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German Pedagogy.

EDUCATION,

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IN

GERMAN LITERATURE.

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PREFATORY NOTE.

THE following chapters prepared originally as articles for '*The American Journal of Education*,' were selected by the editor when acting as Agent of the Board of Normal Regents for the State of Wisconsin, and issued as one of a series of volumes entitled PAPERS FOR THE TEACHER. The Series have since been extended so as to embrace a larger amount of suggestive thoughts on the principles and methods of education from eminent writers in different languages than can be found in any similar collection in the English language. They have been thought by others worthy the title of the Library of National Pedagogy.

HENRY BARNARD.

Hartford, January, 1876.

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GERMAN PEDAGOGY.

INTRODUCTION.

IN the prosecution of our labors as an educational journalist we have had occasion to draw largely from the pedagogical literature of the German language, which, beyond that of any other country, is pre-eminently rich in the historical development of education, both public and individual, and in the exhaustive discussion of the principles and methods of instruction. While we must accord to Italy the merit of preserving, and to Italy and France of transmitting and enlarging the ancient civilization, and to the British Isles of sending back to the continent the torch of christian culture when its light was almost extinguished in the devastations of civil war and successive waves of barbarian invasions, we find in the nations which belong to the great German family a succession of schools and teachers, in which and by whom the work of human culture has been carried on with enthusiasm, in spite of civil war, and changing and belligerent dynasties. Since the great ecclesiastical upbreak of the sixteenth century, and particularly since the social and political agitations which grew out of the action of the French Revolution on European institutions, German writers, statesmen, and teachers have bestowed more thought on the problems and discussions of education, than have the same classes in any, or all other countries together. The results are now manifest to the world in the universality and high character of the public instruction, in the wealth of literary and scientific production, in the industrial development, and the military strength of the German people.

It is not creditable to English and American teachers and educators that a literature so rich in thorough historical research, profound speculation, and wise and varied experience from infant training to the broadest university culture, should have been so long neglected—especially when the German educational reformers were so prompt to appreciate and appropriate the broad generalizations of Bacon, and the practical common sense of Locke, as well as the suggestions of Rousseau and Pestalozzi, in this field.

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The attention given in Germany to the organization and administration of schools, and the instruction and discipline of children, grows out of certain principles which are fundamental in the German ideal of the State, and its functions. These principles are very clearly set forth by Prof. Donaldson in his *Lecture on the History of Education in Prussia*.

The ancient Greeks and Romans had a stronger consciousness of the claims of society than of those of the individual. They saw that society lived for ever. The individual members died, but the society, the community, was ever renewed and ever continued. And the individual members derived their blessings and privileges from society. It was therefore the bounden duty of every individual to think first of the good of the community, to sacrifice his own wishes and pleasures for its welfare, and to submit to all restrictions which the general weal, the commonwealth, might impose. Existence in a State demands unselfishness. This ancient idea the Prussians have retained. The nation is a unity; the rulers are its head, its brains; and their work is to accomplish, through the machinery of the State, all that is best accomplished through that machinery. Education is one of these things. It is an object that owes its success to organization. A good teacher can not be extemporized. He must be systematically trained, and he must look on his profession as the work of his life. A good school must be supported by a regular and permanent source of income. Variability in this matter tends to defeat educational efforts; and if a whole people is to be educated, ample provision must be made for them in the matter of schools and teachers. If a nation, therefore, is to have good teachers, good schools, and a sufficient number of them, it must begin the preparation of the teachers, and the erection of the schools, long before they will pay, and it must organize the whole into a unity. For these and many other reasons education can not be satisfactorily given to a whole community except with a complete public organization. This the Prussians have always acknowledged. They have always regarded education as specially the duty of the State. Proofs of this could be given innumerable. I shall quote from three writers. Beneke says: 'The right of the State in respect of the school has been disputed by no one. It can not be a matter of indifference to it in what way its future citizens are trained. As all other far-reaching interests, so also those connected with education and instruction are concentrated in it; and as it has the duty to provide for the satisfaction of these, so must it also have the right of the chief establishment and superintendence of all institutions of education and instruction.' 'I understand,' says Paul de Lagarde, a famous scholar and theologian of Göttingen, in a pamphlet on the relation of Church and State, published 1873—'I understand by the State the institution which seeks, at the expense of all, and with means presented by all, to attain to ends necessary for all, or even only desirable to all, but not attainable through the efforts of one or several individuals. Herewith it is granted that the State has to accomplish nothing which the individual or individuals can accomplish; that it has to accomplish only what is necessary for all, and what by its nature can be accomplished only through the common effort of all; that its right, might, and duty go only so far as the universal necessity of the ends which it places for itself. The State ought to give the money of the nation intrusted to it only when it is convinced that that for which it gives out the money is, or can be, the common property of the nation. It is entitled, for instance, to give out money for the army, for schools, for canals, for roads, for forests, because all these objects are necessary to the national life; but a single member, or an association of single members, of it, can not take care of these at all, or only imperfectly, and are also not bound to procure by private means what is for the good of all.' In like manner Eduard Zeller, in his lectures at Berlin, 1873, remarks, 'Society alone can form the institutions and provide for the means which all higher instruction requires, all the more the further science advances and spreads out into a multiplicity of single departments. From it alone can a suitable connected organization and

direction of the whole of education proceed. Its power alone is in a position to overcome the hindrances which the indifference, the folly, the selfishness of many parents put in the way of universal and vigorous education of youth. It is bound and entitled to make use of this power by regard to itself as well as to all belonging to it. . . . The State is bound, in looking after her own future, to secure her permanence and prosperity by instruction and education.' You will notice that all these writers have in their minds the entire education of the country, the universities and *Gymnasien* as well as the people's schools, and this may be said to be nearly the unanimous opinion of all German thinkers.

The Prussian State has fully apprehended its duty in this matter. From the time of Frederick's father to the present day the rulers have sought to bring all the wisdom they could get to bear on this problem, limiting their action by only one consideration, the maintenance of loyalty to themselves. In fact this I consider to be one chief element in the success of the Prussian system, that the rulers have always sought for the men best skilled in the science and art of education to guide them in all educational legislation. And whatever else may be said of Prussian schemes of instruction, they bear on their face the fact that they have been formed by men practically and theoretically acquainted with education, and are eminently wise. Let me illustrate the action of the rulers according to this principle. Shortly before the time of Frederick the Great's father, a religious movement, what we should call a revival movement, broke out in Prussia. Spener was its leader. He had a pupil of the name of Francke. The Church at that time was sunk in a cold orthodoxy. It was the greatest sin not to believe every tittle of the creed, but it was no sin not to feel the love of God. Moral death hates life, and when the revival movement came it was met by stern opposition. Francke suffered persecution from the men of orthodoxy, simply because he had life in him, for in reality he was as orthodox as they were. But this Francke had the love of God in him, and the love of the poor, and the love of children, and so he established a school for the poor, and then a seminary for teachers, and various other institutions. The king, Friedrich Wilhelm I., saw that he was doing a good and great work for his people. He gave him substantial aid, and consulted him when he issued laws for education. Francke thus became the real founder of the modern people's school. Francke had a pupil called Hecker, as pietistic and orthodox as himself, and as intent on doing great work. Frederick the Great was neither orthodox nor pietist. He had no belief in the great truths of Christianity, but he believed in Hecker. Hecker knew about education; Hecker was in earnest about education; and Frederick gave him full swing. He employed Hecker to organize education. It was Hecker that drew up his educational acts for him. These educational acts are really the foundation of the Prussian success. Hecker inserted compulsory clauses, though this was not new, as the doctrine had always existed in the Prussian mind. He insisted on teachers being trained for their profession. He tried to get the whole country interested in the maintenance of the teachers. He instituted seminaries for teachers, and he and Semler were the originators of the *Real-schule*. Frederick went so far as to allow Hecker to introduce his pietism into the act. The decree of the skeptical Frederick contains this clause: 'As far as the work of the school is concerned, sacristans and schoolmasters are earnestly reminded above every thing to prepare themselves for teaching by a heartfelt prayer for themselves, and to ask from the Giver of all good gifts wisdom and patience that their exertions and labors may be blessed. In particular they are to pray the Lord that he would grant them a heart paternally inclined and tempered with love and seriousness toward the children intrusted to them, that they may discharge all the duties lying on them as teachers willingly and without grudge, remembering that they can accomplish nothing, not even gain the hearts of the children, without the divine aid of Jesus, the friend of children, and of His spirit.'

The same determination to choose the best men for the Government offices pervades the Prussian system. The head of that system is the Minister of Instruction, always a man thoroughly versed in educational matters. He presides over a council of education, in which there are always two or three men who

have had large experience in practical education, and who are profoundly acquainted with the science of pedagogy. It is the business of the Minister to form a clear idea of the aims which he wishes each class of schools to have before them. And, for this purpose, he asks one of his council, who is practically conversant with the science and art of teaching, to draw up general directions as to the aims, subjects, and best methods of teaching. This document is submitted to the council. The Minister listens to all that has to be said by men well acquainted with the political and ecclesiastical affairs of the country, makes up his mind as to the advice given, and then sends his directions to all persons concerned. These documents are of great value as expositions of educational practice, and show a rare amount of wisdom. They give unity and purpose to the whole education of Prussia. But great care is taken not to interfere with details. The details are to be worked out by the various subordinate councils. The Universities are made to a large extent self-governing. The directors of *Gymnasien* have large powers, with much responsibility. And special work is assigned to each education board, in proportion as it is supposed capable of doing it. But no directly educational work is done by any one who is not specially prepared and fitted for it, and no board determines strictly educational matters without having the direction and advice of some one practically acquainted with education. There is always attached to the provincial board a special member called a school counselor, who is appointed for his special knowledge of the art and science of education.

The schoolmaster himself is also looked on as an official of the State. His function is not merely to teach reading, writing, and other arts; but to make good citizens. Accordingly, it is demanded of him that he give his life to the work. He must submit to a preliminary course of training at a seminary or normal school; he must serve a kind of apprenticeship; he must pass certain examinations. And the boards are warned to be particularly strict in these examinations. It is thus very rare that an incompetent teacher finds his way into a school; and if such an event takes place, the board that let him pass is held responsible for the mistake, and is bound to get employment for him in some other branch of service for which he is better fitted. Once in a school he is urged to make progress in his career. A man who does not exert himself is sent to the schools where the lowest pay is given, and the mode of life is disagreeable. But if he works, he may rise to any extent. The only obstacle in his way is that many of the best educational situations are open only to those who have gone through the *Gymnasien* and the universities. But if he has this education, he may become the school counselor and a member of the provincial board; he may become a director of a seminary; he may become a member of the chief board; he may become the Minister of Instruction himself. All the offices lie open to merit and loyalty. He is also secured a fixed salary and certain privileges. He may have a retiring allowance at a certain stage, and his widow and children will be cared for after his death. In fact, there is every inducement for him to apply his whole heart to his special work, to continue improving himself to the last, and to be loyal to a Government which, in no ordinary degree, sympathizes with him in his somewhat hard and difficult vocation.

If the State is thus careful in providing for instruction, it expects the people to take it. Every child must be educated. No excuse is admissible, except the guarantee that the child is being instructed properly elsewhere. There are two essential duties which all owe to the State—service in war and attendance at school. The service in war is of recent date, owing its existence to the mind of Scharnhorst and the ravages of Napoleon. But the idea of compulsory attendance at school is found at all periods of Prussian history. 'I hold,' says Luther, 'that the authorities are bound to compel their subjects to keep their children at school.' We find compulsion laid down in the educational decrees of 1717 and 1736. In the laws of Frederick the Great more precise directions are given. The parents and guardians are to pay the school-fees to the schoolmaster (double the school-fees in Silesia), just as if the children had been sent to school; and if all warnings fail to make them do their duty, the magistrates of the place can seize their goods. When, moreover, the visitor

examined the school in his yearly visitation, he was to fine guilty parents sixteen groschen. In later times, retention of a child from school is punished first by a fine in money. If the parents refuses to pay the money, his goods are sold. If this fails, or if the parent has no goods to sell, the parent is put in prison for a short time. But inspectors, teachers, and local boards, are urged to use every means of persuasion before punishment is applied. The fees have always been small. In 1848, during the discussions which then took place, it was agreed that in the people's school no fees should be exacted, and the constitution of 1850, sworn to by the king, contains this clause, 'In the public people's schools instruction is given free of charge.' But this part of the constitution has never been carried into practice. If, however, the child's parents are too poor to pay the school-fee, the school board pays it. Moreover, education opens up wide prospects to all Prussian citizens. If a pupil shows great capacity, there is a free place for him in the gymnasium and university. There are ten free places on an average for every one hundred pupils in a gymnasium. Every encouragement is given to ability. The Government aims at having all the ability of the country on its side and in its service.

The one question which has arisen in regard to the State's management is whether too much pains is not bestowed on making the poorer classes Prussian citizens, and too little on making them men. Now as in Church matters, so in State the science of teaching has roused a certain amount of antagonism. 'We must make our scholars men,' says the science of teaching. We must give them a knowledge of the history of other nations. We must bring out their human sympathies. And for this purpose we must get rid of the bureaucratic interference of State. The school must be a separate institution, independent, to a large extent, of Church and State, and governed by those only belonging to the scholastic profession. There is a society in Berlin, already mentioned, that aims at accomplishing this emancipation of school alike from State and from Church, and it ranks among its members some eminent men; but it is not likely to accomplish all that it wishes, though it may certainly do a great deal of good.

Last of all, the most influential cause that has led to the Prussian success is the wide appreciation of education. This appreciation did not always exist. Frederick's legislation was to some extent frustrated by the stinginess of the nobility, and partly by the opposition of those who doubted whether education was good for the laboring classes. It is characteristic of Prussia that these obscurantists were not so much afraid for the men as for the women. What good can it do, they said, to teach girls to write? They will then spend their whole time in writing love-letters. But the case is now altered. Just ideas of education have permeated the people. These ideas have indeed come from above downward. The Prussian management does not listen to any control from uneducated or half educated men. But the Prussian Government claims the intelligent sympathy of all classes. And it has it. How is this? To explain this fully would require something like a history of the intellectual development of the Prussians during the last two centuries. But I shall attempt a short contribution to the explanation. The growth of a genuine literature in the end of last century is remarkable in this respect: it was the result, to a large extent, of criticism. Lessing, the father of it, was by eminence a critic. He examined minutely the laws and limits of poetry, sculpture, and painting. He discussed the drama. He was a critic of the classics. He established principles of criticism. He worked by *vision*. It was the same with Herder. He was at home in all the phases of humanity. He gathered the ballads and legends of every nation. He sifted them, and drew out the human from them. This habit of looking into things brought the writers face to face with reality, and the width of their range opened up all the aspects of human nature. The classical studies of Wolf and a host of successors had the same effect. They revealed and created a life different from the ecclesiastical one. They placed them at a widely different point of view. And, above all, they brought home to them the laws of evolution, as they appear in the progress of mankind. It was natural that, when the education of mankind was deeply pondered, the evolution of the single mind should arrest attention. And at length it did. This is

not so easy a subject as we are apt to imagine. We have been infants, we have been boys, and therefore we think we know what infants and boys are. But do we? For two of our first years our minds were incessantly employed. Thousands of impressions were made on them. We felt thousands of joys and sorrows. And yet we can not remember one of them. That early life is a mystery which we can not recall, and which to a large extent we can not fathom. The distance between our present life and that of boys is not so great, but still it is very great. Boys and men seem like; but they are in reality very unlike: the boy goes through many stages before he reaches manhood. What are these stages through which the boy goes? What is the natural healthy evolution of the powers of a boy's mind? These were the questions which Pestalozzi put to himself, and in answering them produced a revolution. 'To be a teacher of children,' said Luther, 'you must become a child.' And Pestalozzi became a child: with a heart glowing with love to his fellowmen, with singularly keen and lively sympathies, with an ardent affection for the poor, and with a rare consciousness of his own weaknesses, he set himself to the work of teaching boys to become men. The problem, you see, is not to teach children to read or write. Books are but mere instruments. The child stands face to face with nature, man, and God. These are his real lesson books. What is the alphabet of this instruction? What are the various stages? Pestalozzi pored over these problems: and he gave his answers. The answers spread over Europe. New light was thrown on education. The best minds in Prussia turned to the solution of the difficult problems; and the result was a universal interest among all cultivated people in education. And you may at once see why this interest should be great and persuasive in Germany. It was pressed upon the people by all their greatest minds. Look at German literature, and you will find this to be the case. Herder wrote specially on education. Goethe devoted a great deal of attention to it, and some of the most beautiful portions of the *Wilhelm Meister* are descriptions of his imaginary schools. Jean Paul flung out a noble book on education full of grand thoughts. In fact, no German can be well acquainted with the best literature of his country without having to ponder the truest and wisest thoughts that have been uttered on education. The philosophers also took the subject up. Kant delivered lectures on the science of education. 'Education,' he says, 'is the hardest and most difficult problem which can be proposed to man.' Fichte addressed himself to the question in his speeches to the nation. And Hegel's *Phänomenologie* is so full of the development of the child's mind, that Deinhardt, Thaulow, and Rosenkranz, have issued Hegelian systems of education. The theologians, like Schleiermacher, also devoted themselves to an examination of it. And in particular the psychologists deemed it as a special portion of their department. Two of these, Beneke and Herbart, have given us a thoroughly scientific exposition of the whole subject. They analyzed every process of the child's thought; they estimated the value of every subject of instruction; they discussed the relation of the intellectual to the emotional and practical; they investigated the nature of that interest which children feel in learning; they defined the purposes and aims of instruction; and they examined philosophically the various schemes for its organization. The subject became a subject of scientific research. It found exponents in the Universities. There arose a *pædagogik* or science of instruction for all classes of schools. The *Gymnasien* shared in the movement. It was held out that the great object of the *Gymnasien* was to prepare the pupil for the search for truth. The Universities were the field for this search. Accordingly, there exists a keen desire to investigate. There are men whose only business it is to investigate. They examine without prejudice the principles which underlie education. Their examinations keep up fresh interest and give fresh life to the subject. This life distills through the seminaries for teachers. The future teachers are made acquainted with all the investigations that are going on. They have to think the subject out for themselves. They know that teaching is an art which acts according to the laws that regulate the evolution of the human mind. They watch these laws. Their eyes are open. Their interest is lively. They believe that they have a great and noble work to do. And their pupils also come

to know that their teachers are artists; and hence the laws of education are extensively known in Germany. The consequence is that the people appreciate education, that they do not meddle with what only a practical and scientific knowledge can direct, and they demand of all their instructors a minute investigation into the laws of man's being. The educator is with them not a mere crammer; but all feel that his first and great duty is the harmonious and equitable evolution of the human powers. This appreciation of education seems to me the great secret of the Prussian success. It leads to an earnest determination on the part of the Government that the education be thorough, and every effort of the Government is backed up by the hearty sympathy and intelligent coöperation of the people.

We have to add to this appreciation of education the circumstance that Prussia has had to force its way upwards. It has always been ambitious; and it has always aimed at attaining the object of its ambition through the education of the whole people, especially, indeed, through the higher education, but also through the lower. The State has felt in regard to its prosperity what Luther felt in regard to the Church. 'It is difficult,' he says, 'to make old dogs obedient and old scoundrels pious—the work at which the preacher labors and must often labor in vain; but the young trees can be more easily bent and trained.'

It is in the youth that the State of Prussia has placed its hope. Frederick the Great was beset by Russians, Austrians, and French; he was reduced to the lowest depths sometimes, and his kingdom was exhausted. How did he think of reviving it? The first thing he did after the Seven Years' War was ended, even before the peace of Hubertsberg was ratified, was to promulgate an admirable education Act—the Act, as I have said, of Hecker. Again, when the State was overrun by Napoleon, to what did Frederick William III. and his minister Stein turn? 'Unquestionably we have lost in territory,' said the king; 'unquestionably the State has sunk in external might and glory, but we will and must take care that we gain in internal might and internal glory; and therefore it is my earnest desire that the greatest attention be devoted to the education of the people.' Again he says, 'I am thoroughly convinced that for the success of all that the State aims at accomplishing by its entire constitution, legislation, and administration, the first foundation must be laid in the youth of the people, and that at the same time a good education of the youth is the surest way to promote the internal and external welfare of the individual citizens.' 'Most,' said Stein, in 1808, 'is to be expected from the education and instruction of the youth. If by a method based on the nature of the mind every power of the soul be unfolded, and every crude principle of life be stirred up and nourished, if all one-sided culture be avoided, and if the impulses (hitherto often neglected with great indifference), on which the strength and worth of man rest, be carefully attended to, then we may hope to see a race physically and morally powerful grow up, and a better future dawn upon us.' The method to which Stein here alludes was the method of Pestalozzi. Stein characterizes this method as one 'which elevates the self-activity of the spirit, awakens the sense of religion and all the nobler feelings of man; promotes the ideal life, and lessens and opposes a life of mere pleasure.' These words of the king and his minister rang through the nation. The idea seized them. It permeated all the legislative measures of Altenstein, the Minister of Education, and it worked mighty results. It was within the twenty-three years of Altenstein's ministry that Prussia made such progress in education that she became an object of admiration to the nations of Europe, and Frenchmen and Englishmen went to see the system. And by it Prussia grew in strength and power. The Prussian people have had faith in education. They believed with Kant that 'behind education lies hid the great secret of the perfection of human nature.' They believed with Fichte that 'only that nation which shall first perform the task of educating up to perfect manhood by actual practice will perform the task of the perfect State.' They believed that education makes better citizens, better soldiers, better fathers, and better men. And history records, in great successes in war, and still greater successes in the realms of thought and science, that her faith has not been in vain.

GERMAN PEDAGOGY.—GOETHE.

GOETHE.

IN the vast and varied literary production of the master-mind of German literature—extending over a period of seventy years of unprecedented activity in discussion, legislation, and administration in every department of the educational field, Göethe found occasion to touch on most of the problems, which occupied the attention of statesmen and educators among his cotemporaries.

Mr. Carlyle, in his Essay in the Foreign Review for 1828, on Göethe, dwells with earnest approbation on the chapters (the tenth and eleventh) of *Wanderjahre*,* devoted to the nature, objects, and present ground of religious belief. "They come from the depths of his mind, and are not in their place till they reach the depths of ours. The wisest man, we believe, may see in them a reflex of his own wisdom; but to him who is still learning, they become as seeds of knowledge; they take root in the mind, and ramify as we meditate them, into a whole garden of thought." Forty years later, in his Address to the University of Edinburgh, on the occasion of his installation as Rector (fifty-six years after he entered that city a boy of not quite fourteen), when, with a beautiful enthusiasm, the third generation of his dear old native land welcomed him as 'not altogether an unworthy laborer in the vineyard,' the Rector pronounces these ten pages "the most remarkable bit of writing which I have known to be executed in these late centuries. These I would rather have written, been able to write, than have written all the books that have appeared since I came into the world." Of these chapters, instead of attempting to give them in full, we will here introduce Mr. Carlyle's own version and epitome of them. We must confess to our inability to see either novelty or profundity of the wisdom which Mr. Carlyle finds secreted in them. The old New England schoolboy reverence was of the same type.

* *Wanderjahre* denotes the period which a German artisan is obliged by law or usage to pass in traveling, to perfect himself in his craft, after the conclusion of his *Leherjahre* (*Apprenticeship*), and before his mastership can begin. Most of the guilds extend help in some shape to the needy wandering brothers, as they travel from city to city, studying their future craft.

CULTIVATION OF REVERENCE.*

We must fancy Wilhelm in the 'Pedagogic province,' proceeding towards the 'CHIEF, or the THREE,' with intent to place his son under their charge, in that wonderful region, 'where he was to see so many singularities.'

Wilhelm had already noticed that in the cut and color of the young people's clothes a variety prevailed, which gave the whole tiny population a peculiar aspect: he was about to question his attendant on this point, when a still stranger observation forced itself upon him: all the children, how employed soever, laid down their work, and turned, with singular yet diverse gestures, towards the party riding past them; or rather, as it was easy to infer, towards the Overseer, who was in it. The youngest laid their arms crosswise over their breasts, and looked cheerfully up to the sky; those of middle size held their hands on their backs, and looked smiling on the ground; the eldest stood with a frank and spirited air,—their arms stretched down, they turned their heads to the right, and formed themselves into a line; whereas the others kept separate, each where he chanced to be.

The riders having stopped and dismounted here, as several children, in their various modes, were standing forth to be inspected by the Overseer, Wilhelm asked the meaning of these gestures; but Felix struck-in and cried gaily: "What posture am I to take then?" "Without doubt," said the Overseer, "the first posture: the arms over the breast, the face earnest and cheerful towards the sky." Felix obeyed, but soon cried: "This is not much to my taste; I see nothing up there: does it last long? But yes!" exclaimed he, joyfully, "yonder are a pair of falcons flying from the west to the east: that is a good sign, too?"—"As thou takest it, as thou behavest," said the other: "Now mingle among them as they mingle." He gave a signal, and the children left their postures, and again betook them to work or sport as before.

Wilhelm a second time 'asks the meaning of these gestures;' but the Overseer is not at liberty to throw much light on the matter; mentions only that they are symbolical, 'nowise mere grimaces, but have a moral purport, which perhaps the CHIEF or the THREE may farther explain to him.' The children themselves, it would seem, only know it in part; 'secrecy having many advantages; for when you tell a man at once and straightforward the purpose of any object, he fancies there is nothing in it.' By and by, however, having left Felix by the way, and parted with the Overseer, Wilhelm arrives at the abode of the Three 'who preside over sacred things,' and from whom farther satisfaction is to be looked for.

