prevent disputes the area must be carefully defined. Moreover, there must be no opportunity for the boys to ask questions about unimportant details that are likely to have escaped attention. When the match is to take place each boy should come provided with a set of written questions, and whenever a boy shows himself ignorant of the right answer to a question of his own he must be held to have failed even if his opponent is ignorant also. At Harrow, where I had a class-room ("school-room" as it is there called) to myself, I used to work these matches very successfully in German. Say Heine's Lorelei had been learnt by heart. I set as a subject for a match the plurals of the substantives and the past participles of the verbs in the poem. Or the boys had to make up for themselves and number on

paper a set of short sentences in which only words which occurred in the poem were used. In this last case the questioner handed in to the master his paper with both the English and the German on it, and the master gave the other side the English, of which they had to write the German. The details of such matches may of course be varied to any extent so long as the subject set is quite definite. The scoring will be found best at the lower end, so that a match stimulates those who need stimulus. **A.** What did you call "scratch pairs?" **E.** Oh, that was a device for getting up a little harmless excitement. Knowing the capacities of my boys, I arranged them in pairs, the best boy and the worst forming one pair, the next best and next worst the second pair, &c., &c. I then asked a series of questions to which all had to write short answers. I then looked over the answers and marked them. Finally the marks of each *pair* were added together, and I announced the order in which the pairs "came in." It was really "anybody's race" for neither I nor anyone could predict the result. If the number of boys was an odd number the boy in the middle fought for his own hand and had his marks doubled. Perhaps on the whole he had the best chance.

Competition.—**A.** There were then some forms of emulation which you did not set your face against? **E.** There were many, but I preferred emulation which stimulated the idle rather than the industrious. Most "prizes" act only on those who would be better without them. **A.** Do you see no danger in encouraging rivalry between different bodies? The strife between parties has often been more virulent than the strife between individuals. **E.** Yes, I know well that in exciting party-feeling one is playing with edged tools; and besides this, a boy who for any cause is thought a disgrace to his side, is very likely to be bullied by it. Let me tell you of one form of stimulus which seemed to work well and was free from most of the objections you are thinking of. When I had a small school of my own in which there were only young boys, I put up in the school-room a list of the boys' names in alphabetical order with blank spaces after the names. I looked over the boys' written work very carefully, and whenever I came across any written exercise evidently done with great painstaking and for that boy with more than ordinary success, I marked it with a G, and I put up the G in one of the spaces after that boy's name in the list hung up in the school-room. When the school collectively had obtained a fixed number of G's we had an extra half-holiday. The announcement of a G was therefore always hailed with delight. **A.** I see one thing in favour of that device. You

might by a G give encouragement to a boy when he has just begun to *try*. This is often a turning-point in a boy's life; and a master's early recognition of effort may do much to strengthen into a habit what might, without the recognition, have proved nothing but a passing whim. At the very least, all such devices have one good effect; they break the monotony of school-work; and monotony is much more wearing to the young than it is to their elders. Can you tell me of others who have used such plans? **E.** A friend of mine who has a genius for inventing school plans of all kinds and marvellous energy in working them, has a boarding-house in connexion with a large school. The marks of every boy in the school are given out for each week. My friend gives a supper at the end of the quarter if the average marks of his house come up to a certain standard. He puts up each week a list of "Furtherers," *i.e.*, of the boys who have surpassed the average, and of "Hinderers," *i.e.*, of boys who have fallen below it **A.** No doubt this is an effective spur, but I should fear it would in practice deliver the hindermost to Satan. The boy whom nature has made a "hinderer" is likely to have by no means a good time in that house. Do you know if such devices as you have mentioned are common in schools? **E.** I really can't say. I have seen in American school papers accounts of class matches. In the New England *Journal of Education* (22nd November, 1888) Mr. A. E. Winship gave an account of some inter-class matches at Milwaukee. There is a match between three classes, say in penmanship. If there are seventy boys in the three classes together, each boy draws a number from one to seventy, and puts not his name but his number on his paper. The same lesson is set for all. The papers are collected, divided into three equal heaps, and looked over and marked by three masters. Finally the *average* of each class is taken. In mental arithmetic each class chooses its own champions. This would be fun, but would do nothing for the lower end of the class. The principal of McDonough School No. 12, New Orleans, Mr. H. E. Chambers, gives an account in the New York *School Journal* (8th December, 1888), how he organised sixteen boys into teams of four, putting the best and worst together as I did in making up scratch pairs. The match between these teams was to see which could get the best record for the month. As Mr. Chambers tells us the sharper boys managed with more success than the master to let light into the dull intellects of boys in the same team with them. This union of interests between the "strong" and the "weak" as the French call them, is a very good feature in combats of *sides*.

The Jesuits.—**A.** What is it that interests you so much in the Jesuits? **E.** Two things. First, the Jesuit shows the effects of a definitely planned and rigidly carried out system of education; and next, in such a society you find a continuity of effort which is and must be wanting in the life of an individual. If ever "we feel that we are greater than we know" it is when we can think of ourselves as parts of a society, a society which existed long before us, and will last after us. For instance, it is a great thing to be connected with an historical school such as Harrow. We then realise, as the school's poet, Mr. E. E. Bowen, has said, that we are no mere "sons of yesterday," and thinking of the connection between the mighty dead and the old school we join heartily in the chorus of the school song:—

"Their glory thus shall circle us
"Till time be done."

A. I verily believe you expect your share in this "glory" for having invented the Harrow "Blue Book," which is likely to outlive *Educational Reformers*; but if the boys ever thought of the inventor (which they don't) they would naturally suppose that he was some contemporary of Cadmus or Deucalion. *Sic transit!* But what has this to do with the Jesuits? **E.** Only this, that by corporate life you secure a continuity of effort. There is to me something very attractive in the idea of a teaching society. How such a society might capitalise its discoveries! The Roman Church has shown a genius for such societies, witness the Jesuits and the Christian Brothers. The experience of centuries must have taught them much that we could learn of them. **A.** The Jesuits seem to me to be without the spirit of investigators and discoverers. The rules of their Society do not permit of their learning anything or forgetting anything. Ignatius Loyola was a wonderful man, but he must have been superhuman if he could legislate for all time. By the way, I see you say the first edition of the *Ratio* was published in 1585. What is your authority? **E.** I took the date from the copy in the British Museum. According to a volume published by Rivingtons in 1838 (*Constitutiones Societatis Jesu*) the *Constitutions* were first printed in 1558, but were not divulged till "the celebrated suit of the MM. Lionci and Father La Valette" in 1761.

Alexander's Doctrinale (p. 80).—**A.** I thought you made it a rule to give only what was useful. What can be the use of the quotations which your old

Appendix contained “from a celebrated grammar written by a Franciscan of Brittany about the middle of the 13th century”? **E.** Perhaps I had an attack of antiquarianism; but I rather think the quotations were given in order to shew our progress since those days. The Teachers’ art of making easy things difficult is well exemplified in Alexander’s rules for the first declension. But life is short, and folly is best forgotten.

Lily’s Grammar (p. 80). A. Would not your last remark rule out what you told us about Lily’s Grammar? **E.** As regards Lily’s assertion, “Genders of nouns be 7,” it certainly would. Surely nobody but a writer of school-books would ever have thought of making a “gender” out of “hic, hæc, hoc, felix”! But the absurdity did not originate with Lily. He was all for simplification, and though there were some changes in the Eton Latin Grammar which succeeded the “Short introduction of Grammar” known as Lily’s Grammar, these changes were, some of them at least, by no means improvements. The old book put *a* before *all* ablatives and taught that “by a kingdom” was *a regno*. If this was not any better than teaching that *domino* by itself was “by a Lord,” it was at least no worse. The optative of the old book (“*Utinam sim* I pray God I be; *Utinam Essem* would God I were, &c.”) and the subjunctive (“*Cum Sim* When I am, &c.,”) were better than the oracular statement which perplexed my youth, “The subjunctive mood is declined like the potential.” How often I said those words, and being of an inquiring mind wondered what on earth “the subjunctive mood” was!

Colet. E. The passage I refer to on page 80 from Colet is in a little book in the B.M. It is “Joannis Coleti theologi, olim Decani Divi Pauli, editio, una cum quibusdam G. Lilii Grammatices Rudimentis, &c. Antuerpiæ 1535.” After the accidence of the eight parts of speech, he says:—“Of these eight parts of speech in order well construed, be made reasons and sentences, and long orations. But how and in what manner, and with what constructions of words, and all the varieties, and diversities, and changes in Latin speech (which be innumerable), if any man will know, and by that knowledge attain to understand Latin books, and to speak and to write clean Latin, let him, above all, busily learn and read good Latin authors of chosen poets and orators, and note wisely how they wrote and spake; and study always to follow them, desiring none other rules but their examples. For in the beginning men spake not Latin because such rules were made, but, contrariwise, because men spake such Latin, upon that followed the rules,

and were made. That is to say, Latin speech was before the rules, and not the rules before the Latin speech. Wherefore, well-beloved masters and teachers of grammar, after the parts of speech sufficiently known in our schools, read and expound plainly unto your scholars good authors, and show to them [in] every word, and in every sentence, what they shall note and observe, warning them busily to follow and do like both in writing and in speaking; and be to them your own self also speaking with them the pure Latin very present, and leave the rules; for reading of good books, diligent information of learned masters, studious advertence and taking heed of learners, hearing eloquent men speak, and finally, busy imitation with tongue and pen, more availeth shortly to get the true eloquent speech, than all the traditions, rules, and precepts of masters." This passage is, I find, well known. It is given in Knights' *Life of Colet* and is referred to by Mr. Seebohm. Mr. J. H. Lupton, Colet's latest biographer, has kindly corrected the date for me: it is indistinct in the Museum copy.

Mulcaster for English (p. 97). A. Except in Clarke's edition, your extracts from Mulcaster's *Elementarie* have been omitted by your American reprinters. **E.** So I see. I should have thought the Americans would have been much interested by this early praise of our common language. The passage is certainly a very remarkable one, and Professor Masson has thought it worth quoting in his *Life of Milton*. The *Elementarie* is a scarce book; so I will not follow my reprinters in leaving out this passage:—"Is it not a marvellous bondage to become servants to one tongue, for learning's sake, the most part of our time, with loss of most time, whereas we may have the very same treasure in our own tongue with the gain of most time? our own bearing the joyful title of our liberty and freedom, the Latin tongue remembering us of our thraldom and bondage? I love Rome, but London better; I favour Italy, but England more: I honour the Latin, but I worship the English.... I honour foreign tongues, but wish my own to be partaker of their honour. Knowing them, I wish my own tongue to resemble their grace. I confess their furniture, and wish it were ours.... The diligent labour of learned countrymen did so enrich those tongues, and not the tongues themselves; though they proved very pliable, as our tongue will prove, I dare assure it, of knowledge, if our learned countrymen will put to their labour. And why not, I pray you, as well in English as either Latin or any tongue else? Will ye say it is needless? sure that will not hold. If loss of time, while ye be pilgrims to learning, by lingering about tongues be no