Wilhelm had now reached the gate of a wooded vale, surrounded with high walls: on a certain sign, the little door opened, and a man of earnest, imposing look received our Traveler. The latter found himself in a large beautifully umbrageous space, decked with the richest foliage, shaded with trees and bushes of all sorts; while stately walls and magnificent buildings were discerned only in glimpses through this thick natural boscage. A friendly reception from the Three, who by and by appeared, at last turned into a general conversation, the substance of which we now present in an abbreviated shape.

"Since you intrust your son to us," said they, "it is fair that we admit you to a closer view of our procedure. Of what is external you have seen much that does not bear its meaning on its front. What part of this do you wish to have explained?"

"Dignified yet singular gestures of salutation I have noticed; the import of which I would gladly learn: with you, doubtless, the exterior has a reference to the interior, and inversely; let me know what this reference is."

"Well-formed healthy children," replied the Three, "bring much into the world along with them; Nature has given to each whatever he requires for time and duration; to unfold this is our duty; often it unfolds itself better of

* Carlyle's *Critical and Miscellaneous Essays*. Vol. I, 204.

its own accord. One thing there is, however, which no child brings into the world with him; and yet it is on this one thing that all depends for making man in every point a man. If you can discover it yourself, speak it out." Wilhelm thought a little while, then shook his head.

The Three, after a suitable pause, exclaimed, "Reverence!" Wilhelm seemed to hesitate. "Reverence!" cried they, a second time. "All want it, perhaps yourself."

"Three kinds of gestures you have seen; and we inculcate a threefold reverence, which, when commingled and formed into one whole, attains its full force and effect. The first is Reverence for what is Above us. That posture, the arms crossed over the breast, the look turned joyfully towards heaven; that is what we have enjoined on young children; requiring from them thereby a testimony that there is a God above, who images and reveals himself in parents, teachers, superiors. Then comes the second; Reverence for what is Under us. Those hands folded over the back, and, as it were, tied together; that down-turned smiling look, announce that we are to regard the earth with attention and cheerfulness: from the bounty of the earth we are nourished; the earth affords unutterable joys; but disproportionate sorrows she also brings us. Should one of our children do himself external hurt, blamably or blamelessly; should others hurt him accidentally or purposely; should dead involuntary matter do him hurt; then let him well consider it; for such dangers will attend him all his days. But from this posture we delay not to free our pupil, the instant we become convinced that the instruction connected with it has produced sufficient influence on him. Then, on the contrary, we bid him gather courage, and, turning to his comrades, range himself along with them. Now, at last, he stands forth, frank and bold; not selfishly isolated; only in combination with his equals does he front the world. Farther we have nothing to add."

"I see a glimpse of it!" said Wilhelm. "Are not the mass of men so marred and stunted, because they take pleasure only in the element of evil-wishing and evil-speaking? Whoever gives himself to this, soon comes to be indifferent towards God, contemptuous towards the world, spiteful towards his equals: and the true, genuine indispensable sentiment of self-estimation corrupts into self-conceit and presumption. Allow me, however," continued he, "to state one difficulty. You say that reverence is not natural to man: now has not the reverence or fear of rude people for violent convulsions of nature, or other inexplicable mysteriously foreboding occurrences, been heretofore regarded as the germ out of which a higher feeling, a purer sentiment, was by degrees to be developed?"

"Nature is indeed adequate to fear," replied they, "but to reverence not adequate. Men fear a known or unknown powerful being; the strong seeks to conquer it, the weak to avoid it; both endeavor to get quit of it, and feel themselves happy when for a short season they have put it aside, and their nature has in some degree restored itself to freedom and independence. The natural man repeats this operation millions of times in the course of his life; from fear he struggles to freedom; from freedom he is driven back to fear, and so makes no advancement. To fear is easy, but grievous; to reverence is difficult, but satisfactory. Man does not willingly submit himself to reverence, or rather he never so submits himself: it is a higher sense which must be communicated to his nature; which only in some favored individuals unfolds itself spontaneously, who on this account, too, have of old been looked upon as Saints and Gods. Here lies the worth, here lies the business of all true Religions, whereof there are likewise only three, according to the objects towards which they direct our devotion."

The men paused; Wilhelm reflected for a time in silence; but feeling in himself no pretension to unfold these strange words, he requested the Sages to proceed with their exposition. They immediately complied. "No Religion that grounds itself on fear," said they, "is regarded among us. With the reverence to which a man should give dominion in his mind, he can, in paying honor, keep his own honor; he is not disunited with himself as in the former case. The Religion which depends on Reverence for what is Above us, we denominate the Ethnic; it is the Religion of the Nations, and the first happy deliverance from a degrading fear: all Heathen religions, as we call them, are

of this sort, whatsoever names they may bear. The Second Religion, which founds itself on Reverence for what is Around us, we denominate the Philosophical; for the Philosopher stations himself in the middle, and must draw down to him all that is higher, and up to him all that is lower, and only in this medium condition does he merit the title of Wise. Here as he surveys with clear sight his relation to his equals, and therefore to the whole human race, his relation likewise to all other earthly circumstances and arrangements necessary or accidental, he alone, in a cosmic sense, lives in truth. But now we have to speak of the Third Religion, grounded on Reverence for what is Under us: this we name the Christian; as in the Christian Religion such a temper is the most distinctly manifested: it is a last step to which mankind were fitted and destined to attain. But what a task was it, not only to be patient with the Earth, and let it lie beneath us, we appealing to a higher birthplace; but also to recognize humility and poverty, mockery and despite, disgrace and wretchedness, suffering and death, to recognize these things as divine; nay, even on sin and crime to look not as hindrances, but to honor and love them as furtherances, of what is holy. Of this, indeed, we find some traces in all ages: but the trace is not the goal: and this being now attained, the human species can not retrograde; and we may say that the Christian Religion, having once appeared, can not again vanish; having once assumed its divine shape, can be subject to no dissolution."

"To which of these Religions do you specially adhere?" inquired Wilhelm.

"To all the three," replied they, "for in their union they produce what may properly be called the true Religion. Out of those three Reverences springs the highest Reverence, Reverence for One's self, and these again unfold themselves from this; so that man attains the highest elevation of which he is capable, that of being justified in reckoning himself the Best that God and Nature have produced; nay, of being able to continue on this lofty eminence, without being again by self-conceit and presumption drawn down from it into the vulgar level."

The Three undertake to admit him into the interior of their Sanctuary; whither, accordingly, he, 'at the hand of the Eldest,' proceeds on the morrow. Sorry are we that we can not follow them into the 'octagonal hall,' so full of paintings, and the 'gallery open on one side, and stretching round a spacious, gay, flowery garden.' It is a beautiful figurative representation, by pictures and symbols of Art, of the First and the Second Religions, the Ethnic and the Philosophical; for the former of which the pictures have been composed from the Old Testament; for the latter from the New. We can only make room for some small portions.

"I observe," said Wilhelm, "you have done the Israelites the honor to select their history as the groundwork of this delineation, or rather you have made it the leading object there."

"As you see," replied the Eldest; "for you will remark, that on the socles and friezes we have introduced another series of transactions and occurrences, not so much of a synchronistic as of a symphronistic kind; since, among all nations, we discover records of a similar import, and grounded on the same facts. Thus you perceive here, while, in the main field of the picture, Abraham receives a visit from his gods in the form of fair youths, Apollo among the herd-men of Admetus is painted above on the frieze. From which we may learn, that the gods, when they appear to men, are commonly unrecognized of them."

The friends walked on. Wilhelm, for the most part, met with well-known objects; but they were here exhibited in a livelier, more expressive manner, than he had been used to see them. On some few matters he requested explanation, and at last could not help returning to his former question: "Why the Israelitish history had been chosen in preference to all others?"

The Eldest answered: "Among all Heathen religions, for such also is the Israelitish, this has the most distinguished advantages; of which I shall mention only a few. At the Ethnic judgment-seat; at the judgment-seat of the

God of Nations, it is not asked whether this is the best, the most excellent nation; but whether it lasts, whether it has continued. The Israelitish people never was good for much, as its own leaders, judges, rulers, prophets, have a thousand times reproachfully declared; it possesses few virtues, and most of the faults of other nations: but in cohesion, steadfastness, valor, and when all this would not serve, in obstinate toughness, it has no match. It is the most perseverant nation in the world; it is, it was, and it will be, to glorify the name of Jehovah through all ages. We have set it up, therefore, as the pattern figure: as the main figure, to which the others only serve as a frame."

"It becomes not me to dispute with you," said Wilhelm, "since you have instruction to impart. Open to me, therefore, the other advantages of this people, or rather of its history, of its religion."

"One chief advantage," said the other, "is its excellent collection of Sacred Books. These stand so happily combined together, that even out of the most diverse elements, the feeling of a whole still rises before us. They are complete enough to satisfy; fragmentary enough to excite; barbarous enough to rouse; tender enough to appease; and for how many other contradicting merits might not these Books, might not this one Book, be praised?" * * *

Thus wandering on, they had now reached the gloomy and perplexed periods of the History, the destruction of the City and the Temple, the murder, exile, slavery of whole masses of this stiff-necked people. Its subsequent fortunes were delineated in a cunning allegorical way; a real historical delineation of them would have lain without the limits of true Art.

At this point, the gallery abruptly terminated in a closed door, and Wilhelm was surprised to see himself already at the end. "In your historical series," said he, "I find a chasm. You have destroyed the Temple of Jerusalem, and dispersed the people; yet you have not introduced the divine man who taught there shortly before; to whom, shortly before, they would give no ear."

"To have done this, as you require it, would have been an error. The life of that divine Man, whom you allude to, stands in no connection with the general history of the world in his time. It was a private life; his teaching was a teaching for individuals. What has publicly befallen vast masses of people, and the minor parts which compose them, belongs to the general History of the World, to the general Religion of the World; the Religion we have named the First. What inwardly befalls individuals belongs to the Second Religion, the Philosophical: such a Religion was it that Christ taught and practiced, so long as he went about on Earth. For this reason, the external here closes, and I now open to you the internal."

A door went back, and they entered a similar gallery; where Wilhelm soon recognized a corresponding series of Pictures from the New Testament. They seemed as if by another hand than the first: all was softer; forms, movements, accompaniments, light and coloring.

Into this second gallery, with its strange doctrine about 'Miracles and Parables,' the characteristic of the Philosophical Religion, we can not enter for the present, yet must give one hurried glance. Wilhelm expresses some surprise that these delineations terminate "with the Supper, with the scene where the Master and his Disciples part." He inquires for the remaining portion of the history.

"In all sorts of instruction," said the Eldest, "in all sorts of communication, we are fond of separating whatever it is possible to separate; for by this means alone can the notion of importance and peculiar significance arise in the young mind. Actual experience of itself mingles and mixes all things together; here, accordingly, we have entirely disjoined that sublime Man's life from its termination. In life, he appears as a true Philosopher,—let not the expression stagger you,—as a Wise Man in the highest sense. He stands firm to his point; he goes on his way inflexibly, and while he exalts the lower to himself, while he makes the ignorant, the poor, the sick, partakers of his wisdom, of his riches, of his strength, he, on the other hand, in nowise conceals his divine origin; he dares to equal himself with God, nay, to declare that he himself is God. In this manner he is wont, from youth upwards, to astound his

familiar friends: of these he gains a part to his own cause; irritates the rest against him; and shows to all men, who are aiming at a certain elevation in doctrine and life, what they have to look for from the world. And thus, for the noble portion of mankind, his walk and conversation are even more instructive and profitable than his death: for to those trials every one is called, to this trial but a few. Now, omitting all that results from this consideration, do but look at the touching scene of the Last Supper. Here the Wise Man, as it ever is, leaves those that are his own, utterly orphaned behind him; and while he is careful for the Good, he feeds along with them a traitor, by whom he and the Better are to be destroyed."

This seems to us to have 'a deep, still meaning;' and the longer and closer we examine it, the more it pleases us. Wilhelm is not admitted into the shrine of the Third Religion, the Christian, or that of which Christ's sufferings and death were the symbol, as his walk and conversation had been the symbol of the Second, or Philosophical Religion. "That last Religion," it is said,—

"That last Religion, which arises from the Reverence of what is Beneath us; that veneration of the contradictory, the hated, the avoided, we give to each of our pupils, in small portions, by way of outfit, along with him, into the world, merely that he may know where more is to be had, should such a want spring up within him. I invite you to return hither at the end of a year, to attend our general Festival, and see how far your son is advanced: then shall you be admitted into the Sanctuary of Sorrow."

"Permit me one question," said Wilhelm: "as you have set up the life of this divine Man for a pattern and example, have you likewise selected his sufferings, his death, as a model of exalted patience?"

"Undoubtedly we have," replied the Eldest, "Of this we make no secret; but we draw a veil over those sufferings, even because we reverence them so highly. We hold it a damnable audacity to bring forth that torturing Cross, and the Holy One who suffers on it, or to expose them to the light of the Sun, which hid its face when a reckless world forced such a sight on it; to take these mysterious secrets, in which the divine depth of Sorrow lies hid, and play with them, fondle them, trick them out, and rest not till the most reverend of all solemnities appears vulgar and paltry. Let so much for the present suffice—* * * The rest we must still owe you for a twelvemonth. The instruction, which in the interim we give the children, no stranger is allowed to witness: then, however, come to us, and you will hear what our best Speakers think it serviceable to make public on those matters."

Could we hope that, in its present disjointed state, this emblematic sketch would rise before the minds of our readers, in any measure as it stood before the mind of the writer; that, in considering it, they might seize only an outline of those many meanings which, at less or greater depth, lie hidden under it, we should anticipate their thanks for having, a first or a second time, brought it before them. As it is, believing that, to open-minded truth-seeking men, the deliberate words of an open-minded truth-seeking man can in no case be wholly unintelligible, nor the words of such a man as Göethe indifferent, we have transcribed it for their perusal. If we induce them to turn to the original, and study this in its completeness, with so much else that environs it, and bears on it, they will thank us still more. To our own judgment at least, there is a fine and pure significance in this whole delineation: such phrases even as 'the Sanctuary of Sorrow,' 'the divine depth of Sorrow,' have of themselves a pathetic wisdom for us; as indeed a tone of devoutness, of calm, mild, priest-like dignity pervades the whole. In a time like ours, it is rare to see, in the writings of cultivated men, any opinion whatever bearing any mark of sincerity on such a subject as this: yet it is and continues the highest subject, and they that are highest are most fit for studying it, and helping others to study it.

The following passages, of a pedagogical character, are taken from Göethe's *Wilhelm Meister* in Carlyle's version :

In order to accomplish any thing by education, we must first become acquainted with the pupil's tendencies and wishes: that when these are ascertained, he ought to be transported to a situation where he may, as speedily as possible, content the former and attain the latter; and so if we have been mistaken, may still in time perceive his error; and at last having found what suits him, may hold the faster, and the more diligently fashion himself by it

The child's desire to have distinctions made in his ideas grew stronger every day. Having learned that things had names, he wished to hear the name of every thing: supposing that there could be nothing, which his father did not know, he often teased him with his questions, and caused him to inquire concerning objects, which but for this he would have passed unheeded. Our innate tendency to pry into the origin and end of things was likewise soon developed in the boy. When he asked whence came the wind, and whither went the flame, his father for the first time truly felt the limitation of his own powers, and wished to understand how far man may venture with his thoughts, and what things he may hope ever to give account of to himself or others.

You admit that poets must be born such; you admit this with regard to all professors of the fine arts; because you must admit it, because those workings of human nature can scarce be aped with any plausibility. But if we consider strictly, we shall find that every capability, however slight, is born with us; that there is no vague general capability in men. It is our ambiguous dissipating education that makes men uncertain; it awakens wishes when it should be animating tendencies; instead of forwarding our real capacities, it turns our efforts towards objects which are frequently discordant with the mind that aims at them, I augur better of young persons who are wandering astray along a path of their own, than of many who are walking rightly upon paths, which are not theirs. If the former, either by themselves, or by the guidance of others, ever find the right path, that is to say, the path which suits their nature, they will never leave it; while the latter are in danger every moment of shaking off a foreign yoke, and abandoning themselves to unrestricted license.

Without earnestness there is nothing to be done in life: yet among the people whom we name cultivated men, but little earnestness is to be found: in labors and employments, in arts, nay even in recreations, they proceed, if I may say so, with a sort of self-defense; they live, as they read a heap of newspapers, only to be done with it; they remind one of that young Englishman at Rome, who told, with a contented air, one evening in some company, that 'to-day he had dispatched six churches and two galleries.' They wish to know and learn a multitude of things, and exactly those with which they have the least concern; and they never see that hunger is not stilled by snapping at the air. When I become acquainted with a man, my first inquiry is: With what does he employ himself, and how, and with what degree of perseverance? The answer regulates the interest, which I shall take in him for life.

The invaluable happiness of liberty consisted, not in doing what one pleases, and what circumstances may invite to, but in being able, without hindrance or restraint, to do in the direct way what one regards as right and proper.

Art is long, life short, judgment difficult, occasion transient. To act is easy, to think is hard; to act according to our thought is troublesome. Every beginning is cheerful; the threshold is the place of expectation. The boy stands astonished, his impressions guide him; he learns sportfully, seriousness comes on him by surprise. Imitation is born with us; what should be imitated is not easy to discover. The excellent is rarely found, more rarely valued. The height charms us, the steps to it do not; with the summit in our eye, we love to walk along the plain. It is but a part of art that can be taught; the artist needs it all. Who knows it half, speaks much and is always wrong; who knows it wholly, inclines to act and speaks seldom or late. The former have no secrets and no force; the instruction they can give is like baked bread, savory and satisfying for a single day; but flour can not be sown, and seed corn ought not to be ground. Words are good, but they are not the best. The best is not to be explained by words. The spirit in which we act is the highest matter. Action can be understood and again represented by the spirit alone. No one knows what he is doing, while he acts rightly; but of what is wrong we are always conscious. Whoever works with symbols only is a pedant, a hypocrite, or a bungler. There are many such, and they like to be together. Their babbling detains the scholar; their obstinate mediocrity vexes even the best. The instruction, which the true artist gives us, opens up the mind; for where words fail him, deeds speak. The true scholar learns from the known to unfold the unknown, and approaches more and more to being a master.

True art is like good company: it constrains us in the most delightful way to recognize the measure, by which and up to which our inward nature has been shaped by culture.

It was the history of art alone, which could give us an idea of the worth and dignity of any work of art; that we should know the weary steps of mere handicraft and mechanism, over which the man of talents has arisen in the course of centuries, before we can conceive how it is possible for the man of genius to move with airy freedom, on the pinnacle whose very aspect makes us giddy.

Men are so inclined to content themselves with what is commonest; the spirit and the senses so easily grow dead to the impressions of the beautiful and perfect; that every one should study to nourish in his mind the faculty of feeling these things by every method in his power. For no man can bear to be entirely deprived of such enjoyments: it is only because they are not used to taste of what is excellent, that the generality of people take delight in silly and insipid things, provided they be new. For this reason, one ought every day at least to hear a little song, read a good poem, see a fine picture, and if it were possible, to speak a few reasonable words.

If we can conceive it possible that the Creator of the world himself assumed the form of his creation, and lived in that manner for a time upon earth, this creature must appear to us of infinite perfection, because susceptible of such a combination with its maker. Hence, when we feel a certain disagreement with Him, and remoteness from Him, it is on that account the more our duty to seek out every property and beauty of our nature, by which our pretension to a similarity with the Divinity may be made good.

ROSENKRANZ AND HIS PEDAGOGY.

MEMOIR.

JOHN CHARLES FREDERICK ROSENKRANZ was born at Magdeburg, April 23, 1805. In addition to the educational facilities of his native city, he attended lectures at Berlin, Halle, and Heidelberg, receiving his *veniam docendi* at Halle in 1828. In 1831, he became assistant professor, following enthusiastically the philosophical teaching of Hegel. In 1833, he received a call to Königsburg, as *professor ordinarius*, and there he has performed his university work, with an absence of a year (1848) in official work at Berlin, and as deputy from Memel and Tilsit to the Prussian Diet in 1849. His voice as a lecturer has been devoted to disseminating the ideas of Hegel, and applying them to history, literature, theology, and life.

As an author, his first work of importance was a 'History of German Poetry in the Middle Ages' (Halle, 1830), in which he endeavors to trace its development from the Hegelian standpoint. This was followed by a 'Hand-Book of the Universal History of Poetry,' and in 1836, of the 'History of German Literature,' made up of fugitive pieces previously published.

The following are the titles of works since published:—

Natural Religion; Encyclopedia of Theology; Critique of (on) Schliermacher's Theory of Religion.

Psychology; or the Science of the Subjective Spirit (*Wissenschaft vom Subjectivem Geiste*). Königsburg, 1837.

History of Transcendental Philosophy, (published in the last volume of the edition of Kant's works, edited by Rosenkranz and Schubert).

Life of Hegel. Critique on Strauss' *Glaubenslehre*.

Gæthe and his Works.

Pedagogy as a System. Königsburg, 1848.

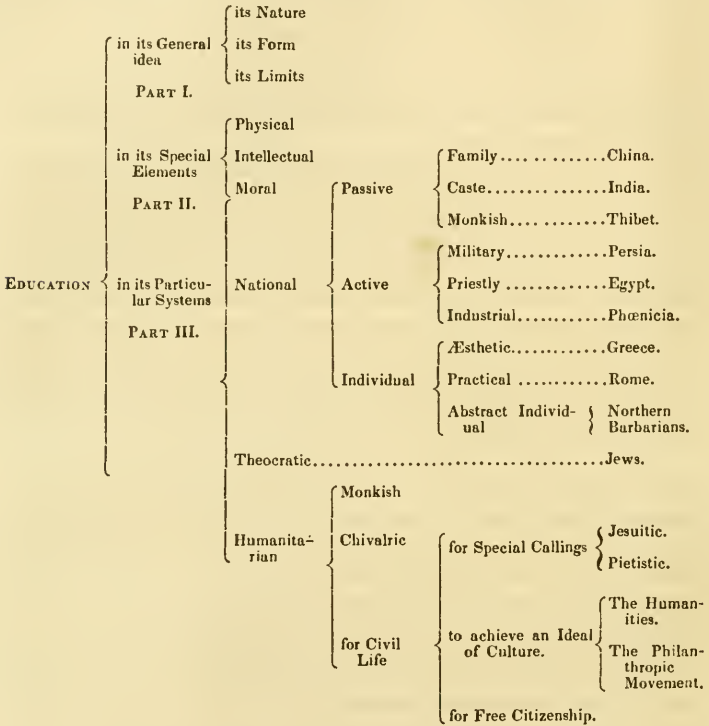
Poetry and its History. Königsburg, 1855.

Diderot's Life and Works. 2 vols., Leipsig, 1866.

Although Rosenkranz has published less on the prolific subject of Pedagogy than his professorial cotemporaries, his views are regarded as singularly comprehensive and profound—at once philosophical and practical.

PEDAGOGICS AS A SYSTEM.*

The following analysis, although confined to the main divisions, exhibits the general scope of Rosenkranz's System of Pedagogics:—



The following Extracts, although not continuous, will exhibit Prof. Rosenkranz's mode of treating this great subject:—

Pedagogics as a science must (I.) unfold the general idea of Education; (II.) must exhibit the particular phases into which the general work of Education divides itself, and (III.) must describe the particular stand-point upon which the general idea realizes itself, or should become real in its special processes at any particular time.

1. General idea of Education.

The nature of Education is determined by the nature of mind—that it can develop whatever it really is only by its own activity. Mind is in itself free; but if it does not actualize this possibility, it is in no true sense free, either for itself or for another. Education is the influencing of man by man, and it has for its end to lead him to actualize himself through his own efforts. The attain-

* We follow, in these Extracts, Miss Anna C. Brackett's translation as reprinted from the *Journal of Speculative Philosophy*. St. Louis: 1872. p. 148.

ment of perfect manhood as the actualization of the Freedom necessary to mind constitutes the nature of Education in general.

Man, therefore, is the only fit subject for education. We often speak, it is true, of the education of plants and animals; but even when we do so, we apply, unconsciously perhaps, other expressions, as 'raising' and 'training,' in order to distinguish these. 'Breaking' consists in producing in an animal, either by pain or pleasure of the senses, an activity of which, it is true, he is capable, but which he never would have developed if left to himself. On the other hand, it is the nature of Education only to assist in the producing of that which the subject would strive most earnestly to develop for himself if he had a clear idea of himself.

In a more restricted sense we mean by Education the shaping of the individual life by the forces of nature, the rhythmical movement of national customs, and the might of destiny in which each one finds limits set to his arbitrary will.

In the narrowest sense, which however is the usual one, we mean by Education the influence which one mind exerts on another in order to cultivate the latter in some understood and methodical way, either generally or with reference to some special aim. The educator must, therefore, be relatively finished in his own education, and the pupil must possess unlimited confidence in him. If authority be wanting on the one side, or respect and obedience on the other, this ethical basis of development must fail, and it demands in the very highest degree, talent, knowledge, skill, and prudence.

2. *The Form of Education.*

The general form of Education is determined by the nature of the mind, that it really is nothing but what it makes itself to be. Education can not create; it can only help to develop to reality the previously existent possibility; it can only help to bring forth to light the hidden life.

This activity of the mind in allowing itself to be absorbed, and consciously so, in an object with the purpose of making it his own, or of producing it, is *Work*. But when the mind gives itself up to its objects as chance may present them or through arbitrariness, careless as to whether they have any result, such activity is *Play*. Work is laid out for the pupil by his teacher by authority, but in his play he is left to himself. Play sends the pupil back refreshed to his work, since in play he forgets himself in his own way, while in work he is required to forget himself in a manner prescribed for him by another.