argument of need; if lack of sound skill while the tongue distracteth sense more than half to itself and that most of all in a simple student or a silly wit, be no argument of need, then ye say somewhat which pretend no need. But because we needed not to lose any time unless we listed, if we had such a vantage, in the course of study, as we now lose while we travail in tongues; and because our understanding also were most full in our natural speech, though we know the foreign exceedingly well—methink *necessity* itself doth call for *English*, whereby all that gaiety may be had at home which makes us gaze so much at the fine stranger." Among various objections to the use of English which he answers, he comes to this one:—"But will ye thus break off the common conference with the learned foreign?" To this his answer is not very forcible:—"The conference will not cease while the people have cause to interchange dealings, and without the Latin it may well be continued: as in some countries the learneder sort and some near cousins to the Latin itself do already wean their pens and tongues from the use of the Latin, both in written discourse and spoken disputation, into their own natural, and yet no dry nurse being so well appointed by the milch nurse's help." Further on he says:—"The emperor Justinian said, when he made the Institutes of force, that the students were happy in having such a foredeal [*i.e.*, advantage—German *Vortheil*] as to hear him at once, and not to wait four years first. And doth not our languaging hold us back four years and that full, think you?... [But this is not all.] Our best understanding is in our natural tongue, and all our foreign learning is applied to our use by means of our own; and without the application to particular use, wherefore serves learning?... [As for dishonouring antiquity], if we must cleave to the eldest and not the best, we should be eating acorns and wearing old Adam's pelts. But why not all in English, a tongue of itself both deep in conceit and frank in delivery? I do not think that any language, be it whatsoever, is better able to utter all arguments either with more pith or greater plainness than our English tongue is.... It is our accident which restrains our tongue and not the tongue itself, which will strain with the strongest and stretch to the furthest, for either government if we were conquerors, or for cunning if we were treasurers; not any whit behind either the subtle Greek for crouching close, or the stately Latin for spreading fair."

Marcel's "Axiomatic Truths."—**A.** I have seen Marcel referred to as a great authority in education, but I look in vain for his name in Kiddle's Cyclopædia and in Sonnenschein's. **E.** You would be more successful in

Buisson's. There I see that Claude Marcel was born at Paris in 1793, and died in 1876. He was one of Napoleon's soldiers. After 40 years' absence from France dating from 1825 he went back to Paris. He had been French Consul at Cork, and brought up nine children whom he taught entirely himself. In 1853 he published with Chapman and Hall his *Language as a Means of Mental Culture* (2 vols.). This book was not very well named, for it contains in fact an analysis of the subject—education. To the study of this subject Marcel must have given his life, and it seems odd that his contribution to English (not French) pedagogic literature is so little known. A French abridgment of his work appeared in 1855 with the title *Premiers Principes d'Education*; and in 1867 he published in French *L'Études des Languages* (Paris, Borrani) of which a translation was published in the U.S.A. Marcel's notion of education is threefold, viz., Physical, Intellectual, and Moral Education: the 1st aiming at *health*, *strength*, and *beauty*; the 2nd at *mental power* and the *acquisition of knowledge*; the 3rd at *piety*, *justice*, *goodness*, and *wisdom*. According to him the Creator has made the exercise of our faculties *pleasurable*. This will suggest his main lines. He expects to find general assent, for he quotes from Garrick:—

> "When Doctrine meets with general approbation,
> "It is not heresy but reformation."

But he has met with less approbation than neglect. His "axiomatic truths" that I quoted in the old appendix were abused without mercy by a critic of those days who accused me of "bookmaking" for putting them in. On the other hand my last American reprinter singles them out for honour and puts them at the beginning of the book. After this I suppose somebody likes them, so here they are:

"**Axiomatic Truths of Methodology.**—1. The method of nature is the archetype of all methods, and especially of the method of learning languages.

2. The classification of the objects of study should mark out to teacher and learner their respective spheres of action.

3. The ultimate objects of the study should always be kept in view, that the end be not forgotten in pursuit of the means.

4. The means ought to be consistent with the end.

5. Example and practice are more efficient than precept and theory.

6. Only one thing should be taught at one time; and an accumulation of difficulties should be avoided, especially in the beginning of the study.

7. Instruction should proceed from the known to the unknown, from the simple to the complex, from concrete to abstract notions, from analysis to synthesis.

8. The mind should be impressed with the idea before it takes cognisance of the sign that represents it.

9. The development of the intellectual powers is more important than the acquisition of knowledge; each should be made auxiliary to the other.

10. All the faculties should be equally exercised, and exercised in a way consistent with the exigencies of active life.

11. The protracted exercise of the faculties is injurious: a change of occupation renews the energy of their action.

12. No exercise should be so difficult as to discourage exertion, nor so easy as to render it unnecessary: attention is secured by making study interesting.

13. First impressions and early habits are the most important, because they are the most enduring.

14. What the learner discovers by mental exertion is better known than what is told him.

15. Learners should not do with their instructor what they can do by themselves, that they may have time to do with him what they cannot do by themselves.

16. The monitorial principle multiplies the benefits of public instruction. By teaching we learn.

17. The more concentrated is the professor’s teaching, the more comprehensive and efficient his instruction.

18. In a class the time must be so employed that no learner shall be idle, and the business so contrived, that learners of different degrees of advancement shall derive equal advantage from the instructor.

19. Repetition must mature into a habit what the learner wishes to remember.

20. Young persons should be taught only what they are capable of clearly understanding, and what may be useful to them in after-life."

A. What do *you* think of these? **E.** I confess they bring into my mind the advice given to a learner in billiards: "When in doubt cannon and pocket the red." First catch your "Method of Nature," as Mrs. Glass might have said. As to No. 10 again, who shall say what "all the faculties" are? And is smelling a faculty that must be equally exercised with seeing? When the young Marcels went to Paris I fancy they found there far more that was worth seeing than worth smelling. **A.** After what you have said about pupil-teachers I infer you do not advocate the "monitorial principle"? **E.** Not exactly. "By teaching we learn." This is very true. But if we can't teach we can't learn by teaching. **A.** But may we not gain by trying to teach? And short of teaching a good deal may be done by monitors. **E.** If by the monitorial principle we mean "Encourage the young to make themselves useful" it is a capital principle.