Play is of great importance in helping one to discover the true individualities of children, because in play they may betray thoughtlessly their inclinations. This antithesis of work and play runs through the entire life. Children anticipate in their play the earnest work of after life; thus the little girl plays with her doll, and the boy pretends he is a soldier and in battle.

HABIT.

Education seeks to transform every particular condition so that it shall no longer seem strange to the mind or in any-wise foreign to its own nature. This identity of consciousness, and the special character of any thing done or endured by it, we call Habit [habitual conduct or behavior]. It conditions formally all progress; for that which is not yet become habit, but which we perform with a design and an exercise of our will, is not yet a part of ourselves.

As to Habit, we have to say next that it is at first indifferent as to what it

relates. But that which is to be considered as indifferent or neutral can not be defined in the abstract, but only in the concrete, because any thing that is indifferent as to whether it shall act on these particular men, or in this special situation, is capable of another or even of the opposite meaning for another man or men for the same men or in other circumstances.

Habit lays aside its indifference to an external action through reflection on the advantage or disadvantage of the same. Whatever tends as a harmonious means to the realization of an end is advantageous, but that is disadvantageous which, by contradicting its idea, hinders or destroys it. Advantage and disadvantage being then only *relative* terms, a habit which is advantageous for one man in one case may be disadvantageous for another man, or even for the same man, under different circumstances. Education must, therefore, accustom the youth to judge as to the expediency or in expediency of any action in its relation to the essential vocation of his life, so that he shall avoid that which does not promote its success.

But the *absolute* distinction of habit is the moral distinction between the good and the bad. For from this stand-point alone can we finally decide what is allowable and what is forbidden, what is advantageous and what is disadvantageous.

As relates to form, habit may be either passive or active. The passive is that which teaches us to bear the vicissitudes of nature as well as of history with such composure that we shall hold our ground against them, being always equal to ourselves, and that we shall not allow our power of acting to be paralyzed through any mutations of fortune. Active habit [or behavior] is found realized in a wide range of activity which appears in manifold forms, such as skill, dexterity, readiness of information, &c. It is a steeling of the internal for action upon the external, as the Passive is a steeling of the internal against the influence of the external.

FORMATION OF HABITS.

Habit is the general form which instruction takes. For since it reduces a condition or an activity within ourselves to an instinctive use and wont, it is necessary for any thorough instruction. But as, according to its content, it may be either proper or improper, advantageous or disadvantageous, good or bad, and according to its form may be the assimilation of the external by the internal, or the impress of the internal upon the external, Education must procure for the pupil the power of being able to free himself from one habit and to adopt another. Through his freedom he must be able not only to renounce any habit formed, but to form a new one; and he must so govern his system of habits that it shall exhibit a constant progress of development into greater freedom.

We must characterize those habits as bad which relate only to our convenience or our enjoyment. They are often not blamable in themselves, but there lies in them a hidden danger that they may allure us into luxury or effeminacy. But it is a false and mechanical way of looking at the affair if we suppose that a habit which have been formed by a certain number of repetitions can be broken by an equal number of denials. We can never renounce a habit utterly except through a clearness of judgment which decides it to be undesirable, and through firmness of will.

If we endeavor to deprive the youth of all free and individual intercourse

with the world, one only falls into a continual watching of him, and the consciousness that he is watched destroys in him all elasticity of spirit, all confidence, all originality. The police shadow of control obscures all independence and systematically accustoms him to dependence. And if we endeavor too strictly to guard against that which is evil and forbidden, the intelligence of the pupils reacts in deceit against such efforts, till the educators are amazed that such crimes as come often to light can have arisen under such careful control.

PROTECTION, REPROOF, AND PUNISHMENT AS TO BAD HABITS.

If there should appear in the youth any decided moral deformity which is opposed to the ideal of his education, the instructor must at once make inquiry as to the history of its origin, because the negative and the positive are very closely connected in his being, so that what appears to be negligence, rudeness, immorality, foolishness, or oddity, may arise from some real needs of the youth which in their development have only taken a wrong direction.

If it should appear on such examination that the negative action was only a product of willful ignorance, of caprice, or of arbitrariness on the part of the youth, then this calls for a simple prohibition on the part of the educator, no reason being assigned. His authority must be sufficient to the pupil without any reason. Only when this has happened more than once, and the youth is old enough to understand, should the prohibition, together with the reason therefor, be given.

Only when all other efforts have failed is punishment, which is the real negation of the error, the transgression, or the vice, justifiable. Punishment inflicts intentionally pain on the pupil, and its object is, by means of this sensation, to bring him to reason, a result which neither our simple prohibition, our explanation, nor our threat of punishment, has been able to reach.

Punishment as an educational means is, nevertheless, essentially corrective, since, by leading the youth to a proper estimation of his fault and a positive change in his behavior, it seeks to improve him. At the same time it stands as a sad indication of the insufficiency of the means previously used. On no account should the youth be frightened from the commission of a misdemeanor, or from the repetition of his negative deed through fear of punishment—a system which leads always to terrorism: but, although it may have this effect, it should, before all things, impress upon him the recognition of the fact that the negative is not allowed to act as it will without limitation, but rather that the Good and the True have the absolute power in the world, and that they are never without the means of overcoming any thing that contradicts them.

In the statute laws, punishment has the opposite office. It must, first of all, satisfy justice, and only after this is done can it attempt to improve the guilty. If a government should proceed on the same basis as the educator it would mistake its task, because it has to deal with adults, whom it elevates to the honorable position of responsibility for their own acts. The state must not go back to the psychological ethical genesis of a negative deed. It must assign to a secondary rank of importance the biographical moment which contains the deed in process and the circumstances of a mitigating character, and it must consider first of all the deed in itself. It is quite otherwise with the educator; for he deals with human beings who are relatively undeveloped, and who are only growing toward responsibility. So long as they are still under the care of a teacher, the

responsibility of their deed belongs in part to him. If we confound the standpoint in which punishment is administered in the state with that in education, we work much evil.

Punishment considered as an educational means, can not be determined *a priori*, but must always be modified by the peculiarities of the individual offender and by peculiar circumstances. Its administration calls for the exercise of the ingenuity and tact of the educator.

Generally speaking, we must make a distinction between the sexes, as well as between the different periods of youth; (1) some kind of corporal punishment is most suitable for children, (2) isolation for older boys and girls, and (3) punishment based on the sense of honor for young men and women.

(1.) Corporal punishment is the production of physical pain. The youth is generally whipped, and this kind of punishment, provided always that it is not too often administered, or with undue severity, is the proper way of dealing with willful defiance, with obstinate carelessness, or with a really perverted will, so long or so often as the higher perception is closed against appeal. The imposing of other physical punishments, e.g., that of depriving the pupil of food, partakes of cruelty. The view which sees in the rod the panacea for all the teacher's embarrassments is censurable, but equally undesirable is the false sentimentality which assumes that the dignity of humanity is affected by a blow given to a child, and confounds self-conscious humanity with child-humanity, to which a blow is the most natural form of reaction, in which all other forms of influence at last end.

The fully-grown man ought never to be whipped, because this kind of punishment reduces him to the level of the child, and when it becomes barbarous, to that of a brute animal, and so is absolutely degrading to him.

(2) By Isolation we remove the offender temporarily from the society of his fellows. The boy left alone, cut off from all companionship, and left absolutely to himself, suffers from a sense of helplessness. The time passes heavily, and soon he is very anxious to be allowed to return to the company of parents, brothers and sisters, teachers and fellow-pupils.

(3) This way of isolating a child does not touch his sense of honor at all, and is soon forgotten, because it relates to only one side of his conduct. It is quite different from punishment based on the sense of honor, which in a formal manner, shuts the youth out from companionship because he has attacked the principle which holds society together, and for this reason can no longer be considered as belonging to it. Honor is the recognition of one individual by others as their equal. Through his error, or it may be his crime, he has simply made himself unequal to them, and in so far has separated himself from them, so that his banishment from their society is only the outward expression of the real isolation which he himself has brought to pass in his inner nature, and which he, by means of his negative act, only betrayed to the outer world. Since the punishment founded on the sense of honor affects the whole ethical man and makes a lasting impression upon his memory, extreme caution is necessary in its application lest a permanent injury be inflicted upon the character. The idea of his perpetual continuance in disgrace, destroys in a man all aspiration for improvement.

It is important to consider well this gradation of punishment (which, starting with sensuous physical pain, passes through the external teleology of temporary

isolation up to the idealism of the sense of honor), both in relation to the different ages at which they are appropriate and to the training which they bring with them. Every punishment must be considered merely as a means to some end, and, in so far, as transitory. The pupil must always be deeply conscious that it is very painful to his instructor to be obliged to punish him. The pathos of another's sorrow for the sake of his cure which he perceives in the mein, in the tone of the voice, in the delay with which the punishment is administered, will become a purifying fire for his soul.

3. *The Limits of Education.*

There are two widely differing views with regard to the Limits of Education. One lays great stress on the weakness of the pupil and the power of the teacher. According to this view, Education has for its province the entire formation of the youth. The despotism of this view often manifests itself where large numbers are to be educated together, and with very undesirable results, because it assumes that the individual pupil is only a specimen of the whole, as if the school were a great factory where each piece of goods is to be stamped exactly like all the rest. Individuality is reduced by the tyranny of such despotism to one uniform level till all originality is destroyed, as in cloisters, barracks, and orphan asylums, where only one individual seems to exist. There is a kind of Pedagogy also which fancies that one can thrust into or out of the individual pupil what one will. This may be called a superstitious belief in the power of Education.—The opposite extreme disbelieves this, and advances the policy which lets alone and does nothing, urging that individuality is unconquerable, and that often the most careful and far-sighted education fails of reaching its aim in so far as it is opposed to the nature of the youth, and that this individuality has made of no avail all efforts toward the obtaining of any end which was opposed to it. This representation of the fruitlessness of all pedagogical efforts engenders an indifference toward it which would leave, as a result, only a sort of vegetation of individuality growing at hap-hazard.

The limit of Education is (1) a Subjective one, a limit made by the individuality of the youth. This is a definite limit. Whatever does not exist in this individuality as a possibility can not be developed from it. Education can only lead and assist; it can not create. What Nature has denied to a man, Education can not give him any more than it is able, on the other hand, to annihilate entirely his original gifts, although it is true that his talents may be suppressed, distorted, and measurably destroyed. But the decision of the question in what the real essence of any one's individuality consists can never be made with certainty till he has left behind him his years of development, because it is then only that he first arrives at the consciousness of his entire self; besides, at this critical time, in the first place, much knowledge only superficially acquired will drop off; and again, talents, long slumbering and unsuspected, may first make their appearance. Whatever has been forced upon a child in opposition to his individuality, whatever has been only driven into him and has lacked receptivity on his side, or a rational ground on the side of culture, remains attached to his being only as an external ornament, a foreign outgrowth which enfeebles his own proper character.

(2) *The Objective limit of Education* lies in the means which can be appropriated for it. That the talent for a certain culture shall be present is certainly

the first thing; but the cultivation of this talent is the second, and no less necessary. But how much cultivation can be given to it extensively and intensively depends upon the means used, and these again are conditioned by the material resources of the family to which each one belongs. The greater and more valuable the means of culture which are found in a family are, the greater is the immediate advantage which the culture of each one has at the start. With regard to many of the arts and sciences this limit of education is of great significance. But the means alone are of no avail. The finest educational apparatus will produce no fruit where corresponding talent is wanting, while on the other hand talent often accomplishes incredible feats with very limited means, and, if the way is only once open, makes of itself a center of attraction which draws to itself with magnetic power the necessary means. The moral culture of each one is, however, fortunately from its very nature, out of the reach of such dependence.

(3) *The Absolute limit of Education* is the time when the youth has apprehended the problem which he has to solve, has learned to know the means at his disposal, and has acquired a certain facility in using them. The end and aim of Education is the emancipation of the youth. It strives to make him self-dependent, and as soon as he has become so it wishes to retire and to be able to leave him to the sole responsibility of his actions. To treat the youth after he has passed this point still as a youth, contradicts the very idea of education, which idea finds its fulfillment in the attainment of majority by the pupil. Since the accomplishment of education cancels the original inequality between the educator and the pupil, nothing is more oppressing, nay, revolting to the latter than to be prevented by a continued dependence from the enjoyment of the freedom which he has earned.

The opposite extreme of the protracting of Education beyond its proper time is necessarily the undue hastening of the Emancipation.—The question whether one is prepared for freedom has been often opened in politics. When any people have gone so far as to ask this question themselves, it is no longer a question whether that people are prepared for it, for without the consciousness of freedom this question would never have occurred to them.

Although educators must now leave the youth free, the necessity of further culture for him is still imperative. But it will no longer come directly through them. Their pre-arranged, pattern-making work is now supplanted by self-education. Each sketches for himself an ideal to which in his life he seeks to approximate every day.

In the work of self-culture one friend can help another by advice and example; but he can not educate, for education presupposes inequality.—The necessities of human nature produce societies in which equals seek to influence each other in a pedagogical way, since they establish by certain steps of culture different classes. They presuppose Education in the ordinary sense. But they wish to bring about Education in a higher sense, and therefore they veil the last form of their ideal in the mystery of secrecy.—To one who lives on contented with himself and without the impulse toward self-culture, unless his unconcern springs from his belonging to a savage state of society, the Germans give the name of Philistine, and he is always repulsive to the student who is intoxicated with an ideal.

FRÖBEL AND THE KINDERGARTEN SYSTEM.

MEMOIR.

FRÖBEL (Friedrich Wilhelm August) was born April 21, 1782, at Oberweissbach, in the principality of Schwarzburg-Rudolstadt. His mother died when he was so young that he never even remembered her; and he was left to the care of an ignorant maid-of-all-work, who simply provided for his bodily wants. His father, who was the laborious pastor of several parishes, seems to have been solely occupied with his duties, and to have given no concern whatever to the development of the child's mind and character beyond that of strictly confining him within doors, lest he should come to harm by straying away. One of his principal amusements, he tells us, consisted in watching from the window some workmen who were repairing the church, and he remembered long afterward how he earnestly desired to lend a helping hand himself. The instinct of construction, for the exercise of which, in his system, he makes ample provision, was even then stirring within him. As years went on, though nothing was done for his education by others, he found opportunities for satisfying some of the longings of his soul, by wandering in the woods, gathering flowers, listening to the birds, or to the wind as it swayed the forest trees, watching the movements of all kinds of animals, and laying up in his mind the various impressions then produced, as a store for future years.

Not until he was ten years of age did he receive the slightest regular instruction. He was then sent to school, to an uncle who lived in the neighborhood. This man, a regular driller of the old, time-honored stamp, had not the slightest conception of the inner nature of his pupil, and seems to have taken no pains whatever to discover it. He pronounced the boy to be idle (which, from his point of view, was quite true) and lazy (which certainly was not true)—a boy, in short, that you could do nothing with. And, in fact, the teacher did nothing with his pupil, never once touched the chords of his inner being, or brought out the music they were fitted, under different handling, to produce. Fröbel was indeed, at that time, a thoughtful, dreamy child, a very indifferent student of books, cor-

dially hating the formal lessons with which he was crammed, and never so happy as when left alone with his great teacher in the woods.

It was necessary for him to earn his bread, and we next find him a sort of apprentice to a woodsman in the great Thuringian forest. Here, as he afterward tells us, he lived some years in cordial intercourse with nature and mathematics, learning even then, though unconsciously, from the teaching he received, how to teach others. His daily occupation in the midst of trees led him to observe the laws of nature, and to recognize union and unity in apparently contradictory phenomena.

In 1801 he went to the University of Jena, where he attended lectures on natural history, physics, and mathematics; but, as he tells us, gained little from them. This result was obviously due to the same dreamy speculative tendency of mind which characterized his earlier school life. Instead of studying hard, he speculated on unity and diversity, on the relation of the whole to the parts, of the parts to the whole, &c., continually striving after the unattainable and neglecting the attainable. This desultory style of life was put an end to by the failure of means to stay at the University. For the next few years he tried various occupations, ever restlessly tossed to and fro by the demands of the outer life, and not less distracted by the consciousness that his powers had not yet found what he calls their 'center of gravity.' At last, however, they found it.

While engaged in an architect's office at Frankfort, he formed an acquaintance with the Rector of the Model School, a man named Gruner. Gruner saw the capabilities of Fröbel, and detected also his entire want of interest in the work that he was doing; and one day suddenly said to him: 'Give up your architect's business; you will do nothing at it. Be a teacher. We want one now in the school; you shall have the place.' This was the turning point in Fröbel's life. He accepted the engagement, began work at once, and tells us that the first time he found himself in the midst of a class of 30 or 40 boys, he felt that he was in the element that he had missed so long—'the fish was in the water.' He was inexpressibly happy. This ecstasy of feeling, we may easily imagine, soon subsided. In a calmer mood he severely questioned himself as to the means by which he was to satisfy the demands of his new position.

About this time he met with some of Pestalozzi's writings, which so deeply impressed him that he determined to go to Yverdon and study Pestalozzism on the spot. He accomplished his purpose, and lived and worked for two years with Pestalozzi. His experience at

Yverdun impressed him with the conviction that the science of education had still to draw out from Pestalozzi's system those fundamental principles which Pestalozzi himself did not comprehend. 'And therefore,' says Schmidt, 'this genial disciple of Pestalozzi supplemented and completed his system by advancing from the point which Pestalozzi had reached through pressure from without, to the innermost conception of man, and arriving at the thought of the true development and culture of mankind.'

[To the articles published in Vol. I., 1859, p. 449; IV. 792; XIX. 611, we add a paper by Prof. Payne on Fröbel's System of Infant Culture. We reproduce a former article by Dr. Wimmer, of Dresden, in part, to show the estimation of the system in Germany twenty years ago.]

FRIEDRICH FRÖBEL, AND THE KINDERGARTEN. Fröbel, who died in 1852, was a Pestalozzian, and founder of the kindergarten, (children's garden.) Some gentlemen at Liebenstein, a watering place near Eisenach, called him "the old fool;" but Diesterweg, on hearing the name, said that Socrates was such a fool, and Pestalozzi also. Fröbel considered the *kinderbewahr-anstalten*, (schools for keeping and caring for abandoned children,) as insufficient, because merely negative: he wished not only to keep, but to develop them, without checking the growth of the body, or separating the child from its mother,—as he would have the children in the garden but two or three hours daily. Children are born with the desire of acting. This was the first principle: hence, his garden was to be free, and planted with trees and shrubs, to enable the children to observe the organic life of nature, and themselves to plant and work. Thus he would change the instinct of activity into a desire of occupation. The child will play; hence the right *kindergarten* is a play ground or play school, though Fröbel avoids the name school. *The kindergartnerin*, (the nurse or female gardener,) plays with the children. Fröbel's chief object has been to invent plays for the purpose. His educational career commenced November 13th, 1816, in Greisheim, a little village near Stadt-Ilm, in Thuringia; but in 1817, when his Pestalozzian friend, Middendorf, joined him, (Fröbel had been several years learning and teaching in Pestalozzi's school, at Yverdun,) the school was transferred to the beautiful village of *Keilhau*, near *Rudolstadt*, which may be considered as his chief starting-place, and is still, under Middendorf and Mrs. Fröbel, a seminary of female teachers. Langenthal, another Pestalozzian, associated himself with them, and they commenced building a house. The number of pupils rose to twelve in 1818. Then the daughter of war-counselor Hoffman of Berlin, from enthusiasm for Fröbel's educational ideas, became his wife. She had a considerable dowry, which, together with the accession of Fröbel's elder brother, increased the funds and welfare of the school. In 1831 he was invited by the composer, Schnyder von Wartensee, to erect a similar garden on his estate, near the lake of Sempach, in the canton Luzern. It was done. Fröbel changed his residence the next year, from Keilhau to Switzerland. In 1834 the government of Bern invited him to arrange a training course for teachers in Burgdorf. In 1835 he became principal of the orphan asylum in Burgdorf, but in 1836 he and his wife wished to return to Germany. There he was active in Berlin, Keilhau, Blankenburg, Dresden, Liebenstein in Thuringia, Hamburg, (1849,) and Marienthal, near Liebenstein, where he lived until his decease in 1852, among the young ladies, whom he trained as nurses for the *kindergarten*, and the little children who attended his school. In August 7th, 1851, to the surprise of all, the *kindergarten* were

suddenly prohibited by the Prussian government, (and afterward in Saxony,) "because they formed a part of Froebel's socialistic system, and trained the children to atheism." This was an error; Charles Froebel, Friedrich's nephew, was the socialist, and the *kindergarten* had no connection with him.

A meeting of educationalists was called by Diesterweg, at Liebenstein, when the following resolutions were adopted:

1. Froebel intends a universal development of the talents given by God to the child.

2. For this purpose he intends,

a. To cultivate the body by a series of gymnastic exercises.

b. To cultivate the senses, particularly the more spiritual; the sense for form and color by instruction, and the rhythmical and musical sense by songs and melodies.

c. To cultivate the desired want of action, as well as the mental faculties in general, by a series of exercises furnished by plays of his own invention.

d. To stimulate the moral and religious sense by addresses and narratives, and especially by the child's communion with the educating nurse.

e. To extinguish the children's bad habits, and to accustom them to child-like virtues by keeping them by themselves in social circles and merry plays.

Soon after this the garden at Marienthal was visited by an officer of the Prussian government, school-counselor Bormann of Berlin, who declared its tendency rather anti-revolutionary than otherwise, and bestowed upon it much praise. In the fifth general assembly of German teachers, in Salzungen, May 16-19, 1853, the following resolutions were adopted by a majority: that Froebel's educational method is in true accordance with nature, as developing and promoting independent action; and that his *kindergarten* is an excellent preparation for the common school. The *Volksfreund* of Hesse, however, says that it furthers revolution, and that every one who agrees with it by word or deed, is himself revolutionary.

There are in Germany a great many *klein-kinder-bewahranstalten*, (institutions for keeping little children,) e. g. in Bavaria, in 1852, 182, with 6,796 children, (2,740 gratis,) and an income of 51,772 florins. In Berlin there are 33, the first of which was founded in 1830 by private charity, to keep little children whose parents are in daytime absent from home, under a good inspection, to accustom them to order, cleanliness and morality, and to fit them for attendance at school. These charity schools are provided, as to the age of children, by the well-known "*Krippen*," (*crèches*), founded in 1844 by M. *Marbeau* in Paris, the author of "*Les crèches, ou moyen de diminuer la misère en augmentant la population*," a little book that received a price of 3000 francs from the French Academy. Filling a gap between the lying-in-institutions and the *kindergarten*, they were rapidly adopted by governments and cities, for children from a fortnight to two years old; and in 1852 Paris had already 18. The first in London dates from March, 1850; in Vienna, from 1849, (in 1852 there were 8;) in Belgium, from 1846; in Dresden, from 1851, etc. Further information is given in the *Bulletin des crèches*, published monthly in Paris. On the education of little children, Mr. Foelsing, at the head of a *kindergarten* in Darmstadt on Froebel's principles but in a somewhat different way, publishes at Darmstadt a monthly paper called "Home and the Infant School." The Sunday and weekly papers published formerly by Froebel in Liebenstein, might be still read with advantage.

It must be observed, that the *kindergarten* are for the most part not charity nor public schools, as are the other institutions mentioned; and this may in part account for this small increase compared with that of other schools. Yet no one can doubt, that Froebel's work has not been lost; it has influenced education generally and that of infant schools in particular, to a great extent.

GERMAN VIEWS ON FEMALE TEACHING IN AMERICA.—Dr. Vogel makes the following remarks on this subject, in the *Leipziger Zeitung*, July 16, 1857.

“ Among the many interesting communications from the United States, which we owe partly to the kindness of private friends, and partly to the liberality of the Smithsonian Institution, through the kind mediation of the American consul at Leipsic, in a statement in the 37th Report on the Public Schools of the City and County of Philadelphia. This brings to our notice a very important fact, to which we deem it the more our duty to draw general attention through this gazette, because it throws a warning light on the future of our own schools, and especially of city and country teachers.

We premise the general statement, that among our transatlantic cousins in North America, a most praiseworthy effort has been made during a series of years, to found and extend a well-organized national school system. Men well qualified for the task, and justly appreciating the wants of their country, so rich in material resources,—Alexander Dallas Bache, Horace Mann, and above all, at a later period, Dr. Henry Barnard of Hartford, in Connecticut, so wisely and perseveringly active in laboring to raise the standard of American schools, and whose *American Journal of Education*, elegant in form and rich in matter, we propose shortly to discuss—have traveled in Europe with the express purpose of observing and knowing for themselves, the school systems of the different countries, and of applying the results of their observations to the benefit of their country, by the improvement of existing schools and systems, or the foundation of new ones.

We return to the Philadelphia report for 1850. This contains all necessary information respecting organization, number of teachers and scholars, gradation of schools in different districts, supervision by district authorities, salaries, other expenses, school interiors, (with cuts of several new ones,) &c., &c., all as clear and definite in names and numbers, as is to be expected from such a practical nation.

The number of children from six to fifteen years of age, was 54,813; of which 28,152 were boys, and 26,661 girls. These attended 303 schools, in 24 districts. Among these schools are; a high school with 601 pupils and 16 teachers; a normal school for females, with 196 pupils and 2 male and 6 female teachers; and a school of practice, with 244 pupils, and 4 female teachers. The remainder, primary, secondary, grammar, and unclassified schools, all belong to the category which we call Elementary Schools, People's Schools, (*Volksschulen*), and Burgher Schools. The sexes are partly separate and partly mixed, often very unequally. E. g., in one secondary school there are 170 girls, and only 14 boys. Generally, however, the proportions are nearly equal; and the whole number of pupils is in no school greater than 400, and in most not more than 200. Schools grown like an avalanche to 2000 pupils and upwards, are unknown there.

But in respect to the teachers we find the important and altogether abnormal fact, to which this communication is intended to call attention. The whole body of teachers in the common schools of Philadelphia, including the normal school and school of practice, amounts in all to 935 persons, a number relatively not very

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large; but hear and wonder:—*Among the 935, there are only EIGHTY-ONE MEN.*

All the rest are women. Hear! Hear! A city of more than 400,000 inhabitants, the second of the United States in importance, commits the education of its male and female youth, until the 14th and 15th year of age, almost exclusively to female hands! Ladies teach not only languages, history and geography, but also rhetoric, geometry and algebra, natural philosophy and chemistry; are at the head of large boys' schools, and guide bodies of teachers. And the reason for this is to be found, not at all in a different pedagogical system, as might be supposed, but rather,—as a glance at the teachers' salaries shows—solely or principally, because man's capacity values itself at a price higher than the school and financial officers wish to pay. A well trained and able man will not sell himself at a price below that demanded by his self-consciousness, and by his modest and reasonable claims to a sufficient living; i. e., he will not devote himself with all he has, is, knows, and is able to do, to the teacher's profession, if more is offered from another, perhaps less agreeable, side; he will not be valued at less by the school than by the counting house, the railroad, or the farmer. Hence we see, in the list of teachers, no man at less than 600 dollars, (800 thalers,) income. He would consider such a one below the dignity of the place to which he should be called, or below his own dignity, or as foolish, or something like it. And who can blame him for it, how high-soever the "ideals" of life are to be valued?

But what may we in Germany, our school boards, parishes, the state—which must have as much interest in possessing a body of able teachers as in possessing an able army—what may they all learn from the fact spoken of? To endeavor, by every means, and in good season, that the German Common School may not fall into a like situation, which would endanger its inmost life. For, highly as we esteem the work of women in general, and particularly in the field of education, we refuse decidedly, to permit them so abundant a share in the proper school work and teacher's office, as that granted—as it appears, by necessity—in Philadelphia. The boy who has passed his eighth year, especially, needs a severer discipline; stronger food for his mind, than women *can* afford him. Single exceptions make no rule; wherefore we dare to entertain some modest doubts of the "superior character of the instruction and the high state of discipline," which the report, (p. 15,) asserts of the public schools of Philadelphia. We want *men* in our German school, and men in the fullest and best sense of the word: sure in the needed knowledge, firm in character, decided and persevering in their endeavor for higher objects, warm and faithful in their love of children, men of clear mind, of noble and pious heart; religious without hypocrisy, or fear of man, genuine and true sons of their country, whose welfare and honor is their own. To gain and to keep such men for the school, state and parish, must not be niggard; else the best will leave it, and only the weak will remain; the women, and the woman-like, who indeed will do far less than women who strive with enthusiasm after the high aim of their vocation. Let us then no longer hesitate, when the values of money and of the necessities of life, have undergone such important changes, to re-adjust and increase the salaries of teachers, in order to escape the danger which threatens that they will sink into poverty and distress, and that thus the inner life of the schools, and with it that of our youth, the hope of future ages, will be necessarily destroyed. Thus we conclude, with the warning call of the Roman state in time of danger: *Videant consules, ne quid detrimenti respublica capiat!*"

THE KINDERGARTEN SYSTEM.*

Frœbel first gave the name of Kindergarten about the year 1840 to his school of young children between three and seven years of age at Blankenburg, near Rudolstadt. Its purpose is thus briefly indicated by himself:—"To take the oversight of children before they are ready for school life; to exert an influence over their whole being in correspondence with its nature; to strengthen their bodily powers; to excrete their senses; to employ the awakening mind; to make them thoughtfully acquainted with the world of nature and of man; to guide their heart and soul in a right direction, and lead them to the Origin of all life and to union with Him." To secure those objects, the child must be placed under the influence of a properly trained governess for a portion of the day after reaching the age of three.

Frœbel differs from Pestalozzi, who thought that the mother, as the natural educator of the child, ought to retain the sole charge up to the sixth or seventh year. This necessarily narrows the child's experience to the family circle, and excludes in many cases the mutual action and reaction of children upon each other—under conditions most favorable to development. Mr. Payne embodies the genesis of Frœbel's system in his own mind as follows:

Let us imagine Frœbel taking his place amidst a number of children disporting themselves in the open air without any check upon their movements. After looking on the pleasant scene awhile, he breaks out into a soliloquy:

"What exuberant life! What immeasurable enjoyment! What unbounded activity! What an evolution of physical forces! What a harmony between the inner and the outer life! What happiness, health, and strength! Let me look a little closer. What are these children doing? The air rings musically with their shouts and joyous laughter. Some are running, jumping, or bounding along, with eyes like the eagle's bent upon its prey, after the ball which a dexterous hit of the bat sent flying among them; others are bending down towards the ring filled with marbles, and endeavoring to dislodge them from their position; others are running friendly races with their hoops; others again, with arms laid across each other's shoulders, are quietly walking and talking together upon some matter in which they evidently have a common interest. Their natural fun gushes out from eyes and lips. I hear what they say. It is simply expressed, amusing, generally intelligent, and often even witty. But there is a small group of children yonder. They seem eagerly intent on some subject. What is it? I see one of them has taken a fruit from his pocket. He is showing it to his fellows. They look at it and admire it. It is new to them. They wish to know more about it—to handle, smell, and taste it. The owner gives it into their hands; they feel and smell, but do not taste it. They give it back to the owner, his right to it being generally admitted. He bites it, the rest looking eagerly on to watch the result. His face shows that he likes the taste; his eyes grow brighter with satisfaction. The rest desire to make his experience their own. He sees their desire, breaks or cuts the fruit in pieces, which he distributes among them. He adds to his own pleasure by sharing in theirs. Suddenly a loud shout from some other part of the ground attracts the attention of the group, which scatters in all directions. Let me now consider. What does all this manifold movement—this exhibition of spontaneous energy—really mean? To me it seems to have a profound meaning.

"It means—

"1. That there is an immense external development and expansion of energy of various kinds—physical, intellectual, and moral. Limbs, senses, lungs, tongues, minds, hearts, are all at work—all coöperating to produce the general effect.

* Lecture delivered at the College of Preceptors at London, Feb. 25th, 1874, by Joseph Payne, Professor of the Science and Art of Education to the College.

"2. That activity—doing—is the common characteristic of this development of force.

"3. That spontaneity—absolute freedom from outward control—appears to be both impulse and law to the activity.

"4. That the harmonious combination and interaction of spontaneity and activity constitute the happiness which is apparent. The will to do prompts the doing; the doing reacts on the will.

"5. That the resulting happiness is independent of the absolute value of the exciting cause. A bit of stick, a stone, an apple, a marble, a hoop, a top, as soon as they become objects of interest, call out the activities of the whole being quite as effectually as if they were matters of the greatest intrinsic value. It is the action upon them—the doing something with them—that invests them with interest.

"6. That this spontaneous activity generates happiness because the result is gained by the children's own efforts, without external interference. What they do themselves and for themselves, involving their own personal experience, and therefore exactly measured by their own capabilities, interests them. What another, of trained powers, standing on a different platform of advancement, does *for them*, is comparatively uninteresting. If such a person, from whatever motive, interferes with their spontaneous activity, he arrests the movement of their forces, quenches their interest, at least for the moment; and they resent the interference.

"Such, then, appear to be the manifold meanings of the boundless spontaneous activity that I witness. But what name, after all, must I give to the totality of the phenomena exhibited before me? I must call them Play. Play, then, is spontaneous activity ending in the satisfaction of the natural desire of the child for pleasure—for happiness. *Play is the natural, the appropriate business and occupation of the child left to his own resources.* The child that does not play, is not a perfect child. He wants something—sense-organ, limb, or generally what we imply by the term health—to make up our ideal of a child. The healthy child plays—plays continually—cannot but play.

"But has this instinct for play no deeper significance? Is it appointed by the Supreme Being merely to fill up time—merely to form an occasion for fruitless exercise?—merely to end in itself? No! I see now that it is the constituted means for the unfolding of all the child's powers. It is through play that he learns the use of his limbs, of all his bodily organs, and with this use gains health and strength. Through play he comes to know the external world, the physical qualities of the objects which surround him, their motions, action, and re-action upon each other, and the relation of these phenomena to himself; a knowledge which forms the basis of that which will be his permanent stock for life. Through play, involving associateship and combined action, he begins to recognize moral relations, to feel that he cannot live for himself alone, that he is a member of a community, whose rights he must acknowledge if his own are to be acknowledged. In and through play, moreover, he learns to contrive means for securing his ends; to invent, construct, discover, investigate, to bring by imagination the remote near, and, further, to translate the language of facts into the language of words, to learn the conventionalities of his mother tongue. Play, then, I see, is the means by which the entire being of the child develops and grows into power, and, therefore, does not end in itself.

"But an agency which effects results like these is an education agency; and *Play, therefore, resolves itself into education*; education which is independent of the formal teacher, which the child virtually gains for and by himself. This, then, is the outcome of all that I have observed. The child, through the spontaneous activity of all his natural forces, is really developing and strengthening them for future use; he is working out his own education.

"But what do I, who am constituted by the demands of society as the formal educator of these children, learn from the insight I have thus gained into their nature? I learn this—that I must educate them in conformity with that nature. I must continue, not supersede, the course already begun; my own course must be based upon it. I must recognize and adopt the principles involved in it, and frame my laws of action accordingly. Above all, I must not neutralize and deaden that spontaneity which is the mainspring of all the machinery; I must rather encourage it, while ever opening new fields for its exercise, and giving it

new directions. Play, spontaneous play, is the education of little children; but it is not the whole of their education. Their life is not to be made up of play. Can I not then even now gradually transform their play into work, but work which shall look like play?—work which shall originate in the same or similar impulses, and exercise the same energies as I see employed in their own amusements and occupations? Play, however, is a random, desultory education. It lays the essential basis; but it does not raise the superstructure. It requires to be organized for this purpose, but so organized that the superstructure shall be strictly related and conformed to the original lines of the foundation.

“I see that these children delight in movement;—they are always walking, or running, jumping, hopping, tossing their limbs about, and, moreover, they are pleased with rythmical movement. I can contrive motives and means for the same exercise of the limbs, which shall result in increased physical power, and consequently in health—shall train the children to a conscious and measured command of their bodily functions, and at the same time be accompanied by the attraction of rythmical sound through song or instrument.

“I see that they use their senses; but merely at the accidental solicitation of surrounding circumstances, and therefore imperfectly. I can contrive means for a definite education of the senses, which shall result in increased quickness of vision, hearing, touch, etc. I can train the purblind eye to take note of delicate shades of color, the dull ear to appreciate the minute differences of sound.

“I see that they observe; but their observations are for the most part transitory and indefinite, and often, therefore, comparatively unfruitful. I can contrive means for concentrating their attention by exciting curiosity and interest, and educate them in the art of observing. They will thus gain clear and definite perceptions, bright images in the place of blurred ones,—will learn to recognize the difference between complete and incomplete knowledge, and gradually advance from the stage of merely knowing to that of knowing that they know.

“I see that they invent and construct; but often awkwardly and aimlessly. I can avail myself of this instinct, and open to it a definite field of action. I shall prompt them to invention, and train them in the art of construction. The materials I shall use for this end, will be simple; but in combining them together for a purpose, they will enjoy not only their knowledge of form, but their imagination of the capabilities of form. In various ways I shall prompt them to invent, construct, contrive, imitate, and in doing so develop their nascent taste for symmetry and beauty.

“And so in respect to other domains of that child-action which we call play, I see that I can make these domains also my own. I can convert children’s activities, energies, amusements, occupations, all that goes by the name of play, into instruments for my purpose, and, therefore, transform play into work. This work will be education in the true sense of the term. The conception of it as such I have gained from the children themselves. They have taught me how I am to teach them.

FRÖBEL’S THEORY IN PRACTICE.

I must endeavor to give some notion of the manner in which Fröbel reduced his theory to practice. In doing this, the instances I bring forward must be considered as typical. If you admit—and you can hardly do otherwise—the reasonableness of the theory, as founded on the nature of things, you can hardly doubt that there is some method of carrying it out. Now, a method of education involves many processes, all of which must represent more or less the principles which form the basis of the method. It is quite out of my power, for want of time, to describe the various processes which exhibit to us the little child pursuing his education by walking to rhythmic measure, by gymnastic exercises generally, learning songs by heart and singing them, practising his senses with a definite purpose, observing the properties of objects, counting, getting notions of color and form, drawing, building with cubical blocks, modeling in wax or clay, braiding slips of various colored paper after a pattern, pricking or cutting forms in paper, curving wire into different shapes, folding a sheet of paper and gaining

elementary notions of geometry, learning the resources of the mother-tongue by hearing and relating stories, fables, etc., dramatizing, guessing riddles, working in the garden, etc., etc. These are only some of the activities naturally exhibited by young children, and these the teacher of young children is to employ for his purpose. As, however, they are so numerous, I may well be excused for not even attempting to enter minutely into them. But there is one series of objects and exercises therewith connected, expressly devised by Fröbel to teach the art of observing, to which, as being typical, I will now direct your attention. He calls these objects, which are gradually and in orderly succession introduced to the child's notice, Gifts,—a pleasant name, which is, however, a mere accident of the system: they might equally well be called by any other name.

GIFTS FOR THE CULTURE OF OBSERVATION.

As introductory to the series, a ball made of wool, of say a scarlet color, is placed before the baby. It is rolled along before him on the table, thrown along the floor, tossed into the air, suspended from a string, and used as a pendulum, or spun around on its axis, or made to describe a circle in space, etc. It is then given into his hand; he attempts to grasp it, fails; tries again, succeeds; rolls it along the floor himself, tries to throw it, and, in short, exercises every power he has upon it, always pleased, never wearied in *doing* something or other with it. This is play, but it is play which resolves itself into education. He is gaining notions of color, form, motion, action and re-action, as well as of muscular sensibility. And all the while the teacher associates words with things and actions, and, by constantly employing words in their proper sense and in the immediate presence of facts, initiates the child in the use of his mother-tongue. Thus, in a thousand ways, the scarlet ball furnishes sensations and perceptions for the substratum of the mind, and suggests fitting language to express them; and even the baby appears before us as an observer, learning the properties of things by personal experience.

Then comes the *first Gift*. It consists of six soft woolen balls of six different colors, three primary and three secondary. One of these is recognized as like, the others as unlike, the ball first known. The laws of similarity and discrimination are called into action; sensation and perception grow clearer and stronger. I cannot particularize the numberless exercises that are to be got out of the various combinations of these six balls.

The *second Gift* consists of a sphere, cube, and cylinder, made of hard wood. What was a ball before, is now called a sphere. The different material gives rise to new experiences; a sensation, that of hardness, for instance, takes the place of softness; while varieties of form suggest resemblance and contrast. Similar experiences of likeness and unlikeness are suggested by the behavior of these different objects. The easy rolling of the sphere, the sliding of the cube, the rolling as well as sliding of the cylinder, illustrate this point. Then the examination of the cube, especially its surfaces, edges, and angles, which any child can observe for himself, suggest new sensations and their resulting perceptions. At the same time, notions of space, time, form, motion, relativity in general, take their place in the mind, as the unshaped blocks which, when fitly compacted together, will lay the firm foundation of the understanding. These elementary notions, as the very groundwork of mathematics, will be seen to have their use as time goes on.

The *third Gift* is a large cube, making a whole, which is divisible into eight

small ones. The form is recognized as that of the cube before seen; the size is different. But the new experiences consist in notions of relativity—of the whole in its relation to the parts, of the parts in their relation to the whole; and thus the child acquires the notion and the names, and both in immediate connection with the sensible objects, of halves, quarters, eighths, and of how many of the small divisions make one of the larger. But in connection with the third Gift a new faculty is called forth—imagination, and with it the instinct of construction is awakened. The cubes are mentally transformed into blocks; and with them building commences. The constructive faculty suggests imitation, but rests not in imitation. It invents, it creates. Those eight cubes, placed in a certain relation to each other, make a long seat, or a seat with a back, or a throne for the Queen; or again, a cross, a doorway, etc. Thus does even play exhibit the characteristics of art, and “conforms (to use Bacon’s words) the outward show of things to the desires of the mind”; and thus the child, as I said before, not merely imitates, but creates. And here, I may remark, that the mind of the child is far less interested in that which another mind has embodied in ready prepared forms, than in the forms which he conceives, and gives outward expression to, himself. He wants to employ his own mind, and his whole mind, upon the object, and does not thank you for attempting to deprive him of his rights.

The *fourth, fifth, and sixth Gifts* consist of the cube variously divided into solid parallelepipeds, or brick-shaped forms, and into smaller cubes and prisms. Observation is called on with increasing strictness, relativity appreciated, and the opportunity afforded for endless manifestations of constructiveness. And all the while impressions are forming in the mind, which, in due time, will bear geometrical fruits, and fruits, too, of æsthetic culture. The dawning sense of the beautiful, as well as of the true, is beginning to gain consistency and power.

I cannot further dwell on the numberless modes of manipulation of which these objects are capable, nor enter further into the groundwork of principles on which their efficiency depends.

OBJECTIONS TO THE SYSTEM CONSIDERED.

It is said, for instance, without proof, that we demand too much from little children, and, with the best intentions, take them out of their depth. This might be true, no doubt, if the system of means adopted had any other basis than the nature of the children; if we attempted theoretically, and without regard to that nature, to determine ourselves what they can and what they cannot do; but when we constitute spontaneity as the spring of action, and call on them to do that, and that only, which they can do, which they do of their own accord when they are educating themselves, it is clear that the objection falls to the ground. The child who teaches himself never can go out of his depth; the work he actually does is that which he has strength to do; the load he carries cannot but be fitted to the shoulders that bear it, for he has gradually accumulated its contents by his own repeated exertions. This increasing burden is, in short, the index and result of his increasing powers, and commensurate with them. The objector in this case, in order to gain even a plausible foothold for his objection, must first overthrow the radical principle, that the activities, amusements, and occupations of the child, left to himself, do indeed constitute his earliest education, and that it is an education which he virtually gives himself.

Another side of this objection, which is not unfrequently presented to us, derives its plausibility from the assumed incapacity of children. The objector points to this child or that, and denounces him as stupid and incapable. Can

the objector, however, take upon himself to declare that this or that child has not been made stupid even by the very means employed to teach him? The test, however, is a practical one: Can the child play? If he can play, in the sense which I have given to the word, he cannot be stupid. In his play he employs the very faculties which are required for his formal education. "But he is stupid at his books." If this is so, then the logical conclusion is, that the books have made him stupid, and you, the objector, who have misconceived his nature, and acted in direct contradiction to it, are yourself responsible for this.

"But he has no memory. He cannot learn what I tell him to learn." No memory! Cannot learn! Let us put that to the test. Ask him about the pleasant holiday a month ago, when he went nutting in the woods. Does he remember nothing about the fresh feel of the morning air, the joyous walk to the wood, the sunshine which streamed about his path, the agreeable companions with whom he chatted on the way, the incidents of the expedition, the climb up the trees, the bagging of the plunder? Are all these matters clean gone out of his mind? "Oh, no, he remembers things like these." Then he has a memory, and a remarkably good one. He remembers because he was interested; and if you wish him to remember your lessons, you must make them interesting. He will certainly learn what he takes an interest in.

I need not deal with other objections. They all resolve themselves into the category of ignorance of the nature of the child. When public opinion shall demand such knowledge from teachers as the essential condition of their taking in hand so delicate and even profound an art as that of training children, all these objections will cease to have any meaning.

My close acquaintance with Fröbel's theory, and especially with his root-idea, is comparatively recent. But when I had studied it as a theory, and witnessed something of its practice, I could not but see at once that I had been throughout an unconscious disciple, as it were, of the eminent teacher. The plan of my own course of lectures on the Science and Art of Education was, in fact, constructed in thought before I had at all grasped the Fröbelian idea; and was, in that sense, independent of it.

The Kindergarten is gradually making its way in England, without the achievement as yet of any eminent success; but in Switzerland, Holland, Italy, and the United States, as well as in Germany, it is rapidly advancing. Wherever the principles of education, as distinguished from its practice, are a matter of study and thought, there it prospers. Wherever, as in England for the most part, the practical alone is considered, and where teaching is thought to be "as easy as lying," any system of education founded on psychological laws must be tardy in its progress.

"The Kindergarten has not only to supply the proper materials and opportunities for the innate mental powers, which, like leaves and blossoms in the bud, press forward and impel the children to activity, with so much the more energy the better they are supplied. *It has also to preserve children from the harm of civilization*, which furnishes poison as well as food, temptations as well as salvation; and children must be kept from this trial till their mental powers have grown equal to its dangers. Much of the success of the Kindergarten (invisible at the time) is negative, and consists in preventing harm. Its positive success, again, is so simple, that it cannot be expected to attract more notice than, for instance, does fresh air, pure water, or the merit of a physician who keeps a family in health."—*Karl Froebel*.

JOHN FREDERIC HERBART.

MEMOIR.

JOHN FREDERIC HERBART, the philosopher, was born on the 4th of May, 1776, at Oldenburg, where his father held the position of Justizrath. After finishing his preliminary studies at the gymnasium of his native city, he entered the University of Jena. His father had intended him for the law, and it was only with difficulty that he obtained permission to study philosophy. He soon had personal relations with Fichte, whose Wissenschaftslehre (Theory of Sciences) awakened in him a spirit of opposition. His independence of thought showed itself in his critique of Schelling's two articles, 'On the possibility of a Form of Philosophy,' and 'Of the I' (Vom Ich), which he submitted to Fichte. In 1797 he accepted the position of private tutor in Berne, and during four years continued his studies with his peculiar energy. He considered it necessary to return to the original problems of philosophy, and studied the philosophy of the ancients, particularly the period previous to Socrates and Plato, also mathematics and natural sciences, and even at that time laid the foundations of his mathematical psychology. It was here, too, that he developed his deep interest in education. He not only became acquainted with the pedagogical publications of Pestalozzi—*The Evening Hour of a Hermit*, first printed in 1780; the first part of *Leonard and Gertrude* printed in 1780; *Christopher and Alice*, issued in 1782, and *Figures to my A B C Book*, published in 1795, but visited in person the great Educator himself, at Burgdorf, in 1799, and received from his own lips an explanation of the *New Education*, based on the proper exercise and training of the senses, and of the methods by which he developed in very young children the ideas of number, form, and language. He felt that there were certain deficiencies in the views of Pestalozzi which it was his duty to supply.

In 1800, he returned to Germany, and after a brief residence at Bremen, settled in Göttingen. Here, until 1809, when he accepted a call from Königsberg as *professor ordinarius* of philosophy and pedagogy, he published the first results of his mature thought.

Among them may be mentioned 'Pestalozzi's Idea of the A B C of Observation Scientifically Treated'—(Gött. 1802, 2d Ed. 1804); 'De Platonici Systemati Fundamento;' 'Universal Pedagogy;' 'On Philosophical Study;' 'Principles of Metaphysics;' 'Universal Practical Philosophy.' In Königsberg he divided his time between his own researches, his academic duties, and work as a practical teacher in directing a seminary of teachers founded at his instance, and held after 1812 in his own house.

In thus uniting under his own roof the advantages of school and family, Herbart endeavored to utilize the powerful forces of each by making them supplement and assist each other. He saw the advantages of each; but in the school, owing to the number of pupils, each one can not receive that care and attention which his individual peculiarities call for, while the force of family influence is too frequently wasted from the incapacity of those who are called to direct and apply it. His ideal was education in the family, guided and assisted by the counsel of an experienced and professional teacher, not necessarily residing immediately in the family circle, but one whose occasional instruction of the children would indirectly find additional strength and usefulness through the co-operation of the parents whose daily influence he should assist and direct. His ideal method embraced brevity and vividness—the first, because children should not be confined long to one position or one subject, and the method should find and leave the mind of the pupil fresh; the impression thus made of any subject in even a brief period will be worth hours of forced attention.

Besides a great number of essays and lectures, he published among others: 'Handbook of Philosophy,' and 'Handbook of Psychology,' 'Psychology as a Science upon a new basis of Experience, Metaphysics and Mathematics,' and 'Universal Metaphysics with the Elements of Natural Theology,' and lastly, 'Encyclopedia of Philosophy from a Practical Point of View.'

The desire to work in a University with more intellectual life led Herbart in 1833 to accept a call back to Göttingen, where he died Aug. 14, 1841. While in Göttingen he published several small treatises, among which are 'A Plan of Lectures on Pedagogy,' 'Lessons on the Theory of the Freedom of the Human Will,' etc.

His biography is contained in 'Herbart's Minor Philosophical Essays and Treatises,' published in 1842-43, by Hartenstein. A complete edition of his works was published by the same editor in twelve vols., Leipzig, 1850-52.)

HERBART, BENEKE, AND FICHTE.

Herbart's Ideas of Education.

[In the *Journal of Speculative Philosophy* for April, 1876, there is a sketch, by Dr. Karl Schmidt, of Herbart's *Pedagogics*, translated by Prof. Hannel of St. Louis. We give a few extracts introductory to a more formal treatment to appear in a subsequent number of this *Journal*. The words in brackets are partly explanatory and partly critical by the translator.]