Words and Things.—A. In your Sturm Essay you say: "The schoolmaster's art always has taken, and I suppose, in the main, always will take for its material the means of expression." Surely the signs of the times do not indicate this. Have not the tongue and the pen had their day, and is not the schoolmaster turning his attention from them, not perhaps to the brain, but certainly to the eye and the hand? It has at length occurred to him to ask like Shylock "Hath not a boy eyes? Hath not a boy hands?" And as it seems certain that the boy has these organs, the schoolmaster wants to find employment for them. Till now no scholastic use has been found for the eye except reading, or for the hand except making strokes with the pen and receiving them from the cane. But it will be different in the future. Words have had their day. Things will have theirs. **E.** You may be right; but be careful in your use of terms. As is usually the case with "cries," if we want a meaning we may take our choice. The contrast between "words" and "things" is sometimes between studies like grammar, logic, and rhetoric on the one hand, and, on the other, *Realien*, studies which in some way have Things for their subject. Then again we have *words* as the vocal or visible symbols of ideas contrasted with the ideas themselves. Those who complain of the time spent on words are thinking, some of them, of the time spent on

the art of expression, others of the time given to symbols which do not, to the learner, symbolize anything. But in our day Words and Things are supposed to represent the study of literature and the study of natural science. At present there is a rage for Things, but it is a little early to adjudicate on the comparative claims of, say Homer and James Watt, on the gratitude of mankind. The great book of our day on Education, Herbert Spencer's, would make short work with "words"; and yet two School Commissions, the Public Schools Commission of 1862, and the Middle Schools Commission of 1867 have defended "words." The first of these says: "Grammar is the logic of common speech, and there are few educated men who are not sensible of the advantages they gained, as boys, from the steady practice of composition and translation, and from their introduction to etymology. The study of literature is the study, not indeed of the physical, but of the intellectual and moral world we live in, and of the thoughts, lives, and characters of those men whose writings or whose memories succeeding generations have thought it worth while to preserve." The Commissioners on Middle Schools express a similar opinion:—"The 'human' subjects of instruction, of which the study of language is the beginning, appear to have a distinctly greater educational power than the 'material.' As all civilisation really takes its rise in human intercourse, so the most efficient instrument of education appears to be the study which most bears on that intercourse, the study of human speech. Nothing appears to develop and discipline the whole man so much as the study which assists the learner to understand the thoughts, to enter into the feelings, to appreciate the moral judgments of others. There is nothing so opposed to true cultivation, nothing so unreasonable, as excessive narrowness of mind; and nothing contributes to remove this narrowness so much as that clear understanding of language which lays open the thoughts of others to ready appreciation. Nor is equal clearness of thought to be obtained in any other way. Clearness of thought is bound up with clearness of language, and the one is impossible without the other. When the study of language can be followed by that of literature, not only breadth and clearness, but refinement becomes attainable. The study of history in the full sense belongs to a still later age: for till the learner is old enough to have some appreciation of politics, he is not capable of grasping the meaning of what he studies. But both literature and history do but carry on that which the study of language has begun, the cultivation of all those faculties by which man has contact with man."

(Middle Schools Report, vol. i, c. iv, p. 22.) As Matthew Arnold says, in comparing two things it is "a kind of disadvantage" to be totally ignorant about one of them; and I labour under this disadvantage in comparing literature and science. But I own I do not expect the ultimate victory will be with those who may kill, or even cure or carry, the body, and after that have no more that they can do. Milton says of fine music, that it "brings all heaven before our eyes." Similarly fine literature can at least bring all earth and its inhabitants, and the best thoughts and actions the world has known. I remember Matthew Arnold in conversation dwelling on the difference it makes to us *what we read*. Surely one of the great things education should do is to enable and to accustom the thoughts of the young to follow the guidance which is offered us in "the words of the wise."

Seneca *v.* **Comenius**.—**A.** I like your quotation on p. 169 from Dr. John Brown. After your see-saw fashion, you have, in a note on p. 365, expressed a fondness for "a notion of the whole." E. I am there thinking of *minute* instruction about parts. But in most things notions of the parts precede the notion of the whole; and in this matter I think Seneca was wiser than Comenius: "More easily are we led through the parts into a conception of the whole. Facilius per partes in cognitionem totius adducimur." (Ep. 88, 1.) A. May I ask to whom you are indebted for this erudition? E. To Wuestemann. (*Promptuarium.* Gotha, 1856.)

Useful Knowledge.—A. I am inclined to think that now and then you do not attach sufficient importance to the possession of knowledge and skill. E. Perhaps I do not. What I wish to cultivate is, not so much knowledge as the desire for knowledge, and further, the activity of mind that will turn knowledge to account. Knowledge driven in from without, so to speak, and skill obtained by enforced practice are, I will not say valueless, but very different in quality from the knowledge and skill that their possessor has sought for. Knowledge is a tool. He who has acquired it without caring for it, will have neither the skill nor the will to use it. A. Does not this apply to the knowledges recommended by Herbert Spencer, knowledge how to bring up children, &c., and to the knowledge of physiological facts and rules of health which you yourself say would be "of great practical value" (p. 444)? E. Certainly it does, and also to the "domestic economy" of our Board schools; still more to the lessons in morality which it seems are, at least in France if not elsewhere, to supersede religion. If you can get the learners to

care for such lessons, the lessons are worth giving; if not, not. Care, not for the thing, but for the examination in the thing, is different, and can produce only a very inferior article. I expect there are instances in which care for the examination develops into care for the subject of the examination; but these cases are so rare that they may be neglected. A. I see you would not take a deep interest in the "Society for the Diffusion of Useful Knowledge." And yet how terrible are the results of ignorance! Herbert Spencer is great on knowledge for earning a livelihood. It would add, perhaps, three or four shillings a week to the wages of the working man if his wife had learnt to cook. In matters of food the waste from ignorance among the English poor is appalling. E. In this case the school might do much, as girls would be anxious to learn. And though we cannot lay down as a general rule that it is "never too late to learn," this rule might be applied to cooking. I see that in Govan, a suburb of Glasgow, the widow of the great ship-builder, John Elder, employs a trained teacher of cookery to instruct both by demonstrations, and also by visiting houses to which he (or she?) is invited. The results are said to be excellent. May this good lady find many imitators!