Herbart considers an outside influence upon the person under age necessary in order that he may grow mentally in the same [continuous] manner as he does physically, because he (Herbart) maintains, as a principle of his psychology, that there are by no means fixed, predetermined capacities in the human soul, similar to those in plants and animal bodies; that man—only as far as his body is concerned—brings his future form with his germ into the world; *that the human soul on the contrary, resembles rather a machine entirely constructed out of perceptions.* The translator adds in a note:

[“This should read: That the human mind may be made to resemble an organism, but under different circumstances with very different degrees of perfection, and that this mental organism or system is created by the soul out of the material furnished to the senses. Herbart holds that the soul is active, not passive, in forming perceptions out of the momentary sensations of color, sound and the like, that these elementary sensations are reactions of the soul, corresponding to outside influences; that we know nothing of soul, self, or faculties, save what we have learned by induction from the works of the human mind; that other faculties—being likewise the result of work and comparison—may be produced, purified, and strengthened, but in no other manner than by induction, and that the faculties both as regards their separate functions and their joint operation, will approach the closer to the perfection of a living organism, or of the system of mathematics, or of a machine, the more thoroughly we use our energies in the removal of definitely given difficulties and the solution of definitely given problems, first and before such application is followed up by broad and exhaustive comparison with other objects operated upon by the same energies of the soul; whereas a psychological theory which rests satisfied with a number of disconnected faculties for an ultimate basis, to the neglect of their unity in application, and without inquiring into the cause of their unity in the soul, is apt to unfit man for the business of life, and at best to degrade him to the rank of a laborer, whose sense of freedom, and natural enthusiasm for unity in the different departments of society is reduced to smoking embers.”]

Pedagogics is, according to Herbart, closely connected with ethics and psychology; it really depends upon both. He commences by showing that pedagogics depend upon ethics, and proves [indirectly] that those opinions are erroneous which do not let the process of education begin and continue as well as terminate in the individual subject, but which place the pupil in such a relation to certain ideal objects (happiness, usefulness, family, State, humanity, God) that the future actions of the individual are defined by such objects as the end and aim of education. This proceeding has to be reversed, and it must be maintained that the individual person is and remains the exclusive and true centre for the purposes of education.

Hegel and Herbart agree that the chief end of education is to raise the individual to fixed habits of subordinating all to moral activity; neither of them proposes to attain that end by the explanation of moral texts; the spirit of their systems is evidently in emphasizing correct habits of methodical observation and work, which, at the age of mature reflection, may be employed in the culture of our moral self, directly and systematically; both undertake to educate by means of instruction, and to develop the moral judgment of the individual while it is assisted in taking possession of the indispensable results

and conditions of civilization. They further agree that the life of the individual owes fruitfulness and scope to society, while unity and harmony of the departments of society rest upon the moral strength of the individuals, and furthermore that the perpetuity of life, whether of society or of the individual, depends upon the "idea," if we understand by the term "idea" the consciousness of the necessary conditions of such perpetuity. We may therefore conclude that if Hegel had elaborated pedagogics himself, the speculative problem would have been for him as it was for Herbart, how to realize the "idea" within the province of education. Now, though Hegel subordinates everything to one absolute idea, while Herbart co-ordinates his five ideas, viz.: Freedom, Perfection, Right, Equity, and Benevolence, it is nevertheless not difficult to harmonize the latter five with the one absolute idea, for practical purposes. For, whereas complementary opposites are equally necessary to life, and the knowledge thereof to responsibility, non-interference between such co-ordinate powers constitutes the basis of rights; compensation in proportion to the number of complementary opposites united in any purpose and multiplied by the number of actual repetitions, constitutes equity of reward and punishments; both, Rights and Equity limited to the domain of intention and spiritual intercourse, *i. e.*, where the assistance of physical organs and forces is precluded, constitutes Benevolence, the principle of morality in contradistinction from those applications of Rights and Equity which may be enforced; the agreement between intention and action, both being governed as stated above, constitutes individual Freedom. All subordination is governed by the relative term Perfection. Setting aside differences of quantity, any one of the complementary opposites is imperfect as compared with their unity; the richer unity is perfect in comparison with the object embodying a less number of complementary opposites. But whatsoever covers that which is jointly necessary for life, liberty and happiness, actually and with the intention of keeping it severed, is physically bad, legally wrong, spiritually untrue, and morally sinful.

The complete work of education may be divided into discipline (*Regierung*), instruction (*Unterricht*), and training (*Zucht*). The child comes into the world without ability to concentrate the action of his organs upon one object, to the exclusion of the rest; his individual will is the result of practice; this gradual result is interrupted by all manner of disordered inclination; to hold the latter within proper bounds, is the office of discipline. What experience and society teach, outside of school, is too one-sided and desultory; it is disconnected and fragmentary; a systematic activity must supervene which is able to complement, to digest and to unite the material collected as a mere aggregate. This methodical business, complementary of experience and society, is instruction. The term training (*Ziehen, duco, educo, education*) contains allusion to that which is not yet existing [the harmony of opposites controlling insubordinate tendencies] something hoped for [the strength of the complementary opposite, now being weak in the individual] which exists only as purpose, and toward which the pupil has to be led; this action, devoted more especially to the culture of the will, but also, in part, to knowledge and understanding, is designated by "training."

1. It is the office of discipline to keep order, and to subject the naturally predominant and unruly inclinations of the individual. Such subjection has to be effected by a power strong enough, and acting so frequently as to be completely successful, before indications of a genuine will [persisting in wrong] are exhibited by the child. Measures within the reach of discipline are: (a) to keep the pupil so busy that he can find no time for mischief; (b) detective

supervision which, however, is useful only during the first years of life, and during periods of special danger; (c) commanding and forbidding, with respect to which great caution has to be exercised, lest discipline be rather weakened by it; (d) threats and punishments, which must be superseded by respect and love, wherever possible. Discipline [assisted by physical means] has, at all events, to cease long before training ceases, and should, as soon as possible, be relieved by the latter. The [apparently] limiting power of discipline [resembling the restraint of prison] cannot be discontinued so long as great temptations are offered to the pupil by his surroundings.

2. Instruction ought to be and must be educative; the aim of instruction should not be solely, or even predominantly, the amount of knowledge, nor should it be the acquisition of merely technical skill, but culture of the Personality [executive ability for ethical ideas]; this most essential part of education should be rooted and grounded. To be more definite, instruction is methodical production and culture of representations of objects [as definitely constructed applications of the categories and ethical ideas], such representations being the true germs from which to develop the unity of all faculties until said elementary unities of object and subject seem to assimilate subordinate facts with spontaneous rapidity, embracing the complementary opposites in such an exhaustive manner that executive ability and energy for action are the direct result, as well as tact or [more generally] the quick decision as to the ethico-aesthetical value of a given fact.

3. The term [dialectic]training embraces all direct action upon the disposition of the pupil which is prompted by the intention to purify and supplement his energies, and to lead him towards objective liberty. Dialectic training has to deal [with the limitations of the person fixed by way of inheritance or association] or, in other words, it has to deal with the character of man. Character manifests itself by individual preferences [and is two-fold, either objective or subjective. The objective portion or factor of character consists of] the individual's particular construction of inclination, indicated by the relative proportion or percentage of action; the subjective factor of character consists in the enjoyment of complementary opposites criticising the individual inclinations. The historical conception of both our objective and subjective character (*Sitz*= centre of geometrical locus) constitutes the totality of actual energy, and this is produced continuously by means of complementary natural desires into acts of responsibility. The difference of the causes wherewith persons identify themselves, defines such or another character. It is, nevertheless, the internal act, as described, whether purely internal or whether conceived as possibly external, which produces balanced energy out of the material of desires [in every species of character].

Distinct measures of dialectical training [to be carried into effect by the teacher in separate lessons] are required, on account of faults inherent in all schooling [more particularly in schooling of a higher order, where the culture of directive energy by means of composition is not made the leading aim, and the necessary faults referred to arise from the fact that systematic excellence in the plan of studies, together with the best possible standard in the separate lessons, cannot alone, and without aid from systematic use of knowledge in lessons on composition, overcome the discrepancy between the claims of practical life and the one-sided culture of theoretical or abstract judgment, which results from any division of labor by means of teachers, subject-matter, time and methods, without adequate and scientific correction].

[The above extracts are not a fair exhibit of Herbart's educational views, which cannot be presented in isolated passages. *Ed. of A. J. E.*]

The basis and aim of Beneke's pedagogical views must be found in his psychological publications. To establish the phenomena of mind on a scientific basis, to discard all uncertain speculation, and adhere only to the facts of observation, having ascertained all fixed antecedents, and uniform sequences in these phenomena was the great aim of all his teaching and all his publications. His separate work on Education and Instruction, which is highly valued in the best normal schools of Germany, is only the application of his psychological views to the work of the school-room. We give a brief analysis of his doctrine from two articles in the *Museum and English Journal of Education* of 1865.

Beneke's System of Psychology.

Beneke sets down two false notions as the principal obstacles to the scientific treatment of psychology. The first one is the practice of regarding the mind in its very earliest stage as an aggregate of special faculties. The child is supposed to have born with him faculties of memory, of understanding, of reasoning, of will, and such like. These faculties are assigned to the child in spite of the fact that no one has really observed the infant recollecting, or reasoning, or deliberately willing. In truth, these faculties do not exist in the child at its birth. There is a power called soul, but it does not admit of farther definition. It does not become known to us until it acts on the outer world, and it is only after long processes, which it is the business of psychology to observe, that it reaches the power of deliberate volition or of abstract reasoning.

But there is a second error which it is equally important to remove. All acts of retention are grouped together, and are assigned to a faculty called memory. All acts of reasoning are grouped together, and assigned to one faculty, called the reasoning faculty. And so on with other faculties. But this is a mistake. Psychologists like Sir William Hamilton and Mansel, allow that there are no such faculties, that the soul is one, and that these faculties are merely convenient names by which to group together similar phenomena. But the fiction leads to gross mistakes, both psychologically and educationally. If there were such a faculty as memory, then if a man's memory were good, he would remember every thing well. But we find that the same man remembers words well, but forgets ideas, remembers numbers well, but forgets tunes, remembers places well, but forgets faces. So we find a critic of art reason soundly, and with wonderful acumen and insight, in the region of art, but he fails entirely in his reasoning in regard to religion or politics. How can this happen if he has but one reasoning faculty?

The business of psychology, then, is to observe the activities of the human mind, to watch and classify all its acts, avoiding all hasty generalizations.

Now, in the first stage of the soul's existence here, we know it only as it comes into contact with external nature. We are, therefore, first to observe what takes place when the mind comes into contact with particular external objects. The results of this observation Beneke gave in what he called the four fundamental processes of the soul.

The first is, if the soul come into contact with an external object, it forms a sensation or sensuous perception. How it forms this sensation is not a ques-

tion of psychology, for our consciousness does not speak even of the body as the means. We have to deal only with the facts of consciousness.

The second fundamental process is thus stated by Beneke: "New original powers are continually forming themselves in the human soul." The phenomenon which we perceive is this. The mind is employed for the day in perceptions. It at first works vigorously, but gradually its power fails, and, like the body, it refuses to act. Sleep, however, comes on, and next morning the mind awakens refreshed, reinvigorated, able to form new sensations and perceptions.

The third process is thus stated: "All developments of our being are on the stretch every moment of our lives, to equalize towards each other the movable elements which are given in them." The movable elements require explanation. The result of the activities of the mind on external objects is different. In some cases the perceptions are steadfast. They are easily recalled. In other cases the perceptions are indistinct, the objects have not clearly impressed themselves on the mind. These become the movable elements. They pass easily from one group of perceptions to another. Now, in the case of these movable elements, the mind struggles to equalize them. For instance, good news comes to me. This feeling of gladness will give a color to all my perceptions which are not definitely fixed. The song of the bird will be the expression of its happy existence; the sun will smile amidst clouds, all nature will rejoice. Again, if I receive a strong impression of an object, the strength of the impression will communicate itself to the impression of the next object which I perceive.

The last fundamental process which Beneke lays down is, "The same products of the human soul, and those similar, in proportion to their likeness, attract each other, and strive to enter into nearer combinations with each other."

These are the four great fundamental processes of the human mind. Beneke rests them entirely on observation, and if our reader has understood them thoroughly, he will see how simple they are. These processes take place in the three divisions of the soul's activity, which were proposed by Kant, and since adopted by most psychologists; and Beneke applies his knowledge of them in explanation of the phenomena of the feelings and conations, as well as of those of our cognitions.

In the first fundamental act there are two factors,—the soul and the external object. If we turn our attention to the soul, we find that its capabilities in regard to external impressions may be described in a threefold manner. An object comes before the soul, and, in consequence, the soul takes a firm, strong impression from it. The object becomes firmly fixed in the soul. Or again, if an object comes before the soul, the soul seizes it in all its parts, it takes into its perception the minute features of the object. Or again, it may, in a speedy manner, lay hold of the object. At the earliest stage of the child's soul, it is impossible to define exactly what it is, because it is not until vast and complicated processes have been gone through, that the soul reaches the state in which we know it well. Therefore, Beneke does not assign to the soul, in its earliest stages, any of the latent powers commonly ascribed to it. He deals with it in its earliest stages, simply as its activity in sensations and perceptions exhibits it, and he generalizes the results in these three qualities,—strength, sensitiveness and liveliness. This generalization we consider of im-

mense value to the educator. If he watches his slow pupils carefully, with these characteristics in his mind, he will often be able to lay his hand at once on the defect that prevents progress. If the boy does not receive a strong impression from an external object, he can not remember it well; he can not recollect it when he is required to do so. This quality of the mind is the most essential to thought, and characteristic of the manly intellect. If the mind, again, is not sufficiently sensitive, it will fail to form a minutely accurate notion of the object. This quality is characteristic of the female mind, and is not an unmixed good, if not combined with a sufficient amount of strength. If the mind does not take an impression in sufficient time, another object forces itself on the mind, a mere half-impression is produced, and the result is a weakening of the power of the mind. Or if the mind is too lively, and takes its impression too fast, there may be a deficiency of strength, and the pupil may be as ill off as the slowest in the class. Dunces, therefore, may be defective in the strength of their impressions, in the sensitiveness of their minds, in the too great slowness or fastness with which they receive impressions. These defects are defects of degree, and though it is in these qualities that one soul originally differs from another, yet much may be done by the teacher who has studied the matter psychologically to increase the strength and regulate the liveliness of the pupil's impressions.

What adds to, or rather creates, the deep importance of attention to these qualities, is another doctrine which Beneke has established in a completely scientific manner. This doctrine is, that the only possibility of the soul's progress to a higher stage, is the thorough accomplishment of the work in the previous stage. At the first stage the child is predominantly sensuous. Unless his senses be fully exercised, unless he accomplish his intuitions effectively, unless, in one word, he has made many clear, strong intuitions in the course of his childhood, the second portion of his life's intellectual work will be badly performed. In the second stage, the boy becomes reproductive; and here, again, unless the reproductions are done thoroughly, and repeated often enough, it is impossible to acquire any thing like perfection in the third, or highest stage, the productive. If we observe a child's progress in his intuitions, and his movement from these to reproduction, we shall see the reason of all this. A child looks at a tree for the first time. He looks only for an exceedingly short time. He has had some sensation in consequence, which must leave *some trace* in the mind, however indefinite it may be. After an interval he looks again at the tree, and there arises a similar sensation, which, by the fourth fundamental process, blends with the trace of the first. After these sensations have been multiplied to a great extent, by a law which Beneke works out scientifically, the child at length perceives an object which we call a tree. Having made this perception, however, he could not recall the tree in his mind if he wished. But he makes the perception or intuition again and again; and he must make it a certain number of times, more or less (the number being dependent on the strength, sensitiveness, and liveliness of the soul), before he can reproduce the tree without the presence of the object. Now, after he has acquired the power of reproducing one tree, he must learn to reproduce others; and he can not form a notion of a tree, abstracted from all individual trees, until he has reproduced a considerable number of individual trees with tolerable exactness. He can not become a thinker in any department, until he has gained the power of repro-

duction in that particular department. Hence, also, the scientific establishment of the law in education, that the teacher must resolutely, and with great patience, practice the pupil in the concrete, before he proceeds to the abstract. Education must be primarily inductive, if it is to be successful. The pupil must be furnished in every study with numerous individual instances, before he can be fit to make the generalizations for himself; and to furnish him with generalizations before he knows the instances, or even at the same time, is not to educate him, but to throw obstacles in the way of his education.

If we turn now from the soul to the other factor, the external object, in the first fundamental process, we shall find that it is calculated to affect the soul in five different ways. The object may produce a satisfactory impression, and then we have a perception. I look at a tree in daylight, I see it, and am satisfied. Again, it may produce an impression, accompanied with distinctly felt pleasure. I look at a beautiful face. I see it, and, more than that, I feel exquisite pleasure at the sight of it. In proportion, however, to the pleasure of which I am conscious, is my perception less distinct, and if I turn immediately away from it, possibly I could describe it only in the most vague terms,—terms indicative more of my pleasure than of its exact form. But then there is this difference between the object that simply satisfies, and that which excites pleasure. I at once dismiss the object that satisfies the mind, and do not care whether it returns or not. But I long for the return of the object which gives me pleasure, and as it returns again and again, I come to know it more completely, even in its various features. But there are objects that at first stimulate the mind pleasurablely, but being permitted to act too long on it, create satiety, or even disgust. In that case, the mind has not received a satisfying perception of the object, but at the same time it has not only no desire to return to it, but positive aversion to it. The effect, consequently, is a weakening of the mind to this extent. Or again, the object is not calculated to produce a full impression. The light, for instance, is deficient. I look on an object at a distance in dim starlight. I see it indistinctly. The impression produced on my mind is unsatisfactory. I have gained no real knowledge. So far the mind is weakened. Again, I gaze at the sun in its full blaze. The result is that I see nothing, but my eyes are dazzled, and I feel pain. There are thus five effects: a satisfactory intuition, an intuition accompanied with pleasure, an intuition accompanied with satiety, a defective intuition, and an intuition accompanied with pain. The first two strengthen the mind, the other three weaken it. The teacher must present his pupils only with the first two; the other three hinder his work. And, indeed, the division will apply to more things than intuitions. If the lesson given by a teacher produces either satiety or pain, or supplies the pupil only with half-impressions, his work has been useless, and the boy would have been stronger in mind if the lesson had not been given. In every lesson the teacher must either satisfy the boy's mind, and then the knowledge will abide for some time, and become the basis of further knowledge; or he must stimulate the boy through pleasurable excitement, and then, though he may not remember so much of the instruction, there has been planted in his heart a craving for farther enlightenment, which may turn out to be more important than any particular knowledge communicated to him.

These views, and similar views, are elaborately set forth by Beneke in his *Erziehungs-und-Unterrichtslehre*.

INSTRUCTION—ITS CHARACTER AND RELATIONS TO EDUCATION.*

1. *The Fundamental Character of Instruction.*—Education has for its function to raise the reason which is not cultivated at all, or less cultivated, to the position of that which is cultivated, and has therefore principally to do with the mind or subject. The objects which act on the mind have also a training power; in fact, at last all training is limited by what is external, though not less so, and indeed much more so, by the nature of the mind itself. But one and the same thing can train in different degrees in different relations. What is important for objective training, may be unimportant for subjective, or even may have a detrimental influence; and what, on the other hand, is less important for the comprehension and acquisition of external elements, may have a deep influence on the formation of the mind.

In contrast, therefore, with education, the function of instruction is to impart that which is objective. All its peculiarities can be inferred from this: its having to do more with single operations; the circumstance that these operations are so marked that they can begin and cease at a definite time; its capability of exhausting what lies within a limited region; of its proceeding from a single object with more determined intention; and of its being communicated to a greater number at once.

This definition gives the most general limits of instruction. Its principal objects are, according to this, representations and external capabilities. The external capabilities, such as walking, dancing and writing, are included, because it is through representations that they can be learned fully. For instance, writing is teachable on account of the perceptions which the pupil can make of the teacher's writing and of his own.

In regard to representations, it is external objects which first form the objects of instruction. They form for us the first objects. Along with them we comprehend the connections and other relations which exist amongst them; such as those of space and time; the relations of continual juxtaposition; of cause and effect; of number; as well as the more abstract relations of degree; of size; &c.; and in consequence of these being able to be apprehended along with external objects, they also can become the objects of instruction. And this does not exhaust the province of instruction even in regard to external objects, for it embraces also the working up, not merely of single representations, but of their combinations and relations to knowledges of every kind. And it goes beyond the immediate apprehensions of objects into logical combinations, for while we are in a position to produce similar combinations in others with a kind of compulsion, there can be no doubt that such can become the objects of instruction.

This leads into another and very wide province, which instruction rules at least in part. Our inner being can become an object to us. This takes place through a peculiar formation of notions which, introduced by the similarity of the qualities and relations and modes of growth of the mind, brings forth in special acts what is universal in these relations for our consciousness. Through these acts, that is, notions relating to mental qualities, relations, and modes of growth, is formed what is commonly called our inner sense, but which would

* *Erziehungs- und Unterrichtslehre.*

be better called our inner senses, by means of which we are in a position to comprehend acts of a similar nature. In consequence of them, therefore, all evolutions of our inner being, whatever form they may have originally, assume the form of representation, or become objects for us, and thus they can be drawn into the province of instruction.

The whole inner world, it is true, does not lie within the province of instruction, but only so far as the individual element can be struck out and a universal representation gained in consequence of the power of forming notions already mentioned, and only so far as a communication of it possible; nay, only so far as the person to be instructed has in himself the elementary preparations for that which we are to impart to him. Above all, then, the universal predetermined laws, which are the same in all men, such as those of logic, æsthetics, morality, and religion, &c., can be evolved notionally, and thus become objects of instruction: and so also can even other mental phenomena, which take different forms in different individuals, even feelings and conations.

But it is evident that the province of instruction in this respect is much more limited than that of education. Take, for instance, the branch where it has the widest reach, namely æsthetic instruction, such as can be imparted through the reading and exposition of poetical works, through instruction in music, as well as through pictures and statues. The apprehension of these takes place in a similar manner in all, so far as the objective is concerned, yet not with equal perfection, delicacy, freshness, liveliness, and spirituality. And without doubt the communication of these would be more valuable, and more important in regard to the real training of the mind. But for these a certain equality of inborn talents (not communicable therefore by one to another) is requisite, and a certain equality in the previous circumstances of training; two equalities, therefore, which, even where a possibility of communicating them exists, would fall, not to the province of instruction, but to that of education.

Still more decidedly is this the case in regard to morality and religion. Instruction can venture here only to form, combine, and apply the *notions* or *representations* which relate to both. And although these are assuredly of some value in themselves, yet it is unquestionably not these that are to be considered as most valuable, nor as the most important for the training of youth, nor as the peculiar end of education in these two departments; but it is the lively moral feelings and impulses, the disposition which arises in consequence of these, and the deep religious tone of the soul. From these feelings indeed there lies a plain and open way to the notions or representations, but from the notions or representations there is no road to the feelings. For the lively and the fresh must come before the notions, according to the fundamental relations of mental evolution. The particular evolutions can be melted and formed into notions by abstraction, but the reverse process, that of dissolving notions into particular evolutions, and into particular evolutions of the requisite freshness, force, and completeness, has not yet been discovered by any one, however much the possibility of it has been presupposed in pedagogic theories. For establishing lively feelings, impulses, dispositions, therefore, there lie before us, so long as we are in the province of instruction, not only difficulties, but an absolute impossibility. What is aimed at can be attained only through education, by placing the pupils in those relations of life which are the necessary conditions, more or less, of the required evolutions from the com-

mencement. Instruction can merely, while circling round the shrines of morality and religion, describe and glorify their treasures; the pupil can be made a partaker of them only through that more lively and more penetrating activity which constitutes education.

2. *Education through instruction.*—Through the investigations of the previous paragraph, we are now in a position to give a definite answer to the question if instruction can educate, and how far. Of all the evolutions of our mind there remain behind traces, and these traces are powers, and so far, therefore, there is through all instruction an inner or subjective shaping of the mind produced, the very thing at which education aims. But the question then occurs, Whether this inner shaping, this formation of the subjective, is important and joyful; whether the traces which remain behind, have the adequate strength, liveliness, and intensity which make them desirable developments of the inner mental being; whether they mingle and work together with one another in relations promotive of progress; and whether in this way all kinds of inner progress which education aims at, are to be attained?

In order to gain perfect exactness in the determination of these questions, we must distinguish three things: the education which is attached to instruction immediately and essentially; the education which comes alongside of the instruction, or takes place through that which the teacher says or does in addition to what properly belongs to his duties as an instructor; and, finally, we have the results that may arise from special arrangements which are made for instruction, such, for instance, as are made in instruction in schools.

Of these three elements, we can take no notice of the last. The second is seen at the first glance to be entirely different in different circumstances. It depends on the individuality of the teacher whether it appears at all, and in what way and to what extent; and it also depends, on the other hand, not less on the individuality of the scholar. To take a nearer view of this matter, we can bring the influences that bear on it under four general heads.

First, an educating influence can be exercised on the scholars in immediate connection with the objects of instruction by the *zeal* of the teacher, by the liveliness and continuity which he displays, and by the scientific spirit which informs his instructions, for these qualities are transferred to the scholars, sometimes unconsciously and instinctively, and sometimes in more conscious representation and feeling. While he has these qualities of his teacher continually before him, he forms them in himself along with the objects of instruction, by means of that which he possesses in an elementary state similar to these; and the traces which remain behind of these, become gradually in him permanent qualities. It is plain from this that this training may be often of greater importance than the subject matter which the instruction communicates. Hereby there is introduced into the scholar a special power of estimating the moral worth of things, which, according to the measure of its strength, its purity, its liveliness, and its harmonious agreement with other motives, may exercise an exceedingly important moral influence for the whole of life.