Memorizing Poetry.—A. About learning poetry by heart, did you ever hear of the old Winchester plan of "Standing up"? In the regular "exams." ("trials" as we called them at Harrow), each boy had to state in how much Homer and Virgil he was ready to "stand up." The master examined into the boy's power of saying this by heart, and of construing all he said. From the very first the boy always gave in the *same* poetry, only adding to it each time. E. I have heard of it. Why, I wonder, was this plan given up? A. I have asked old Wykamists, but nobody seems to know. Perhaps the quantities learnt became absurdly large. But this method of accretion, if not overdone, would leave something behind it for life. Let me show you a passage from Æschines (Agnst Ktesip. § 135) which I have seen, not in Æschines, but in J. H. Krause's "Education among the Greeks" (*Gesch. d. Erziehg bei d. Griechen*). It is so simple that even *you* may construe it. Διὰ τοῦτο γὰρ οἶμαι ἡμᾶς παῖδας ὄντας τὰς τῶν ποιητῶν γνώμας ἔκμανθάνειν ἵν' ἄνδρες ὄντὲς αὐταῖς χρώμεθα. E. There is very little left of my Littlego Greek, but I will try: "For it is, I suppose, with this object that, when we are boys, we thoroughly commit to memory the sayings of the poets—in order to turn them to account when we are men." I wish the old Greek custom were continued. I believe in learning by heart what is worthy of it (see *supra*, p.

74, *n.*). A. But the poetry that appeals to children they grow out of. E. This cannot be said of the best of it; but of this best there is, to be sure, a very small quantity. By "appeals to," I suppose you mean "written on purpose for." But in a sense much melodious poetry appeals to children even when they can get only a vague notion that it *has* a meaning. I have known children delight in "The splendour falls on castle walls," and Hohen Linden pleases them much better than anything of Jane Taylor's. But here, at all events, there can be no doubt about the wisdom of Tranio's rule: "Study what you most affect." As I have said in an old paper of mine (*How to Train the Memory*; Kellogg's *Teachers Manuals*, No. 9), the teacher may read aloud some selected pieces, and let the children separately "give marks" for each. He can then choose "what they most affect."

Books for Teachers.—A. Don't you think you might give some useful advice to young teachers about the books they should read? E. I had intended giving some advice, but in reading tastes differ widely, and after all the best advice is Tranio's, "Study what you most affect." There are three Englishmen who have written so well that, as it seems, they will be read by English-speaking teachers of all time. These are Ascham, Locke, and Herbert Spencer. If a teacher does not know these he is not likely to know or care anything about the literature of education. These authors have attained to the position of classics by writing short books in excellent English. After these, I must know something of the student before I ventured on a recommendation. If he (or more probably *she*) be a student indeed, nothing will be found more valuable than Henry Barnard's vols. especially those of the *English Pedagogy*. But the majority of mankind want books that are readable, *i.e.*, can be read easily. I do not know any books on teaching that I have found easier reading than D'Arcy Thompson's *Day-Dreams of a Schoolmaster* and H. Clay Trumbull's *Teaching and Teachers* (Eng. edition is Hodder and Stoughton's). But some very valuable books are by no means easy reading. Take *e.g.* Froebel's *Education of Man* (trans. by Hailmann, Appletons). This book is a fount of ideas, but Froebel seems to want interpreters, and happily he has found them. The Baroness Marenholtz-Bülow has done good work for him in German, and in English he has had good interpreters as *e.g.*, Miss Shirreff, Mr. H. C. Bowen, and Supt. Hailmann. In the case of Froebel there is certainly a want of literary talent; but even where this talent is clearly shown, a book may be by no means "easy reading." It may make great

demands on our thinking power, and thought is never easy. This will probably prevent Thring's *Theory and Practice of Teaching* (Pitt Press, 4*s.* 6*d.*) from ever being a popular book, though every teacher who has read it will feel that he is the better for it. Sometimes the size of a book stands in the way of its popularity. This seems to me the case with Joseph Payne's *Science and Art of Teaching* (Longmans, 10*s.*); but this book is popular in the United States, and I take this as a proof that the American teachers are more in earnest than we are. All the essentials of popularity are combined in Fitch's *Lectures on Teaching* (Pitt Press, 5*s.*), and this is now (and long may it continue!) one of our most read educational works. A. But what about less known books? Cannot you recommend anything as yet unknown to fame? E. Ah! you want me to tell you what books deserve fame, that is, to—

"Look into the seeds of time
"And say which grain will grow, and which will not."

But I have no intention of posing as the representative of the readers of our day, still less of the future. Indeed, far from being able to tell you what other people would like or should like, I can hardly say what I like myself. Perhaps I come across a book and read it with delight. Remembering the very favourable impression made by the first reading I go back to the book some years afterwards and I then in some cases cannot discover what it was that pleased me. A. That reminds me of Wordsworth's similar experience—

"I sometimes could be sad
To think of, to read over, many a page,
Poems withal of name, which at that time
Did never fail to entrance me, and are now
Dead in my eyes, dead as a theatre
Fresh emptied of spectators." (*Prelude* v.)