But, *secondly*, the teacher, besides what he may introduce immediately into his teaching from his inner being, is something more. He has a character, an individuality, and these can manifest themselves during instruction in the most manifold ways, and can also be reflected in the scholars where the preparatory capabilities exist. It is these that principally determine the tone of the teacher;

the expression of the united intellectual and moral individuality and disposition of the teacher. It is well known that teachers differ much from each other in this respect. While many, during instruction, simply let the object speak through itself, others continually are mingling up with it themselves or their personality more or less, relating the circumstances of their lives, their adventures, their feelings, and their doings. Where the special subject of instruction has little, or perhaps nothing to do with this, we must unquestionably consider this as a mistake, according to strict didactic rule; and it may take place to a degree where it becomes a mistake which can in no way be excused. But in many circumstances the advantage preponderates. Through the foreign admixtures, more is gained in respect of moral tone and character than is lost in respect of instruction, where there exist in the scholars the preparations. Even didactically it can sometimes have a beneficial influence, by breaking the uniformity of the instruction, and giving more spirit and life to it, which is a decided necessity for some individualities.

Thirdly, there is the attention which the teacher can pay to the moral individuality of the scholar. Also in this respect we come upon a similar diversity. Many teachers do not trouble themselves about this matter. They give their lessons, they take care that there be quiet and attention during these, and that the necessary preparations and work be done for them. Every thing beyond this, they imagine, is of no concern to them. Others, on the contrary, regard the moral effect on the scholars as the principal matter. While they give intense attention to the scholars in this respect continually, they take the opportunity presented of something faulty occurring either in the regulation of the instruction, or in conduct, to introduce, with great earnestness, representations and admonitions, which, in consequence of the way in which they proceed from them, receive a penetrating character; and what they have once begun in this way, they follow out with systematic zeal.

To these educating agents have to be added, in the *fourth* place, those which are determined by the relations, and especially the likes and dislikes which arise between teacher and scholar. Love begets love, confidence elevates and strengthens; on the other hand, cold repulsive behavior on the part of the teacher chills the pupil, creates ill-will, and may inspire even hatred. The results in this case are often of great importance for the whole education; and unquestionably special consideration is to be given in the selection of a teacher, not merely to the amount and kind of knowledge he may possess, but to the circumstances now named, and more especially to the many relations of agreement or of opposition which can bring the scholar to willing association; or, on the other hand, to an often invincible repulsion.

We have yet to discuss the first of those points suggested in the beginning,—the educating power immediately and essentially attached to the instruction. With regard to it, we expect that there will be more certainty in carrying it out, because it is conditioned by its more close connection with instruction; and a full examination confirms this expectation. We can have no doubt as to its nature in general. The traces which remain behind from the comprehension of the instruction, give rise to powers for the comprehension of that which lies in the same direction with it,—powers of perception and observation, of memory, understanding, and judgment of the most manifold kind, as well as the habits of attention, of diligence, and of perseverance. It is plain, at the

first glance, that this training will be the more valuable, the greater the liveliness and intensity with which these traces are collected, provided only the mind do not be wearied out.

And then to these are attached further workings out of that which has been already comprehended. To these belong, especially in an objective point of view, the regulating laws, which not unfrequently extend their operations beyond the special circumstances in connection with which they were first formed; and subjectively, there is the elevating and bracing feeling of power in one's self which urges on the scholar, and later the youth and the man, from one intellectual height to another, and gives him the energy requisite to the attainment of his aims.

The truth of this remark will become exceedingly evident if we look at it, as it were, through a magnifying-glass, in that education which the previous ages give to those that follow. Let us take, for instance, the influences which proceed from our more recent speculative philosophies. It has often been believed, that even although these brought no advantage in respect of the matter which they supply to the mind, inasmuch as they establish no knowledge that promises to last, yet they deserve the highest praise in a formal point of view, or in respect of the mental, gymnastic, and intellectual exertion and strengthening which they guarantee. But exactly the reverse is unquestionably the result; for since these speculative systems move in distorted, often purely fanciful forms, the formation of the mind, or the education which is produced by them, must bear a distorted and perverted character. They impress on the mind fanciful laws of knowledge, they set up pictures of a progress in which there can be no real progress, but merely the fancy that there is progress. And since these pictures and laws work as misdirecting powers, the intellectual training must necessarily be radically corrupt. And so also the moral training. On the one side, they establish presumption and superciliousness in reference to that worthless and perverted acquisition. On the other hand, they depress and unnerve, where they ought to give courage and spirit, namely, in striving after knowledges which, established in the right way, possess sufficient tenacity to remain truth for all time.

This, then, is the full extent to which instruction can and ought to act with an educating power, independently of special arrangements which may be added for the purpose. Most decided is its action in that which is immediately attached to it; and then in that which lies near to it, at least so far as a special individuality is not presupposed for it. Every thing else is in and for itself, not in its power, but can be drawn into it only so far as already a mental preparation has been made for it through the immediate action of the relations of life. The relation to the teacher is assuredly a relation of life, but only a single and limited one. On this account it can have an educating power (in an elementary way) fresh and lively, but only so far as it affects the mind in this character. And this statement already furnishes us with the answer to the question, in what way schools are fitted to extend this influence. It is plain, without further investigation, that they are in a position to do this so far, but only so far as they can introduce new relations of life which shall act immediately on the inner development of the scholar.

THE NATIONAL EDUCATION DEMANDED BY THE AGE,

CONSIDERED IN CONNECTION WITH THE EDUCATIONAL SYSTEM OF FRIEDRICH FROBEL.

By Prof. J. H. Von Fichte.*

I. EDUCATION—THE PROBLEM OF THE AGE.

SINCE Pestalozzi's great movement, it has become, at least in Germany, a universally recognized conviction, that only by means of an improved popular education, can the many defects of civil, social and family life be thoroughly corrected, and a better future be assured to our posterity. It may be asserted, still more universally, that the fate of a people, its growth and decay, depend, ultimately and mainly, on the education which is given to its youth. Hence follows, with the same indisputable certainty, the next axiom: that nation which, in all its classes, possesses the most thorough and varied cultivation, will, at the same time, be the most powerful and the happiest, among the peoples of its century; invincible to its neighbors and envied by its contemporaries, or an example for them to imitate. Indeed, it can be asserted, with the exactness of a mathematical truth, that even the most reliable preparation for war can be most surely reached through the right education of physically-developed young men. This conviction also gains ground in Germany; and renewed efforts are now made to introduce gymnastics (*turnen*) into the system of common school education, freed from all cumbersome modifications, and restored to their simple, first principles.

But the problems of national education are far from being limited to these immediate, practical aims. Its workings must not alone cover the present and its necessities; the great plan of national education must comprehend unborn generations, the future of our race, the immediate and therefore the most distant. Finally, man must not be educated for the State alone (after the manner of Greece and Rome), but the highest civil and educational aim must be to lead the individual and the whole race toward their moral perfection. National education must therefore extend beyond the popular and expedient; must construct its foundations on pure and universal humanity, and then raise upon these whatever national and professional wants require. This gradation of requirements strictly held, will prove to be a guiding rule of great importance.

Here now, it may seem—and “idealizing educators” have frequently received such reproaches—as if in these demands, far off, impossible

* Translated by Emily Meyer, with slight verbal alterations and abridgements. •

problems were treated of, as if educational utopias were desired, instead of looking after what is nearest and most necessary. And one could say, even with an appearance of right, that inasmuch as we perform what is near and sure, we approach, at least progressively, our highest goal. For national education is a work so comprehensive, complicated and prodigious, that it can be realized only in favorable periods and within very circumscribed limits.

Admitting this last, we hope still to show how directly practical the consideration of that universal question of principle is, and that the education of the present will only reach its aim by beginning at this point. We are undeniably entering a new era. We are preparing to cast aside the last remnants of the middle ages. Inherited rights are precarious, or at least they can claim no legal sanction, while, nevertheless, much in our manners and customs remind us of the past. No one is compelled to serve another, and no individual enjoys in idleness the profits of another man's labor; but for each, labor and capacity are to be the sole supports of his position in life. Thus each is thrown upon his own exertions, and the path of unlimited competition and zealous effort is opened to all.

For this reason there should no longer be a privileged class, but to each, approximately at least, must be offered every thing which belongs to a universal human culture, and what his particular capacities demand or are able to appropriate. Only upon these two conditions can the citizen of the commonwealth be fitted for the future "struggle for existence," to continue equal to the increased requirements, and fulfill ably his chosen calling.

This new great principle of the equal rights of all to all which their talents can grasp, demands a plan of education fundamentally renovated and readjusted. In every given case, the education must be strictly proportional to the conditions which the period offers. But it can not be denied, that in the present period this proportional relation has not been reached; yes, there is even danger that it may be missed of, by a mistaken arrangement of details. For this reason, those upon whom the responsibility of educating rests, must recognize clearly the final aim of the same, and prepare it with practical certainty, through all the necessary grades. Above all, therefore, theoretically there must be no vacillation in principles, practically no failure in the correct issues! If we should succeed only in spreading a wholesome light over these two points, we should feel that we had solved our present problem.

Our politicians and State educators differ widely in regard to that aim; and this is the next ground where the struggle should begin. Whoever considers a republic the highest goal to which a State can attain, laments that he sees no republicans around him; these true education must make. But what the republican spirit, in which the people are to be educated, really is, there is no thorough insight. This spirit is the opposite of that which has till now existed, and which sees true freedom

only in a leveling equality, and the overthrow of old authority and social barriers; and above all admits no civil compulsion in education. Each individual must cultivate himself for such practical purposes as he chooses, and as well as he can. Education and its institutions must be entirely untrammled. As a fitting example we can refer to what is related of North America, where the educational conditions, and the consequent family life, are free in general. The pupil is prepared, as early as possible, to help himself onward, in some form of profitable business. The greatest activity, and the richest accumulation of property, is the aim of each. Though German republicanism may reject these principles, it must still admit that there is consistency in them, and that if the State has no higher aim than to become a great industrial and fiscal institution, an immense phalanstery for the most enhanced pleasures of this mortal life, this purpose is being realized on the other side of the ocean, in a highly practical way, and without unnecessary complications; not, indeed, without already displaying the moral evils which unavoidably accompany its progress, and to which our republican sages persistently shut their eyes.

Those who find their ideal state in old feudalism, in simple submission to the fatherly care of "princes by the grace of God," and see in a full return to such conditions the only safety from the dangers of the present, must also contemplate a reform, indeed a retrograde movement, of the educational system. They will insist upon clinging to old things, even to preserving what is decayed, solely because it is consecrated by authority. Nor are we without example of this; for we find a North German State, betraying a lamentable inconsistency and blindness in settling the most important question of popular education, limits the range and thoroughness of instruction, and thus destroys the germs of its future growth as a State.

These two parties—we have mentioned only their extreme characteristics, while numerous intermediate grades exist—designate only the extreme limits of the antithesis, which touches all the political and social questions of the age. They stand upon the broad field of the literature and opinions of our time, as if separated by a wide chasm, and in irreconcilable hostility. They could, however, by returning to their first, true principles, and acquiring a clearer insight, be brought to recognize each other; and, instead of incessantly quarreling, be made to acknowledge their relative rights, and work harmoniously upon the common task of improving the education of the people. We consider it not only desirable, but possible, that the work of reconciliation should begin with a true appreciation of popular education, which is the common aim of both sides. By this we mean that the conservatives, who will sacrifice nothing which is sanctified by age and authority, do not see how, in thus destroying, that which is truly valuable and enduring can be preserved. For the new form in which it is to arise more enduringly, does not present itself so distinctly that they can recognize it. This gives

them a right to protest that it is better to retain the oldest positive form than sink into the nothingness of a bare negation; no new form should be introduced which is not at least a full compensation for the old.

On the other side, we see reformers too frequently losing themselves in what is external or unessential. They do not often get beyond empty plans of abolition. They are clear as to what they do not want, but do not perceive as clearly what is permanently to fill the place of that which they reject. They are deeply mistaken if they think, that, in ridding themselves of certain hindrances, they gain creative freedom, the power to erect a positive structure. We can not err, in asserting that most revolutions have failed and become unfortunately retrogressive, because their leaders did not know what they wanted, or at least what they ought to want.

In the first place, it is necessary to understand the past correctly, and to recognize clearly what in it has still a relative right to continue, and what must serve as a transitional basis and means for that which is new and necessary. The law of continuity, of gradual transition, which we see ruling organic life with irresistible sway, has also in all intellectual processes, whether political or social, its highest authorization, the violation of which never escapes punishment. We might call it the educational law of the world's history.

If we may be allowed to presume that, as a general thing, the best thinkers agree upon these fundamental principles, then we may consider the following inference as admitted. It is plain, namely, that the path of this gradual, complete, and peaceful transition from the present into the new period, must take place in the field of education; for in the growing race, the old and new time, the decaying past and vigorously-developing future, meet and are reconciled. And thus in this direction, the decisive truth is proved:

All political and social controversies of the present concentrate finally in the question of education; but not only in regard to what must be done in detail and immediately, but more universally still, in this: What is the only true education, the education worthy of the human being?

This is plainly a psychological-ethical question. It can be decided—with the permission of our practical teachers—only on philosophical ground. Not—and here experience must be our guide—not that a certain philosophical system is to construct for all time, an educational plan which all must follow, but that correct insight into the nature of the human intellect must first fix the nature and the end of all human education, and must at the same time designate the fundamental principles by which the several questions of education and instruction are to be decided. Thus we shall be able to dispose of the final question: Which one, of the now ruling educational systems, is best adapted to the nature of the human mind?

(To be continued.)

KARL VON RAUMER.

KARL VON RAUMER, whose "*History of Pedagogy from the Revival of Classical Learning to our own Times*," is a valuable contribution to the Science and Art of Education, as well as a most reliable and comprehensive record of the progress of pedagogical development in Europe, as affected by the practice, or publications of eminent teachers and educators, particularly in Germany, was born in Worlitz, in the duchy of Anhalt-Dessau, on the 9th of April, 1783. Until his fourteenth year, he was under private tuition at home, when he was placed in the Joachimsthal Gymnasium at Berlin, to which institution his elder brother* had already been sent. From this Gymnasium where he had the instruction of Meierotto, he went in 1801, to the university at Gottingen, to study law and read with Buttman; to Halle in 1803, to attend the lectures of Wolf and Steffens; in 1805 to the Mining Academy to devote himself to mineralogy under Werner; and in 1808, after a geological exploration of the mountain chains of Germany and France, to Paris to continue his geological studies. While at Paris, he changed somewhat his plans of life, which he thus describes in one of his published lectures on education.

"At Paris my views and intentions in regard to the future occupation of my life underwent a great change, which was brought about by two different causes. For one thing, I had learnt by my own experience how little a single individual is able to accomplish for the science of mineralogy, even if he goes to work with the best will and the most toilsome industry; that it required, much more, the united, intelligent and persevering labors of many, in order to pass from a mere belief in the laws of mineralogy to an actual perception of their operation in mountain chains. I thus became convinced that we ought not to work for science as individuals, but that we should, after passing through our own apprenticeship, instruct others and train them for the pursuit of science. How much more useful is it, thought I, to produce *one* new workman than *one*

* FREDERICH VON RAUMER, author of *History of Hohenstaufen*, Privy Counselor, and Professor at Berlin, was born in 1781.

RUDOLPH VON RAUMER, author of the "*Essay on Instruction in German*," in the fourth edition of the *History of Pedagogy*, and Professor of the German Language and Literature in Erlangen, is a son of Karl, and was born in 1815.

The late Minister of Public Instruction in Prussia, was a cousin of Prof. Karl von Raumer.

single new work, seeing that the former can execute many works, and even train other workmen. This conviction caused me to turn my attention to the question of education. But a second cause operated in a still higher degree to produce the same result. The sad time that had passed since 1806 had affected me with horror and dismay; it had made me wish to shun the society of my fellow-men, and had quite disposed me to give myself up to the most solitary researches among the mountains. This disposition was strengthened at Paris, in the midst of the haughty despisers of our German fatherland. But it was here, too, where hope first dawned within me, where a solitary light beamed toward me through the darkness of night. I read Pestalozzi, and what Fichte says, in his 'Addresses to the German Nation,' about Pestalozzi and education. The thought, that a new and better Germany must rise from the ruins of the old one, that youthful blossoms must spring from the mouldering soil, took strong hold of me. In this manner, there awoke within me a determination to visit Pestalozzi at Yverdon.

Fichte's Addresses had great influence on me. Surrounded by Frenchmen, the brave man pointed out to his Berlin hearers in what way they might cast off the French yoke, and renew and strengthen their nationality.

He promised deliverance especially through a national education of the Germans, which he indicated as the commencement of an entire reformation of the human race, by which the spirit should gain a complete ascendancy over the flesh. To the question, to which of the existing institutions of the actual world he would annex the duty of carrying out the new education, Fichte answered, 'To the course of instruction which has been invented and brought forward by Henry Pestalozzi, and which is now being successfully carried out under his direction.'

He then gives an account of Pestalozzi, and compares him with Luther, especially in regard to his love for the poor and destitute. His immediate object, says Fichte, was to help these by means of education, but he had produced something higher than a scheme of popular education,—he had produced a plan of national education which should embrace all classes of society.

Further on he expresses himself in his peculiar manner on the subject of Pestalozzi's method, which he criticises. He takes exception to Pestalozzi's view of language, namely, 'as a means of raising mankind from dim perceptions to clear ideas,' and to the Book for Mothers. On the other hand, he strongly recommends the development of bodily skill and dexterity proposed by Pestalozzi, for this, among other reasons, that it would make the whole nation fit for military service, and thus remove the necessity for a standing army. Like Pestalozzi, he attaches a high value to the skill necessary for gaining a livelihood, as a condition of an honorable political existence.

He especially insists that it is the duty of the State to charge itself with education. He spoke in the year 1808, in the capital of Prussia, which had been deeply humiliated by the unhappy war of the preceding years, and in the most hopeless period of Germany's history.

'Would that the state,' he said to a Prussian audience, among whom were several high officers of state, 'would look its present peculiar condition steadily in the face, and acknowledge to itself what that condition really is; would that it could clearly perceive that there remains for it no other sphere in which it can act and resolve as an independent State, except the education of the rising generation; that, unless it is absolutely determined to do nothing, this is now all it can do; but that the merit of doing this would be conceded to it undiminished and unenvied. That we are no longer able to offer an active resistance, was before presupposed as obvious, and as acknowledged by every one. How then can we defend our continued existence, obtained by submission, against the reproach of cowardice and an unworthy love of life? In no other way than by resolving not to live for ourselves, and by acting up to this resolution; by raising up a worthy posterity, and by preserving our own existence solely in order that we may accomplish this object. If we had not this first object of life, what else were there for us to do? Our constitutions will be made for us, the alliances which we are to form, and the direction in which our military resources shall be applied, will be indicated to us, a statute-book will be lent to us, even the administration of justice will sometimes be taken out of our hands; we shall be relieved of all these cares for the next years to come. Education

alone has not been thought of; if we are seeking for an occupation, let us seize this! We may expect that in this occupation we shall be left undisturbed. I hope, (perhaps I deceive myself, but as I have only this hope still to live for, I can not cease to hope,) that I convince some Germans, and that I shall bring them to see that it is education alone which can save us from all the evils by which we are oppressed. I count especially on this, as a favorable circumstance, that our need will have rendered us more disposed to attentive observation and serious reflection than we were in the day of our prosperity. Foreign lands have other consolations and other remedies; it is not to be expected that they would pay any attention, or give any credit to this idea, should it ever reach them; I will much rather hope that it will be a rich source of amusement to the readers of their journals, if they ever learn that any one promises himself so great things from education.

It may easily be imagined how deep an impression such words made on me, as I read them in Paris, the imperial seat of tyranny, at a time when I was in a state of profound melancholy, caused by the ignominious slavery of my poor beloved country. There also I was absorbed in the perusal of Pestalozzi's work, 'How Gertrude teaches her children.' The passages of deep pathos in the book took powerful hold of my mind, the new and great ideas excited strong hopes in me; at that time I was carried away on the wings of those hopes over Pestalozzi's errors and failures, and I had not the experience which would have enabled me to detect these easily, and to examine them critically.

About the same time I read the 'Report to the Parents on the state of the Pestalozzian Institution;' it removed every doubt in my mind as to the possibility of seeing my boldest hopes realized. Hereupon, I immediately resolved to go to Yverden, which appeared to me a green oasis, full of fresh and living springs, in the midst of the great desert of my native land, on which rested the curse of Napoleon."

At an age when most men, of his acknowledged ability and scholarship, are only thinking of securing a civil employment, which shall bring both riches and honor, Von Raumer hastened to Pestalozzi at Yverden, where he devoted the months from October 1809, to May 1810, to a thorough study of the principles and methods of elementary instruction, as illustrated by the great Swiss educator.

After returning from Switzerland, he was first appointed, in 1810, to an office in the higher grades of the mining department; and in the autumn of 1811, to the professorship of mineralogy in the University of Breslau, and at the same time, to the office of Mining Counselor in the higher mining board there. In the latter year he married the daughter of Chapel-master Reichardt, with whom, in 1861, he celebrated the anniversary of his golden wedding. In 1819, he was transferred to Halle, and in 1823, taking a dismissal from the Prussian public service, he went to Nuremberg, where he was at the head of an educational institution until the year 1827. In that year he became professor of Natural History and Mineralogy, at the University of Erlangen.

In addition to his regular duties, both at Halle, and at Erlangen, Prof. Raumer delivered courses of lectures on Pedagogy, which he afterwards published in four parts, the first of which, was issued 1843.

"This work has grown out of a series of lectures, upon the history of education.

which I delivered, in 1822, at Halle, and several years later, from 1838 to 1842, at Erlangen.

The reader may inquire, how it was that my attention was directed to this subject? If he should, it will perhaps be sufficient to say in reply, that during the thirty-one years of my professorship, I have not merely interested myself in the *science* to which my time was devoted, but also in its corresponding *art*, and this the more, because much of the instruction which I gave was additional to my regular lectures, and imparted in the way of dialogue. This method stimulated my own thoughts too, to that degree, that I was induced as early as the year 1819 to publish many didactical essays, and subsequently, a manual for instruction in Natural History. But were I called upon for a more particular explanation, it would be necessary for me to relate the many experiences of my somewhat eventful life, both from my passive years of training and instruction, and from my active years of educating and instructing others. This, however, is a theme, to which I can not do justice within the brief compass of a preface; hereafter an opportunity shall offer, I may treat it in another place.

And yet after all, the book itself must bear testimony to the fitness of the author for his task. Of what avail is it to me, to say that I have been taught by Meierotto, Buttman, Frederick Augustus, Wolf, Steffens, Werner, Pestalozzi, and other distinguished men? When I have said all this, have I done any more than to show that the author of this book has had the very best opportunity to learn what is just and true?

My book begins with the revival of classical learning. And Germany I gave had preëminently in view. Why, by way of introduction, I have given a brief history of the growth of learning in Italy from Dante to the age of Leo X., the reader will ascertain from the book itself. He will be convinced, if not at the outset, yet as he reads further, that this introduction is absolutely necessary to a correct understanding of German didactics.

A history of didactics must present the various standards of mental culture, which a nation proposes to itself during its successive eras of intellectual development, and then the modes of instruction which are adopted in each era, in order to realize its peculiar standard in the rising generation. In distinguished men that standard of culture manifests itself to us in person, so to speak, and hence they exert a controlling influence upon didactics, though they may not themselves be teachers. 'A lofty example stirs up a spirit of emulation, and discloses deeper principles to guide the judgment.'

But their action upon the intellectual culture of their countrymen has a redoubled power, when at the same time they labor directly at the work of teaching, as both Luther and Melanethon did for years. This consideration has induced me to select my characters for this history among distinguished teachers, those who were held in the highest respect by their contemporaries, and whose example was a pattern for multitudes. Such an one was John Sturm at Strasburg, a rector, who with steady gaze pursued a definite educational aim, organizing his gymnasium with the utmost skill and discernment, and carrying out what he had conceived to be the true method, with the most scrupulous care. An accurate sketch of the educational efficiency of this pattern rector, based upon original authorities, in my opinion conveys far more insight and instruction than I could hope to afford, were I to entangle myself amid fragmentary sketches of numberless ordinary schools, framed upon Sturm's plan.

Thus much in explanation of the fact that this history has taken the form of a series of biographies. And in view of the surprising differences among the characters treated of, it can not appear singular, if my sketches should be widely different in their form.

There was one thought, which I will own occasioned me abundant perplexity during my labors. If I was about to describe a man, who, I had reason to suppose, was more or less unknown to most of my readers, I went about the task with a light heart, and depicted his life and labors in their full proportions, communicating every thing which could, by any possibility, render his image clearer and more lifelike to the reader. But how different the case, when the educational efficiency of Luther is to be set forth. 'My readers,' I say to myself, 'have long been acquainted with the man, and they will not thank me for the information that he was born at Eisleben, on the 10th of November, 1483; as if they had not known this from their youth up.' I am, therefore, compelled

to omit all such particulars, and to confine myself exclusively to his educational efficiency. And yet this did not stand alone; but was for the most part united, with its entire influence, both to the church and the state. As with Luther, so also was it with Melancthon and others. Considerate readers will, hence, pardon me, I hope, when, in cases of this kind, they are not fully satisfied with my sketches.

In another respect, too, I ought perhaps to solicit pardon, though I am reluctant to do so. We demand of historians an objective portraiture, especially such as shall reveal none of the personal sympathies or antipathies of the writer. Now it is proper to insist upon that truth and justice which will recognize the good qualities of an enemy, and acknowledge the faults of a friend. But free from likes and dislikes I neither am, nor do I desire to be, but, according to the dictates of my conscience and the best of my knowledge, I will signify my abhorrence of evil and my delight in good, nor will I ever put bitter for sweet or sweet for bitter. It may be, too, that a strict objectivity requires the historian never to come forward himself upon the stage, and never to express his own opinion in respect to the facts which he is called upon to chronicle. Herein he is not allowed so much freedom of action as the dramatist, who, by means either of the prologue and epilogue, or of the chorus between each of the acts, comes forward and converses with the public upon the merits of his play. Such an objectivity, likewise, I can not boast myself of; for I record my own sentiments freely where I deem it necessary. And surely will not the objectivity of history gain more by an unrestricted personal interview with the historian, at proper intervals, than by compelling him to a perpetual masquerade behind the facts and the narrative? Certainly it will, for in that case the reader discovers the character of the writer in his opinions, and knows what he himself is to expect from the narration. He likewise observes with the more readiness, where the writer, though conscientiously aiming at truth and impartiality, nevertheless betrays symptoms of human infirmity and party zeal. From a church historian, for instance, who should express his puritanical views without reserve, no intelligent reader would expect an impartial estimate of the middle ages.

Another motive also urges me to a free expression of my opinions, and that is, in order thereby to allure my readers to that close familiarity with many important educational subjects which the bare recital of facts seldom creates. If, in this history, the ideal and the methods of such different teachers are depicted, these diverse views can not but have the effect, especially those practically engaged in training the young, to induce a comparison of their own aims and procedure therewith. Sentiments that harmonize with our own give us joy, and inspire us with the pleasant consciousness that our course is the right one; differing or opposing opinions lead us to scrutinize our own course, even as were it another's; and from such scrutiny there results either perseverance based upon deeper conviction, or a change of course. I am happy to acknowledge, that this practical aim has been my chief motive in undertaking the present work, and has been uppermost in my thoughts during its prosecution.

As far as possible, I have depended on contemporaneous sources, and in part from exceedingly rare works, and such, as, for aught that I know to the contrary, in the present age, have fallen into almost total oblivion. And, for this reason, I was the more influenced to render a service to the reader, by bringing widely to his view the men and the manners of earlier centuries, through the medium of contemporaneous and characteristic quotations."

We append the Contents of the three volumes of Raumer's great work, from the edition of 1847, and also the preface and contents of the fourth volume, which appeared in 1854. Since the publication of the fourth volume, a new edition of the entire work has been issued in four large octavo volumes, for a copy of which, we are under obligations to the author. In the third volume there are numerous additional paragraphs, and several important chapters, viz., a section of ten pages on "the Church and School," a chapter, (III) on "Schools of Science and Art," another, (IV) of nearly ninety pages on the "Education of Girls," and an essay on "Instruction in German," of eighty pages, by his son, Prof. Rudolph von Raumer.

GESCHICHTE DER PEDAGOGIK VOM WIEDERAUFBLÜHEN KLASSISCHER STUDIEN BIS ZU UNSERER ZEIT. [*History of Pedagogics, or of the Science and Art of Education, from the revival of classical studies down to our time.*] By Karl von Raumer. 3 vols. Stuttgart, 2d edition, 1847.

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Appendix.—I. Ruthardt's new *Loci Memoriales*. II. Teachers of mineralogy III. Use of counters in the elementary instruction in arithmetic. IV. Explanation of the common abbreviated counting with cyphers.

The entire Contents of this work, including the fourth volume, and the additions referred to on the preceding page, have been translated expressly for, and published in the "*American Journal of Education*."

CONTRIBUTIONS TO THE HISTORY OF PEDAGOGY.

[Translated for this Journal, from the German of Karl von Raumer.]

PROF. RAUMER introduces the third volume of his "*History of Pedagogy*" with the following remarks:—

In this third volume, I am far from wishing to put forth a system of pedagogy. I have been deeply impressed by some strong expressions of the great Bacon, against systematizers.

"The wonder of men at learning and at the arts," he says, "has been made to increase by the cunning and technical arts of those who, having studied the sciences, gave out that they were perfect in them and had brought them to completion. For when men turn their attention to systems and subdivisions, these systems seem to them to include every thing, and to contain within themselves all matter which relates to the subject. And though such system may be ill filled out, or as it were empty, still they impose upon the common understanding by the form and fashion of a perfect science. The first and oldest investigators of truth, however, with more faithfulness and good fortune, bestowed the knowledge which they had received from the observation of things, and wished to preserve for use, in the form of aphorisms, or short separate thoughts, not knit together in any method; and thus they did not feign and pretend to set forth the whole of their art."

So far Bacon. As I abide by his doctrine, and therefore do not pretend to set forth the whole extent of my subject, the reader will find, instead of a system of pedagogy, mostly descriptions of single pedagogical subjects. These, moreover, are not treated at all after any one plan. Sometimes the presentation is of a historical kind; sometimes I have considered rather the present time. Sometimes the theoretical side is most prominent, and sometimes the practical. In this I was influenced by the various characters of my subjects, by my greater or less knowledge of them, and by the mode in which they had appeared to me in learning and teaching; in short, by my own experience of them. If I had undertaken to discuss all these subjects in one and the same way, the work would have been done in a colorless, monotonous manner; and such a method would evidently have been very closely connected with the evolution of a system.

The reader here receives the first division of the third part. In the second division will be treated instruction in the subjects omitted in the first. As a conclusion of the whole work, I have thought of giving a comprehensive view of the present condition of pedagogy; and am even desirous of endeavoring to portray truly and impartially the most eminent of living teachers.

I know well how difficult is this task, and how much self-denial it implies. Perhaps an author who has entered his sixty-fifth year is better fitted for such a task than younger men, who yet are "vigorous in love and hate." It is more easy for one near the end of his life to speak of the present as if it already lay far behind him, as it soon will.

Erlangen, June 1st, 1847.

KARL VON RAUMER.

We shall continue our translations from this volume until we have completed them, by the reproduction of the whole of Prof. Raumer's great work in the English language.

INTRODUCTION.

THE EARLIEST CHILDHOOD.

"Speak, that I may see thee," said a Greek.

Accordingly, the child being unable to speak, comes into the world, as it were, invisible; and long preserves the deepest incognito. All the care of the parents is bestowed upon the little helpless body; physical education is the main object. This was the case with the Greeks and Romans. The Spartans used a rude method of alleviating the task, by passing a sentence upon the new-born child, of life if its body seemed healthy, of death if not. Rousseau's doctrine was little better. "I could not trouble myself," he says, "about a sickly child, if it were to live to be eighty years old. I can not be concerned about any pupil who is a burden to himself and to those who have the care of him."

To give all the honor to the body is a coarse and brutal estimate of man. Such barbarians would not have thought worth preserving the life of Kepler, the great German astronomer, who came into the world a sickly seven months' child.

Rousseau, in his teachings as to physical education, has kept in view, as his ideal, a completely healthy North American savage; a rule which will not serve for us domesticated Europeans. But one extreme introduces another; there prevailed, for great part of the eighteenth century, especially in France, a frivolous, unnatural method even in the education of small children. We have already become acquainted with these unnatural ways: the frizzle-wigged boys, with laced coats, and swords at their sides; and the little frizzle-headed girls, with their great hoop-petticoats. By their contests against these evils, Rousseau in France and his followers in Germany, as advocates of natural principles, did great service to the cause of physical education. The extreme views which they held, as happens at every reaction, disappeared with time, and the real good remained.

To refer once more to a few points. Rousseau admonished mothers of their maternal duties, in striking terms. It is not nurses, but they themselves, who are destined to bring up their children. If they would have their children love them, they must wait upon them with efficient maternal love.* He zealously combated the abominable custom of swaddling children, as a child so swathed up can not exercise any of its limbs; and recommended cool bathing, fresh air, simple diet, and a costume permitting the freest exercise of the body.

However correct these views are in the main, it would not, as has already been said, be advisable to follow Rousseau absolutely. He is

* Gellius had already (12, 1,) laid down the same principles; as had Ernesti after him.

no physician—he even hates physicians; proceeds recklessly, and often blindly, after his Huron ideal; and is determined, either by bending or breaking, to harden the French children.*

The little work of the able physician, Hufeland, on the contrary, his "*Good Advice to Mothers, on the Physical Education of their Children,*" is highly to be recommended. Intelligent mothers may safely follow his advice, particularly as to diet, where so many go astray. According to Hufeland, coffee and tea are altogether unnecessary to children; he prohibits the usual overwhelming of children in thick, soft feather-beds, and their sleeping in heated, unventilated rooms; recommending, instead, the utmost cleanliness, and especially what he calls air and water-baths.

Children do not give information; we do not see into the quiet and hidden secrets of their existence. In instruction, the most helpless scholar will receive the most assistance from the intelligent teacher. But we often have to stand in doubt and irresolution by the cradle, and to recommend our child to the care of its angel in heaven. I have known farmers' wives, who permitted their children to play in the street, without any care. And if any one drew their attention to the danger, they would say, "My child is not three years old yet—the angels take care of those." Their idea, probably, was that after the third year, when the child is more active and intelligent, it can take care of itself.

But, although the inner life of the child is a secret to us, we may be confident that its mind is no vacant space, but a place consecrated by baptism, in which are slumbering the seeds of divine gifts, which shall develop with advancing years. But let it not be imagined that the mother can do nothing for the child in the first years of its life, except in the mere matter of physical care. Is the heartfelt love which inspires this care nothing? Who knows whether it is not this love which implants the first seeds of the answering love in the child's heart? Shall, then, the dependence of little children upon their mother be only animal and selfish? Who can tell how much influence the beautiful cradle-songs of the mother have upon the child? And, above all, we believe that the intercession of the parents brings a blessing.

With the acquisition of speech, begins a new course of life for the child; and it comes out of its mysterious isolation. Learning to speak is connected with learning to walk; † and these two compre-

* For instance, Rousseau rejects Locke's admonition never to permit a child, when heated, to lie down on damp ground, or to drink cold drink.

† First, to creep. This strengthens both arms and legs. A child who learns to creep well will, as he begins to go upright, and often falls down in trying, usually come down on his hands and arms, which he has learned to use. Children who have not crept fall more awk-

hend the first elementary instruction of a child. I anticipate the question, what reason is there why children should be born dumb, and require almost a year before they can speak a word? It is because they must needs awake gradually from their deep, nine months' embryonic slumber. Light awakens the eyes, sound the ears, and in this way the senses become active, and of themselves receive impressions from the world around. This is the beginning of living, and of experience. It is when the child's impressions mature into ideas that there arises within him the need of expressing himself; words are the ripe fruit of childish experience.* It is provided that the attempt to speak shall not be made too soon, by the original influence of the organ of speech. If this is overcome, there is in most cases an end of a judicious course of learning language. Such children misuse the treasure of language, which others have laid up; and, as if ornamenting themselves with the feathers of others, they allow their thinking and speaking to be done for them.

Learning to speak is, in part, a mental process, and partly bodily. The latter portion of it is concerned with the training of the originally awkward organs of speech. Children themselves take pleasure in this practice, and very often say and repeat words and phrases for the sake of speaking. Their ears learn gradually to apprehend more accurately and fully the words pronounced before them, and thus they become able to pronounce them better.†

The mental labor of the child in learning language consists in the correct comprehension and experience of the thing to be expressed, and in the memory of the right word for it. Without any stiff, schoolmaster-like, incessant pronouncing over before him, the child observes for himself the names of things by repeatedly seeing the same things always called by the same names; cherries, for instance, always called cherries. In the same manner, he learns from grown persons words and phrases to express his inward impulses; his wishes, desires, pain, pleasure, &c.‡

The ideal to be pursued in the child's first learning to speak, is the same which should remain such all his life as a man; namely, truth; adequacy; the fullest correspondence of the thing to be expressed with that which is expressed; of the inner seeing, feeling, thinking, with the verbal language. To such a correspondence and truth we

wardly and dangerously. And still how hasty are parents in hurrying their children onward, and forcing them to walk without having crept!

* J. M. Gesner says: "The Greeks have a most valuable word, *logos*, with a broad significance. For it may mean either *reason* or *speech*. When the word has ripened within, then it can be spoken out. The child does not learn to speak like a parrot; it is no organized echo to return what is spoken to it. At least, it ought never to be taught, by the incessant chattering of nurses, &c., parrot-like habits of imitating such chattering."

† See the chapter on the training of the senses. ‡ See Augustin's Confessions, Lib. I., 6, 8

should educate the child; it is this quality which characterizes the greatest poets, orators, and philosophers.

The mother usually gives the first elementary instruction in language, and may commonly be expected, proceeding in a natural manner, and with sure instinctive tact, to do what is right; while the subsequent instruction in language, by teachers who boast of using the best methods, is very often extremely fantastic, and well calculated to defile, or entirely to dry up, the deep and living sources of human language. Let him who desires to instruct mothers in this thing be cautious; let Pestalozzi's "*Book for Mothers*" be a warning example to him. Instead of intelligent mothers, eagerly, freely, and delightedly teaching their beloved children to talk, as opportunity serves, we shall have, by means of these methodologists, stiff, wooden school-mistresses, giving methodical lessons in language to children one year old, every day at a fixed time.*

It might almost be believed that unrhythmic language is not for children, but song; which passes so magically into their hearts, and thence into their memories.

Scarcely can children speak, when many parents are at once uneasy to have them learn all sorts of things. A confused idea of education prevails, like a dusky phantom, in our day; to which many parents blindly submit, without examining whether his authority is legitimate. I shall hereafter speak more fully of this tyranny, which must bear the blame when parents induce or force their children to learn to read and write at the earliest possible moment, especially if it is too early. † "Good things take time," says the proverb. The child grows in mind as in body; unpreoccupied and intelligent attention by the teacher is necessary, in order to observe whether he is ready for any particular subject. How few exercise this observation! The farmer might put them to shame, who watches closely to see whether his

* See "*History of Pedagogy*," Vol. II., p. 411, 2d ed. I shall say more on this point when speaking of the so-called intuitional instruction.

† This haste is doubly material in a time when a celebrated pedagogue ventures to praise his widely-known system of instruction in reading, as follows:—"It makes the child conscious of his actions, by observing how he forms one or another letter by his organs of speech:"—it is designed "to direct the children's attention to their actions, by this regulated practice." This beginning is continued by instruction in "logical and æsthetical reading:" in which the reason is every where given "why the reading is to be so and not otherwise," which is called "reading with a distinct consciousness." This method is carried to such an unnatural extent, that any plain woman, who has been made to believe that she ought to teach her children to read in this way, and no other, had better quite give up instructing them at all.

I shall speak in another place of the wretched "thinking method" of teaching language, which is so utterly repugnant to the youthful nature, which dries up the very marrow, destroys the feeling for poetry, and misunderstands and despises all childlike simplicity; deifying, in its stead, a so-called "consciousness," commonly an empty form. Let us hope that the good natural character of the German youth, so hard to extirpate, can maintain a strong opposition to this unreasonable training in self-consideration and self-management, until their teachers' eyes shall be opened to their exceedingly unnatural theory and proceeding.

colt is strong enough to carry saddle and bridle. If he errs, and harnesses him in too early, the beast is worked beyond his strength; and I have with grief known more than one boy broken down by similar untimely and excessive labor. The farmer knows but one mode of bringing his poor beast to his strength again; he looses him, and turns him into the green meadows. I know of no better mode of restoring a boy, so broken down, than a similar vacation in the country.

The child therefore must not too soon proceed from hearing to reading, from speaking to writing. He should at first be kept within the region of the living voice (*vox viva*.) In his mother he should love and respect his only source of tales, songs, &c.; she will speak to him in an appropriate style. Even the Bible must, at first, not be read by the child, but must be narrated to him in a free style. Telling and listening form a beautiful bond of affection between mother and child; while, when he begins to learn to read, he often turns his back to his mother, sets himself down in a corner and devours books.

While I must oppose this intellectual hothouse forcing of children, there is another matter which many parents, led astray by Rousseau and his sect, put off far too long. Our pious forefathers used to teach their youngest children to pray, and to know edifying Bible-texts and hymns. A child's heart finds, in prayer, the life of its life; and the deep impression never fades, and consecrates its whole existence, even until death. Yet these illuminati arose, inquiring, What can a child think about the names of God and Christ?—and children's prayers were in many families discontinued.* Would to God that grown persons, with all their so-much-praised "consciousness," were as capable of deep and heartfelt prayer, and of trust in their heavenly father, as children whom a pious mother has taught to pray! But unless grown persons become like children, they can not so pray; and men would destroy even this strength of feeble children!

I shall hereafter discuss the beginnings of various branches of instruction.

INFANT SCHOOLS.

The farmers' wives in a Silesian village, in the year 1817, at the suggestion of an excellent landlord, contrived an agreement that, during harvest-time, when they were busy in the fields, one and another should take turns in remaining in the village and taking care of all the children. The plan was certainly very praiseworthy and intelligent, and to be recommended in all similar cases; *e. g.*, when a number of mothers are occupied in washing or factory labor—in short, wherever there is the same occasion.

* See Rousseau and Philanthropinum, in "*History of Education*," Vol. II., pp. 258, 301.

Though there are many infant schools which did not originate in this necessity, still the idea is closely related to them.

The bond of affection which connects the members of a family is, at the present time, continually slackening. Father, mother, children, each have their own views, and follow their own paths. Every thing which aids in this unfortunate dissolution and scattering of families should be carefully avoided. Pestalozzi felt this deeply. To him the family sitting-room was so holy that he even opposed sending children to school at an early period, and would have the first elementary instruction confided to the mother. It would seem as if the infant schools contemplated the opposite of this, and were school-rooms instead of home-rooms.

Attendance at the infant school by children, whose mothers remain at home and are not obliged to labor elsewhere for their support, should ordinarily not be allowed; certainly not encouraged. I say this of children under six years of age—of those not arrived at school age, and whose mothers would therefore not be expected to instruct them, but only to give them maternal care and protection. To whom else, in God's name, than mothers should that duty be intrusted; and who would venture to perform it, uncalled?

Such are my views; and I hope that they will, in general, be accepted. Still I must confess with pain that, at the present day, the exceptions to the rule increase. Our day is a day of *sucedanea*. A *sucedaneum*, accordingly, must be had for a large class of mothers; especially for unnatural mothers. But it may be objected, where is the use of saying that mothers ought to be so and so, and of turning away from what is actually practicable? When so many mothers fulfill their maternal duties so ill that they rather injure their children in all ways, shall not every one, in whom there remains one spark of Christian sympathy, lay hold and save all that can be saved? Shall we not at least bring these poor children, for a few hours daily, into a better and purer physical and intellectual atmosphere, so as to give them more strength to resist a corrupted atmosphere for the rest of the time? Will not such a mode of proceeding perhaps afford the means of acting upon the mothers themselves, and of bringing them into a better way?

Who could oppose to such applications of the principles of love a mere stiff adherence to what ought to be? Only so far would we adhere strictly to principles and rules, especially the fundamental laws of divine and human order, as to avoid the danger of becoming so estranged from them and accustomed to our substitutes as at last to think these absolutely right. We would rather use all possible means to aid in re-establishing those ancient and obsolete laws, and a pious and honorable family life.

There is a second thought, which I can not avoid expressing; it relates to the mode in which the unhappy condition of these children is to be remedied. The problem is one of the most difficult of the art of education; and but few men have the gifts which enable them to pass many hours a day with a crowd of little children in a natural, childlike manner, without affected childishness, and to do the right thing every moment, with assured tact, and without uncertain and uneasy meddling.

But what are the consequences of failure in this direction? I may be excused if, at the risk of going too far, I present a sketch of the errors which in such a case are probable, and which have sometimes actually happened.

Children not yet of school age are collected together in a school-room. If they were taken into an inclosed meadow in the woods, where they could play at making sand-houses, their instructor would have scarcely any thing to do except to keep an eye upon their lively, unwearied, and mostly innocent fancies; indeed, he would scarcely have any thing at all to do.

What a task is it, on the other hand, to preserve from weariness, to oversee and govern a crowd of children shut up together in a room! A mother can often scarcely get along with only four or five children; and has to require the help of the older ones.

A method has unfortunately been invented of meeting the exigency; but how? The poor children, who would otherwise have enjoyed a vacation up to their sixth year, and thus would have suffered no weariness, have to sit still on benches and at desks, and study. Although it may be said that this is only an introduction to the school, it is nevertheless itself a school. When a good mother at home repeats or sings a stanza to her children until they can say it or sing it after her, this is harmless private teaching and learning. But how different is the proceedings in such schools where a multitude of little children learn, repeat, and sing by rote and simultaneously!

Many teachers suppose that they must drill the children in order to bring them forward. Invisible, quiet development is indifferent to them. And even if we confess that the same indifference apparently prevails here and there in the public which supports such schools, still they will see the fruits of their support of them, even if these are apples of Sodom—rosy outside, but within dead ashes. Woe to those teachers who only endeavor to make a show of these little ones, and in them of their own skill; who aim to make them, at public examinations, or even before any visitors, sing, declaim, and even pray with theatrical and affected manner, at their age so unnatural and repulsive! Thus is instilled into these lamentable little creatures

a poison which remains with them all their lives; an utterly unfeeling and hateful vanity. Thus are produced children who take no pleasure in verses and stories, but only in the praises which they can obtain by telling them with acquired and drilled naturalness; who are rolling their eyes about even while they are praying before the company; while the last trace is gone from them of that devotion which a pious child feels when his pious mother hears him repeat his evening prayer, before he goes to sleep in his little chamber.

It would be better than this even to have the children grow up in the streets and squares, in sight of the whole city.

I ask excuse for the foregoing. It may be considered as a caricature, drawn by way of warning. Yet it is certain that its features were not composed from imagination.

It is, I repeat, a difficult task to conduct an infant school. Aside from the numerous external difficulties, the place requires men who, besides great christian humility, and heartfelt love for children, do what is right and true in all simplicity, hate pretense, and without being led astray by experiments and controversies will walk and act as quietly and unobtrusively as possible, conscientiously, and as if in the sight of God.

The Lord has already sent many pious laborers, who are working unweariedly in the field. He will carry forward the work of his hands. He has pronounced heavy curses against those who offend children; and will give blessings equally great to those who save their souls from death. The mistakes, errors, and even faults, which have appeared in various places, should not betray us into looking only at the dark side of these institutions; although we would not shut our eyes to their faults; since we desire that they should be recognized and cured, and that this important work may from day to day become purer and more pleasing to God.

SCHOOL AND HOME.

The child attains the school age in his sixth or seventh year; at which time new relations arise, namely, those between the child and the parent on one side, and the teacher on the other. Hitherto his parents' house has been the central point of the child's existence; now it is the school. Education is the object at home, and instruction at school.

In simple communities, the father can be the teacher of his boys; especially when the latter are brought up in and for the father's calling. But if the son does not follow that calling, or if the extent of the matters to be learned is larger, or if those matters have little or nothing in common with the occupation of the father, the teacher

becomes a necessity. Thus there comes to exist a special class of teachers, as by the progress of division of labor the various other professions and occupations have been originated.

Of the teacher is required a definite amount of knowledge and skill, a thorough acquaintance with certain sciences and arts, and particularly a mastery of the art of teaching—the art of awakening in the young the love of these arts and sciences, and of communicating them to them.

The relations between the parents and the teacher are most important; as a constant co-operation is necessary. The father should ask the teacher, *How does my son go on at school?* and the teacher again should ask the father, *How does he conduct at home?* Thus will be established the most healthy species of influence; which will bring the boys, particularly the insubordinate ones and the real good-for-nothings, between two fires.

Parents and teachers must treat each other with respect, especially before the children. In no case should either of them speak criticisingly, contemptuously, or inimically of the other, before them. Great errors are committed in this particular by injudicious parents, who treat the teacher like a hired servant, who is bound to govern himself by their views—usually narrow—and prejudices. They find fault in the presence of the children with the instruction or the strict discipline of the teacher, and even say that the tuition-fee is altogether too large. Will the children obey, respect, and love persons of whom, and even to whom, such things are said?

My own parents impressed upon their children unconditional love and respect for their teacher. But my father once violated his own rule in an instance apparently quite unimportant. He found fault in my presence with the mode in which my teacher made pens. This trifling blame made me for the first time entertain doubts of my teacher's perfection.

ALUMNEA.—PRIVATE INSTITUTIONS.

Elementary instruction is provided for, in every village of moderate size, by a common school. Small towns have also schools in which the rudiments of Latin are taught; but only the large towns have gymnasia, which afford a complete preparation for the university. It is therefore only in the large towns that the relation which we have sketched between school and house can continue while the boys are receiving the higher grade of school instruction. Many fathers of families, as for instance landed proprietors and clergymen, live in the country, or at small villages; how are such to secure for their children, if destined to a course of learned study, the higher gymnasium instruction? To secure it, I say, because cases are so unusual where

such a father himself affords the whole course of school instruction, from the elementary up to entrance into the university, as scarcely to need notice. Where they do not do this, however, they must either send away their son to the place where the gymnasium is established, or must place him at a private establishment, or must employ a tutor at home.