I suppose this has happened to all of us. We go back and the things are the same and yet look so different. It is like after the night of an illumination looking at the designs by daylight. E. Not many of our designs will bear "the light of common day." And if we tried to settle which, we should probably be quite wrong. Of my three English Educational Classics one can hardly understand why the peoples who speak English have retained Ascham while Mulcaster, Brinsley, and Hoole are forgotten. Locke had his

reputation as a philosopher to keep his *Thoughts* from neglect, and yet at the beginning of 1880 1 found that there was no *English* edition in print. Perhaps some of the old writers will come into the field of view again. *E.g.*, my friend Dr. Bülbring, of Heidelberg, the editor of De Foe's *Compleat Gentleman*, talks of reviving the fame of Mary Astell, who at the end of the seventeenth century took up the rights of women and put very vigorously some of the pet ideas of the nineteenth century. A. I will not ask you to "look into the seeds of time," and I will not take you for a representative person in any way. On these conditions perhaps you will give me the names of some of the books that have made such a favourable impression on first reading—at least in cases where that impression has not been effaced by further acquaintance. E. Agreed. I ought to begin with psychology, but I must with sorrow confess that I never read a *whole* book on the science of mind; so this most important section of the subject must be omitted. French and German books I will also omit unless they exist in an English translation. About the historical and biographical part of the subject I have already named many books such as S. S. Laurie's *Comenius* and Russell's Guimps's *Pestalozzi*. F. V. N. Painter's *History of Education* is pleasantly written; but no really satisfactory history of education can be held in one small volume. This objection *in limine* also applies to G. Compayré's *History of Pedagogy* (trans. by W. H. Payne) which is far too full of matter. In it we find *many things*, but only a very advanced student can find *much*. Little has been written about English-speaking educators, but there are good accounts of Bell, Lancaster, Wilderspin, and Stow in J. Leitch's *Practical Educationists* (Macmillans, 6*s.*). Turning to books about principles and methods I have found nothing that with reference to the first stage of instruction seems to me better than Colonel F. W. Parker's *Talks on Teaching* (New York, Kelloggs). Fitch's more complete book I have named already. A. Geikie's *Teaching of Geography* (Macmillans, 2*s.* 6*d.*) is a book I read with great delight. For principles Joseph Payne seems to me one of our best educational writers, and we shall before long have, I hope, the much expected volume of his papers on the history of education. Some of the smaller books that I remember reading with especial gratification are Jacob Abbott's *Teacher*, Calderwood *On Teaching*, A. Sidgwick's lectures on *Stimulus* (Pitt Press) and on *Discipline* (Rivingtons), and Mrs. Malleson's *Notes on Early Training* (Sonnenschein). There seemed to me a very fine tone in a book much read in the United States—D. P. Page's

Theory and Practice of Teaching. T. Tate's *Philosophy of Education* I liked very much, and the book has been revived by Colonel Parker (Kelloggs). There are some books that are worth getting "by opportunity," as the Germans say, good books now out of print. Among them I should name Rollin's *Method* in three volumes, Rousseau's *Emilius* in four, De Morgan's *Arithmetic, Essays on a Liberal Education* edited by Farrar. I know or have known all the books here named, but my knowledge and time for reading do not extend as far as my bookshelves, and I see before me some books that I have not mentioned and yet feel sure I ought to mention. Among them are Compayré's *Lectures on Pedagogy*, translated by W. H. Payne, which seems an admirable compilation (Boston, Heath; London, Sonnenschein); Shaw and Donnell's *School Devices* (Kelloggs) in which I have seen some good "wrinkles"; and T. J. Morgan's *Educational Mosaics* (Boston; Silver, Rogers & Co.). J. Landon's *School Management* (London, K. Paul) I have heard spoken of as an excellent book, and I like what I have seen of it. But I set out with a promise to mention not all our good books, but those which I thought good *after reading them*. There still remain some that fall under this category and have not been mentioned, *e.g.*, *The Action of Examinations*, by H. Latham, Cotterill's *Reforms in Public Schools*, W. H. Payne's *Contributions*, and a pamphlet from which I formed a very high estimate of the writer's ability to give us some first-rate books about teaching. I mean *A Pot of Green Feathers*, by T. G. Rooper.

Professional Knowledge.—A. What a pity it is that in English we have no name for *Kernsprüche*! When an important truth has been aptly expressed, the very expression may be an important event in the history of thought. Take *e.g.* Milton's words which I observe you have quoted more than once, about "the understanding founding itself on sensible things" (p. 510). Here we have a "kernel-saying" that might have sprung up and yielded a rich crop of improvements in teaching if it had only taken root in teachers' minds. Why don't you make a collection of such "kernel-sayings"? E. I have had thoughts of doing so, and I have a collection of collections of *Kernsprüche* in German. A. Well, German is *not* the language I should choose for the expression of thought. According to Heine, in everything the Germans do there is a thought embodied; and we may add that in everything they say a thought is embedded; but I rather shrink from the labour of digging it out. E. You would find a collection of "kernel-sayings" in any language rather stiff reading. And after all, the sayings

which strike us are just those which give utterance to our own thought. This is probably the reason why in reading such a book so few sayings seem to us worthy of selection. I had intended prefacing these essays with some mottoes, as Dr. W. B. Hodgson used to do when he wrote, but finally I have left my readers to collect for themselves. A. I should like to know the sort of thing you intended for your "first course." E. Here is one of them from Professor Stanley Hall, of Worcester, Mass.: "Modern life in all its departments is ruled by experts and by those who have attained the mastery that comes by concentration." (New England *J. of Ed.*, 27th February, 1890.) A. According to you, sayings strike us only when they express our own thought. In that case Professor Hall's saying would not make much impression on the generality of your scholastic friends. Many of the best paid schoolmasters in England would burst out laughing if anyone spoke of them as "educational experts." Educational experts? Why they have never even thought of the art of teaching, leave alone the science of education. They are "good scholars" who at one time thought enough of preparing for the Tripos or the Honour Schools; and having got a good degree they thought (and small blame to them!) how to employ their knowledge of classics so as to secure a comfortable income for life. Accordingly they took a mastership, and soon settled down into the groove of work. But as for the science of education they have thought of it about as much as they have thought of the sea-serpent, and would probably tell you with Mr. Lowe (now forgotten as Lord Sherbrooke) that "there is no such thing." E. No doubt they feel the force of Dr. Harris's words: "For the most part the teacher who is theoretically inclined is lame in the region of details of work." It would be a pity indeed if their "resolution" to make a good income were "sicklied o'er with the pale cast of thought." A. They had to think how to prepare for the Tripos; and before long they will have to think how to do their work of teaching and educating better than they have done it hitherto. The future will demand something more than "a good degree." Professor Hall is right. The day of the experts is coming. But does not even Dr. Harris warn teachers against being "too theoretical"? E. It is rather jumping at conclusions to assume with some of our countrymen that if a man does not think, he does act. Goethe's aphorism which Dr. Harris quotes is this: "Thought expands, but lames; action narrows, but intensifies." Now a good many men who do not expend energy in thought are by no means strong in action. In education they have no desire either to think the best

that is thought or to do the best that is done. They won't inquire about either; and they show the most impartial ignorance of both. Like Dr. Ridding they are of opinion that professional knowledge is to be sought only by persons without the advantages of having been at a public school and of "a good degree." As for reading books about teaching they leave that sort of thing to national schoolmasters. And yet if teaching is an art, they might get at least as much good from books as the golf-player gets or the whist-player. "How marvellous it is when one comes to consider the matter, that a man should decline to receive instruction on a technical subject from those who have eminently distinguished themselves in it and have systematised for the benefit of others the results of the experience of a lifetime!" Mr. James Payn who wrote this (*Some Private Views*, p. 176) was thinking of books not on teaching but on whist; but his words would come home to teachers if they took as much interest in teaching as he takes in whist. A. I fancy you have spotted the real deficiency; it is want of interest. It is only when a man becomes thoroughly interested in whist that he desires to play better, and when he becomes thoroughly interested in teaching that he desires to teach better. And if only he *desires* to improve he will seek all the professional knowledge within his reach. "Every one," says Matthew Arnold, "every one is aware how those who want to cultivate any sense or endowment in themselves must be habitually conversant with the works of people who have been eminent for that sense, must study them, catch inspiration from them. Only in this way can progress be made." (Quoted by Momerie). Let us hope that you have incited some young teachers to study and catch inspiration from the great thinkers and workers in the educational field. E. This is the object I have aimed at. If I wanted a motto I think I should choose this from Froebel interpreted by Miss Shirreff:

"The duty of each generation is to gather up its inheritance from the past, and thus to serve the present, and prepare better things for the future."

SYLLABUS
OF QUICK'S EDUCATIONAL REFORMERS.

From the International Reading Circle Course of Professional Study.

Pages 1 to 62.

I. THE RENASCENCE.

1. The essential element in literature.
2. Classical literature in education.
3. The educational classes produced by renascence tendencies.
4. How much of the error of the "renascence ideal" still survives?
5. Is this harm overbalanced by the good influences of that ideal?

II. STURM.

(*See Painter, pp. 160-162, for Sturm's Course of Study.*)

1. What two or more influences of Sturm's school would you mention as most prominently retained in our larger schools of to-day?
2. How far are these influences good, and in what ways are they evil?

III. THE JESUITS.

1. Their motive.

2. Their elements of excellence.

3. What value attaches to their provisions for securing thoroughness?

4. What to their instruction in morals?

5. What to their physical training?

Pages 63 to 171.

RABELAIS.

1. His products of education: wisdom, eloquence, and piety.

2. His emphasis upon the study of *things*.

3. His standard of physical training.

MONTAIGNE.

1. His prime product of education: wisdom, in thought and action; not knowledge.

2. The practical errors in his theory of educational methods.

ASCHAM.

1. His method of Latin instruction.

MULCASTER.

1. His principles of education as identical with the best of to-day.

2. His recognition of the need for trained teachers.

RATKE.

1. His practical failure due to the characteristics of the man, not to faults in his principles of education.
2. Nine cardinal principles of didactics as gathered from his writings upon method.

COMENIUS.

1. The first to treat education in a scientific spirit.
2. Based educational method upon an understanding of the nature of the child.
3. Insisted upon the direct study of external Nature, and upon the learning of words only in connection with things.
4. Recognized education as the development of all the faculties of body and of mind.
5. Demanded the equal instruction of both sexes.
6. Taught that languages must be learned through practice, not by means of rules.
7. Made provision for education through the hand as well as through the eye and ear.

Pages 172 to 218.

THE PORT-ROYALISTS.

1. Purpose and method of Saint Cyran's "Little Schools."
2. Actual results of English public-school influences as opposed to St. Cyran's theory.

3. Port-Royalists' restoration of the mother tongue as the subject-matter of elementary instruction.

4. Literature study as distinguished from grammar study of Latin and Greek.

5. Logic, or the act of thinking.

6. The principles set forth in the pedagogic writings of the Port-Royalists.

SOME ENGLISH WRITERS BEFORE LOCKE.

1. Francis Bacon: first great leader of the *realists*—of those who sought to know the facts of Nature rather than the thoughts of man.

2. Charles Hoole: "one of the pioneer educators of his century."

3. Dury and Petty: extending the doctrines of *realism*.

4. Milton: elevating the moral nature to the first place in his theory of a complete education.

Pages 219 to 238.

JOHN LOCKE.

(See Painter's History, pp. 218-223.)

1. From the standpoints of reason he rejected the established methods.

2. His definition of knowledge.

3. Development of body and mind, and formation of right habits the true aim of education.

4. Locke's comparison of the child to white paper or wax.

5. The *naturalistic* school of educational thinkers.

6. Objections to classing Locke as a utilitarian.

Pages 239 to 289.

ROUSSEAU.

1. To be classed with the thinkers, not with the doers, in educational work.

2. The value of his destructive work.

3. His three kinds of education—from Nature, from men, from things.

4. The first essential in the work of education is to understand the mind of childhood.

5. Some characteristics of the mode of acting of the child's mind.

6. Evil of over-directing in both discipline and instruction.

7. Right and wrong views of the value of self-teaching.

BASEDOW.

1. His mode of thought and manner of life.

2. The theory outlined in his Elementary and in his Book of Method.

3. Interesting devices used at the Philanthropinum.

4. The training of the senses and acquirement of knowledge through the senses pre-eminent both in Rousseau's and in Basedow's theories.

Pages 290 to 383.

PESTALOZZI. I. HIS LIFE.

1. His personal characteristics as shown in his early life and in his farming venture.
2. His view of the nature and purpose of education.
3. The first experiment at Neuhof and its failure.
4. The orphanage at Stanz.
5. The experiences at Burgdorf.
6. The Institute at Yverdun.
7. The last success at Clindy.
8. Death of Pestalozzi at Neuhof.

II. PESTALOZZI'S PRINCIPLES.

1. The main object of the school not to teach but to develop.
2. The child first to be trained to *love*; moral education.
3. The child next to be trained to *think*; intellectual education.
4. The child also to be trained to *work*; physical education.
5. The *self-activity* of the pupil the real force in all true education.

Pages 384 to 413.

FRIEDRICH FROEBEL.

1. The best tendencies of educational thought embodied in Froebel's teachings.
2. Froebel imperfectly understood even by the most earnest students.

3. Influence of his own neglected youth upon his after consideration for children.

4. His communion with Nature in the Thuringian Forest.

5. His transfer from the study of architecture to the practice and study of education.

6. His association with Pestalozzi at Yverdun.

7. The influence of his military experience in showing him the value of discipline and united action.

8. His experiences in teaching prior to his first kindergarten.

9. The edict forbidding the establishment of schools based upon Froebel's principles.

10. His death at threescore years and ten.

FROEBEL'S EDUCATIONAL PRINCIPLES.

11. To find in science the expression of the mind of God.

12. To view education as founded upon religion, and leading to unity with God.

13. To regard the educational process as a process of development.

14. To seek development, or evolution of power, in the exercise of those functions, in the use of those faculties, that it is desired to develop.

15. That the exercise productive of true development must be in harmony with the function or faculty to be developed, and proportioned to its present strength.

16. That to be most truly efficient the exercise must arise from and be sustained by the *self*-activity of the function or faculty to be developed.

17. That this self-activity must manifest itself not in receptive action or acquisition alone, but in expressive

action or production.

18. Practically, that children should be busied with things that they can not only see but can handle and use in the making or representing of new things to express their growing ideas.

Pages 414 to 469.

JACOTOT.

1. Set pupils to learning by their own investigation and refrained from giving them direct instruction.

2. Asserted that all human beings are equally capable of learning.

3. Declared that every one can teach; and, moreover, can teach that which he does not know.

4. Has done great service by giving prominence to the principle that the mental faculties must be developed and trained by being put to actual work.

5. By his doctrine “All is in all,” he gave prominence to the correlation of knowledge.

6. Made the thorough mastery of a single book and the retention of it all in the memory his basis of all further accumulation.

7. His methodology summarized: Learn something, repeat it, reflect upon it, test all related facts by it.

HERBERT SPENCER.

1. The value in the views of one who comes to educational problems free from tradition and prejudice.

2. The teaching that gives the most valuable knowledge also best disciplines in the mental faculties.

3. The end and aim of education is to prepare us for complete living.

4. The test of the relative value of knowledge lies in its power to influence action in right or wrong directions.

5. In method we must proceed from the simple to the complex; from the known to the unknown; from the concrete to the abstract.

6. Every study should have a purely experimental introduction, and children should be led to make their own investigations and draw their own inferences.

7. Instruction must excite the interest of pupils and therefore be pleasurable to them.

Pages 470 to 503.

I. THOUGHTS AND SUGGESTIONS.

1. The ideal of public-school work is to beget a healthy interest and pleasure in the doing of hard work.

2. The interest to arise from the nature of the subject itself, or from the recognized usefulness of the subject, or from emulation.

3. The value of pictures in the teaching of children as a means of awakening active interest.

4. The first teaching in reading and number to begin with the objective method and pass thence to the subjective.

5. In geography and history the lively description and the interesting story to precede the formal compend.

II. MORAL AND RELIGIOUS INFLUENCE.

6. Sources and means of the teacher's influence upon his pupils.

7. Causes of the loss of his good influence.

8. The influence of a few leading spirits among the pupils themselves.

9. A mode of religious training.

Pages 504 to 547.

REVIEW OF EDUCATIONAL PROGRESS.

1. The good and the ill influences of the Jesuits as the "first reformers" in educational practice.

2. Rabelais, the first to advocate training as distinguished from teaching.

3. Comenius, founder of the science of education, recognizing in his scheme the threefold nature of man.

4. Rousseau, the originator of the "new education" as based upon the inherent nature of the child.

5. Pestalozzi and Froebel, reformers of the processes of education, seeking to secure the development of each faculty by its own activity in appropriate exercise.

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