In the former of these cases, it has always been a great evil that the father usually finds it difficult to obtain a good place of abode for his son, and to find a man who will receive him into his family as if one of his own children, and exercise a like conscientious care over his education. It is besides also beyond the parents' means to pay the expenses of their children's board.

To obviate this difficulty, there have been established, at many gymnasia, *Alumnea*, in which children from other places live together under supervision; and the establishment of the Saxon and Wirtemberg cloister-schools was for the same purpose. The mode of life in these Alumnea was very different from the previous life of the boys at home; indeed, there was no distinct aim to supply the place of family life. There was wanting, above all, a housewife—a house-mother. The liberty of the Alumnists was much circumscribed of necessity, on account of their number. In the Alumneum of the Joachimsthal Gymnasium, at Berlin, where the author was an Alumnus from 1798 to 1801, no pupil might leave the house for more than a quarter of an hour without a written permission, signed by the inspector, which he presented to the door-keeper. We were awakened at a fixed time, and the lights were to be extinguished at a fixed time. Every thing had the character of the discipline of a strict father; a character no longer in agreement with our freedom-loving age. I do not wish to be understood that there was no opposition among the Alumnists to this strictness, nor that there were not manifold evasions of the legal regulations.

The instruction, like the discipline, was mostly on the ancient plan. If any thing new was introduced at any time, with cautious selection, it was done as quietly as possible, so that we scholars scarcely observed it; there was not the remotest, slightest approach to innovation or charlatany.

The private institutions for education were precisely the opposite of the Alumnea. They have mostly risen up in Germany and Switzerland, within the last seventy years, since the establishment of the Dessau Philanthropinum. This institution sought new objects, opposite in nature to the old, and thus came in conflict with the schools already existing, which adhered to the old plan. After this time, any one who desired to promote the new system was obliged to seek

to do it either at his own risk, by establishing a private institution, or by joining himself to one already existing under it; and parents of the same views placed their children at such an institute, and supported it by their payments for tuition.

It is not to be denied that the old-fashioned schools were conservative in excess, and even to obstinacy; and that they often rejected any thing new, even when it was good. Many private institutions made a beneficial opposition to this excessive tenacity. They experimented with devotion to the cause of progress, and the results were of service to the old-fashioned schools, which imitated their success and avoided their failures. Many private institutions might be named, which in this manner exercised a most healthful influence. Others of them are enterprises which are entitled to gratitude, because they took the place of public schools which had disappeared, and disappeared as soon as they resumed their places. Many of them were called cities of refuge for orphan children, and others whose own faults or other means had brought into a necessitous condition. Such is the bright side of the private institutions; let us now look at their dark side.

If the old-fashioned schools were too conservative, the private institutions showed themselves to be, on the other hand, too progressive; inclined to innovation. This was clearly exemplified in the case of the Philanthropinum; which despised the wisdom of previous centuries, and proposed to fashion all things anew. They pulled up wheat and tares together. This fault, it is true, many modest and judicious principals endeavored to shun. But such teachers, by trying to satisfy the excessive requirements both of the old and new periods, only overworked themselves and their pupils, in their endeavor to accomplish impossibilities, without being thanked for it. It is evident how much such experimenting must have injured the pupils intrusted to them.

The private institutions were designed to identify the school and the house. The school assimilated itself to the family life, and brought the latter under its roof; the principal, who received the boarders into his family, representing both the teacher and the father of the family. Thus wielding the double scepter of school and home, it was thought that he could not fail, as every thing was under his hand, to conduct every thing without any divisions, and in unity of spirit.

But this was an error. He represented the father of a family, but was not it; and, in like manner, he only represented the rector of the school, without really being such.

It is easy to explain why he was not actually the father of such a

family. The very number of the children rendered a domestic and affectionate family life impossible, even though the director should have the services of the most conscientious, industrious, and kind-hearted of housekeepers. Nor can the director, even with the utmost good will, embrace each child separately in his affections; he must manage them as a body, and what father manages his children as a body?

And though he were able to embrace them all in his heart, still that is not the heart of a father; even granting him the utmost good will, it is only a substitute for the love which God plants in the heart of a father. And the children, collected from the most various families, are doubly destitute of childish love for the director. They feel themselves as it were in exile—banished from their parents' houses; and they compare their present life with their previous life at home, finding nothing right, and every thing hateful and oppressive. And even if they become gradually accustomed, their liking remains but lukewarm, and it is only seldom that they acquire a real love for the new state of things, and then their previous condition must have been quite bad.

Private schools, moreover, are frequently under the necessity of receiving pupils who do well nowhere; or who are excluded from other schools for deficiency in intellect. And, although parents and guardians ought to describe the children they bring just as they are—as worthless or ignorant if they are so—yet the contrary practice prevails, and they are silent about their faults and conceal them, especially their secret ones; and, after all, they charge the institution with all the ignorance and badness of their children. It is well-advised, therefore, that pupils, at entering, should be examined in the presence of their parents, that the results should be set down in a protocol, and the protocol signed by the parent or guardian.

It is a common delusion that the director of a private school is free; having no authorities to limit him and prescribe laws to him. Instead of school authorities, who may honorably be obeyed, there are many parents and guardians who take upon themselves to prescribe, in all possible matters, to the director what and how he shall teach, how his table shall be managed, &c. Woe to him, if he promises to comply with every thing; if he lacks the necessary judgment and firmness to meet all these requirements in a proper manner.

These assumptions have usually a very vulgar origin; namely, the idea that the instructor depends upon their favor, as if they were his official superiors. If he does not obey them, they threaten to take away

their children.* And they tell them, even in the teacher's presence, to be very industrious, because they cost so much money. Such admonitions naturally make the children think that the teacher is supported by them, and can not exist without them. Is that the position of a father of a family ?

Want of a capital to begin upon, and dependence upon payments for board, has a bad influence upon private teachers. One who desires a permanent situation prefers a place in a public school to one in a private institution. The latter affords no certain support, and he can not think of marrying in reliance upon it. And even if his income is sufficient on one day, what assures him, with his sliding-scale of boarders, that it will be sufficient to-morrow ? The consequence is, that in the private institutions we usually find only young teachers, who have just come from the university. These make experiment of their gift for teaching upon the pupils. As soon as they ascertain that their ability is good, they begin to desire some position elsewhere, which will assure them a certain income. In this only the more incapable teachers are usually disappointed, and thus they remain for years burdens upon the schools ; while the abler ones find situations. Thus there is almost never established, in a private institution, a corps of teachers with the skill of years of practice and experience. But it is not only the desire of a sure maintenance which drives off the teachers ; there is a second reason—the almost intolerable burden of labor. The gymnasium teacher has the time of his evenings to himself, as soon as the regular school-hours are over ; but not so with the teachers in a private school. He must continue his supervision of the boys at table, at play, and even through the night, if he sleeps with them. He has no time to breathe ; and one can scarcely endure such a burden, unless he has a not overscrupulous conscience. The principal is worst tormented of all. Besides instruction and supervision, he has many other duties : correspondence with the parents, the housekeeping management, the general care of the whole institution, &c. And these burdens are doubly oppressive because he is not governing in the strength of an official appointment. And such a man, beset day and night, is expected at the same time to be a cheerful, friendly, loving father to a multitude of strangers' children, and to maintain the tone and atmosphere of a pleasant family life !

He is even expected to do more than this. He is expected to be rector, and to maintain discipline among the mass of children. Thus he has two inconsistent occupations, and this inconsistency—that of

* An honorable and conscientious teacher must meet these vulgar assumptions with the most distinct *sint ut sunt aut non sint*—things must be as they are, or not at all—at the risk of having his school entirely deserted.

family life and school discipline—runs through the whole institution. If the former is the prevailing element, the strict discipline and order, which are so healthful and beneficial to the child, suffer; and if the latter, there is from morning to night a stiff regulation-movement to play, meals, sleep; every thing has the impress of the rules upon it. This is intolerable to intelligent and active boys; and they try to get free air for themselves by constant opposition to the incessant pressure of the stupifying legal code. And this very opposition often causes the teacher to still greater strictness.

Thus there is a vacillation between a corporeal despotism, which would assimilate the school to a barrack, and a so-called family life, which would resolve itself into lawless anarchy.

Having thus displayed the dark side of the private schools, I gladly turn once more to the other.

It should first be observed that it would be very unjust to charge that all parents and guardians of pupils at such schools are such as have been described. At all the institutions which have been known by me, there have always been fathers, mothers, and guardians, who have been sincerely thankful for every thing which has been for the good of their children. And there were also many among the children, who felt and recognized the honest and disinterested exertions of the teacher for them. And even those to whom their life at the institution was not pleasant, often in after years sincerely thanked the teachers for what they had done for them.

Intelligent parents and good children influence the others, and strengthen the teacher in his difficult calling. Such parents are far from entertaining that foolish notion that the teacher, in return for their tuition-fee, is their servant, and must fall in with their wishes in every thing.

If the teachers of a private school are respectable men, free from interested motives, kind and conscientious, and if the parents of the children are liberal-minded, and place full confidence in such teachers, many of the evils which we have described will disappear. The pupils, after the example of their parents, will confide in the teachers, and good feeling will prevail in the school.

TUTORS.

Parents who love their children sincerely find it very hard, at so early an age, and under such circumstances as have been described, to send their children away from them, and to intrust them to an Alumneum or a private institution. They have remaining, in such a case, the alternative of employing a private tutor, who shall educate their children jointly with them, and who shall have entire charge of the department of instruction, and thus supply the place of the

school. This is the business of the tutor in the country; in the city, however, he will usually have charge only of the supervision and education of the boys, who will attend some school, receiving additional private lessons.

To consider more in detail the task of the tutor. And, firstly, as to instruction: the duties of the city tutor are in this respect much the lightest; as he will have only to supervise the boys during their studies at home, and to assist them wherever necessary. In this position it is difficult always to observe a proper medium, so as to avoid—if a somewhat colloquial form of expression may be admitted—making a personified asses' bridge of one's self. If the study of self-taught persons is often an oppressively severe task, that of the scholar, who is always assisted, is too easy. By always depending upon external aid, he loses the right control of his faculties, which alone will bring him to a proper independence.

The country tutor must instruct in all studies; he must be a whole school in himself. He must understand and be able to practice whatever he is to teach; and he must do still more. Even a master of any subject does not thereby become a master in teaching it; many virtuosos might be named, who could not teach their science or art.

It may be said that, as the art of swimming must be learned by swimming, so the art of teaching must be taught by teaching. This is very true; but still, each of these arts has rules and modes of operating, a knowledge of which can be acquired before proceeding to the practice of them, although the right understanding and practical knowledge of them is only to be acquired by actual practice.

Candidates in theology and philology are usually tutors. They have seldom, while at the university, made any special preparation for the place, and do not know what its difficulties are. They frequently imagine that, because they can read and reckon, they can teach both of those studies; and even delude themselves as to the clearness and certainty of their knowledge and ability in them. Experience is necessary before one can know how teaching brings the teacher to the right estimation of his knowledge; that is, how it cures him of an overestimate of it, and humbles him.

Most of what is to be taught, it will be necessary not merely to be practically master of, nor scientifically to understand, but both. The teacher must conjoin clear theoretical knowledge and practical skill. An apparently ready arithmetician undertook, rashly, to teach the rudiments of arithmetic. He soon found out, for the first time, that he was destitute of any true knowledge of the essentials of the four ground rules, especially of division; and thus convinced himself that he could not teach properly without that knowledge.

If the tutor is likely to make such a discovery as this on subjects which he has diligently studied at school and university, the case will be still worse when he undertakes to instruct on subjects which he has studied and practiced only superficially, or not at all. Such are drawing, singing, piano-playing, gymnastics, geography, and natural history; departments of especial importance for a teacher in the country.*

Any person, therefore, who is proposing to become a tutor, should use the opportunities afforded him at the university to ground himself more thoroughly, and increase his readiness in the studies which he pursued at school, and to learn also much more. And even if the theological student has no design of becoming a tutor, he should have a reason for such a course of study, aside from the noble motive of self-cultivation. If he afterward becomes a pastor, he will commonly have the supervision of a country or city school. In this event he must become acquainted with the subjects and the method of school instruction; in order to which, he needs to prepare himself almost in the same manner as for a place as tutor. The fact that this has always been neglected by the great majority of theological students has done much to promote the unhappy division between church and school. Teachers feel it to be unjust that they are under the supervision of clergymen who have made themselves acquainted neither with the theory nor the practice of teaching, while they themselves have labored assiduously for years in preparing themselves for their vocation. I am aware that many teachers protest against subordination to the clergy from quite other and improper motives; but they are right in demanding of the school-inspector an acquaintance with the subjects and methods of school instruction.

But to return to the subject of the tutor. In the country, he must teach, singly, what all the teachers of a school teach together. To make up for this great field of subjects of instruction, he has been encouraged by the consideration that, to compensate for it, he has fewer children, perhaps but one or two, to instruct. But this is a poor comfort. It is true that to instruct a class of seventy or a hundred scholars is a task to which no one ever felt himself competent who was seriously desirous of teaching, in the true sense of the word. But an opposite extreme brings with it an opposite disadvantage to the teacher. This is, that nothing could be more irksome than to sit six or eight hours daily opposite two pupils, and to instruct them without cessation. The case is the same as in gymnastics. What would the teacher of gymnastics do if his class at leaping, for instance, consisted of only one or two? He can not keep these two

*The study of French is especially to be recommended to those who would oppose the excessive valuation of this language; so that it need not be said that they can not judge of it, because they do not understand it.

jumping incessantly; they would very soon be exhausted. But, if he has a class of fifteen, each, after his exercise, rests and looks on at fourteen others before his own turn comes again.

The case is generally similar in mental training. Suppose a class of fifteen are studying the *Æneid*. The scholar who is reciting has to make a much greater mental effort than the rest; but, when he is through, he only listens while the other fourteen recite, until his turn comes round again. And it is precisely this alternation of the productive and receptive mental activity, in speaking and hearing, which is most profitable to the pupil.

It is, therefore, to be recommended to the tutor that, wherever practicable, he should, when the case requires it, have a few pupils joined with his own, who will certainly gain by it. No parents could object to this plan, except such as consider that, if the tutor should instruct their boy only, his whole powers would act on them; but, if he should teach four others, only one-fifth of them.

It is also said that the tutor has an easy time, as long as the children are quite young—having to give them only elementary instruction. This again is poor consolation; for this is the most difficult instruction to give. It is certainly more difficult to communicate the right rudiments, in the right way, of arithmetic, Latin, &c., than to study algebra and read Cicero *De Officiis* with a boy of fifteen, already practiced in them.

Having thus considered the task of the tutor in respect to instruction, let us look at his duties in disciplining.

In instruction he is usually unrestricted, and regulates it as he chooses; but he must administer discipline in conjunction with the parents. And the discipline will be successful only when they labor in harmony with him. If this harmony is wanting, the blame is sometimes due to the tutor, sometimes to the parents, sometimes to both.

Until the first employment of a tutor, the parents are usually the only educators of their children. It often happens that the tutor, at first entering upon his office, lays claim to sole authority. This is as much as to tell the parents to their face, You do not understand this affair; let me transact it alone—and this too from a person who has usually not even made an experiment in education. Before he makes such a demand he should have made proof of his capacity by his effect upon the children; and, if he has done this, he will usually not need to make any demand—the authority will fall to him of itself.

This misunderstanding with tutors just beginning their work is especially probable when the tutor is a Christian, and the parents decidedly worldly. In a situation so full of temptations and troubles as this, it is extraordinarily difficult to do well by the children in every

case, or to carry through, with firmness and mildness, any measure requiring uncommon wisdom. The tutor, in such cases, must be careful not to set up a rigid system, grounded not on God's Word but on his own determination, nor the wearisome, painful, and presumptuous formalities of a false pietism; for the gospel will win no hearts by such measures. A seriousness based on strong faith, which is by no means inconsistent with unconstrained cheerfulness, is not at all repulsive; but the case is very different with that ill-humored frame of mind which is always uneasy, out of temper, and displeased with every thing, and which even by its silence passes sentence of condemnation.

This is one error with which a Christian tutor in a worldly family may fall; the other is gradually to become worldly himself. Especially should he beware of becoming so accustomed to the high style of life in a family of high position that it is a necessity to him, and that afterward he will be utterly miserable in a little village parsonage, always longing for the flesh-pots of Egypt, and for what is called cultivated society. He should, therefore, while employed as tutor, find time to attend upon the sick and the poor, and especially on poor children; in order not to become entirely estranged from the occupations of his future life. If, at the conclusion of his engagement as tutor, his employer should offer to present him the place of clergyman of his village, he should be careful lest he play the part of a mere chaplain and guest of his patron, and neglect the congregation intrusted to his charge.

A Protestant tutor can not easily exert a profound religious influence upon Catholic children. He can not accommodate himself to Catholicism; and, if he does not do this, but gives Protestant religious instruction without regard to consequences, this is in fact nothing but a proselytism which is inconsistent with honesty. The same is true of a Catholic tutor in a Protestant family.

Thus much of the duties of a tutor: I shall pass rapidly over those of the parents. I discuss the points under this head in my chapters on early childhood, religious instruction, relations of parents to public and private teachers, and of training generally. To the remarks offered in those places I will add a few words on the relations of the parents to the tutor.

They must, firstly, be cautious in selecting; but, having selected, according to the best of their conscience and knowledge, they must then put confidence in the employed, and not cramp and discourage him by captious misunderstandings. In general, the tutor will command more and more confidence as he approves himself; and it is a matter of course that he has one or another fault or weak side. But if his fault is not one that entirely unfits him for his office, it must be

borne with patiently ; and the patience of the tutor will, in like manner, be exercised by the parents. Those parents fare worst who require a perfect tutor ; and who try one candidate after another, dismissing them for slight reasons. Such a constant change has a most unfavorable effect on the children.

Parents who employ tutors belong commonly to the educated classes. It ought, therefore, to be a thing of course that they respect the men to whom they intrust the children whom they love, and that they show this respect every where, especially before his pupils. But, unhappily, this is not always the case. Who does not know how often it is the case that the pride of wealth or birth looks down as if from a higher sphere upon the tutor, and considers and treats him little better than a servant ? And the children are expected to respect a person thus treated ! and a man is to educate them to whom, after the example of their parents, they consider themselves far superior, both in wealth and birth !

Feasting, balls, theaters, and play are the usual diversions of the higher classes. If an intelligent tutor remonstrates plainly against the participation of the children in such dissipations, the parents ought to listen to him, and not to require that both the children and he himself should take part in them.

Thus we have discussed the various difficulties which may arise between the tutor and the parents of his pupils—difficulties, unhappily, only too common. We may now, with propriety, inquire after the ideal of such a relation undisturbed by them. Such a one will exist where the tutor is a decidedly Christian man, cultivated, fond of children, and master of the art of teaching.

“ Well is that house where Jesus Christ
Alone the all in all is thought ;
And where, if He should absent be,
All earthly good would be as naught !

“ Well, when the husband, wife, and child
In faith and truth are joined as one ;
When all accord in earnest zeal
That God's commands shall all be done.

“ Well, when before the observant world
They set a good example forth ;
And show that where the heart is wrong,
All outward works are nothing worth.”

Such a house is built upon a rock ; peace dwells within it, and the blessing of God rests upon the children, who are trained up in unison by parents and tutor, in the nurture and admonition of the Lord. And thus also are the right foundations laid of all higher training in science and art.

RELIGIOUS INSTRUCTION.

[Translated from Raumer's "*History of Pedagogy*," for the American Journal of Education.]

THE sacred charge of the seeds of the new birth rests upon the parents. The mother must pray* for the child, and teach it as early as possible to pray, in order that prayer may become a second nature. It has already been observed that a man seldom prays with as full confidence in being heard as a pious child in his undoubting simplicity. Our old morning and evening-hymns contain stanzas which are entirely proper to be used by children as prayers.† He may add to such stanzas his own prayers and requests; and no surprise should be shown if these should contain some strange and even comical matters; for what seems comical to us grown persons is sacred seriousness to the child. The mother must also first make the child acquainted with the Bible. A good old-fashioned picture-bible serves to demonstrate its stories. I say an old one, for few of the modern ones are of any value. That of Kügelgen, which is much the best of these, extends, I believe, no further than Genesis; and, if completed, would be too expensive for most families. The Hildburghäuser Picture-Bible, again, begins with a quite unsuitable picture of Paradise. To paint the paradise of innocence requires a chaste and innocent mind.

Among the old picture-bibles, that of Christoph Weigel, of which repeated editions have appeared, is to be recommended.‡ This is not because they possess any remarkable artistic merit, and their execution is mostly of very moderate excellence; but, notwithstanding these technical faults, the designer had a vivid fancy, and therefore made pictures which stimulate the fancy of children.

Older brothers and sisters will readily show the pictures to their

* Augustin says of his excellent mother, Monica, "Thy maid-servant, who bore me beneath her heart to bring me into this life, but within her heart to bring me into everlasting life." Conf. 9, 8; 9, 9.

† See "*Spiritual Songs*," (*Geistliche Lieder*.) 2d ed. Stuttgart, S. G. Liesching. 845. For morning-prayers for children, see Nos. 154, 155, and 157—160. For evening-prayers, Nos. 162—168.

‡ I possess two editions. One, without date, has the title "*Sacra Scriptura loquens in Imaginibus*. . . . By Christoph Weigel, artist in Nuremberg." With text. The other, without text, is called "*Biblia Ectypa. Pictures from the Holy Scriptures of the Old and New Testaments, by Christoph Weigel, copperplate engraver in Augsburg, 1695.*"

This I wrote four years since. Since that time Cotta has announced a picture-bible, to which Schnorr is to contribute. I saw, as early as 1836, his remarkably-excellent illustrations of the Old Testament, of the history of creation, &c. The illustration of Joshua 5, 13—15 impressed me deeply.

juniors, and describe the contents to them. In this way both one and the other soon become firmly grounded in the Bible; a matter of importance both to boys and girls. It has already been said that the mother should not read the stories, word for word, out of the Bible, to very young children, but should tell them in her own way; for the style of the Bible is too unaccustomed to these, who need milk for food.

But if the child has learned to read, and is able to become acquainted with the Holy Scriptures by reading, he should be taken at once to the original sources, not referred to the so-called biblical stories. It is now time so to accustom the children to the sacred style of the Bible, which knows nothing of rhetorical ornament, that they will early acquire a taste for its divine originality, and for its great difference in character of style from all the works of human rhetoric.

Shall children read the whole Bible? At first, certainly not. But what shall be omitted? What can be left out without injuring the connection, and making it obscure? The best course on this point is to use books whose authors have felt the utmost piety toward the Bible, and who have made extracts from it, word for word, as far as possible, for the use of beginners. Zahn's "*Biblical History*" is particularly to be recommended.*

Care should be had not to regard as unsuitable for children such books of the Bible as they may happen especially to like, and in their simple way to understand better than many grown persons. Among the prophets, for instance, they are especially fond of Daniel, his visions, the stories of the three men in the fiery furnace, and of the den of lions. It should not be said that the children do not understand the Bible. The child has one understanding, and the man another; just as the artist has one very different from that of the learned commentator. And still Palestrina and Handel understood the 53d chapter of Isaiah better than Gesenius.

It is an old question, what is to be done respecting those accounts in which the relations of the sexes are handled without fig-leaves. Except the Mosaic law, which ought not to be read at all,† there are very few accounts which should be omitted.‡ And if in any ordinary reading it is thought best to omit any part, it should be done in such a manner as not to make the children doubly attentive to the omitted part, and then go and read it for themselves. It is by the emasculated editions of Horace that boys learn most easily to find the obscene odes, &c., in complete copies.

* "*Biblical History*, by F. L. Zahn. With a preface by Tholuck. Dresden, 1831." (*Bibliche Geschichte von F. L. Zahn.*)

† With few exceptions; as, for instance, Levit., xix., 1—18.

‡ Perhaps Gen., xix., 30—33; xxxiv., xxxviii.; 2 Sam., xiii.; Lot's Daughters; Dinah; Judah; Tamar and Amnon.

Above all, it should be remembered that it is not so much the subject of an account which is corrupting in itself, as it is the impure mind of the narrator which corrupts and poisons the reader. Even in these brief biblical narratives, which are impure in themselves, there appears plainly the austere, divine, and strict purity of the perfectly Holy Scriptures. Are we to consider it mere chance that the story of Judah's incest is immediately followed by that of Joseph's God-fearing chastity? David's adultery brought the curse upon his house, and brought after it the incest of Amnon and Absalom. The truly brutal crime of Amnon is described in a few words of fearful truth. (2 Sam., xiii., 15.)

Truly, God is not a tempter to evil, but the truest monitor against it. Sooner or later, the Bible may with confidence be put in the hands of the young. But their elders, who have with humility and earnestness penetrated the meaning of the book—father, mother, minister, or teacher—must advise them during their reading, especially when they are in doubt, at any place where they are liable to be led astray.*

It may also be inquired in what order the Bible must be read; whether in the order in which it stands, beginning with Genesis and coming afterward to the New Testament? I think not. Children should first become acquainted with the Gospel, and proceed thence to Moses and the prophets. After reading the two first chapters of Luke and Matthew, they may take Genesis and the other historical books, alternately with the Psalms and selections from the prophets. The Old Testament prepares them for the coming of Christ; it is, indeed, one great prophecy of the Saviour, whether typical by persons and religious ceremonies, or in the express words of the prophets. No one, who has diligently read the Bible from youth, and with an honest mind, will be so foolish as to say that the Old Testament is of no importance, and to boast of confining himself to the New.

When the connection is clear, prophecy and history may be conjoined. In the course of repeated readings of the Bible, the prophecies and evangelists in particular should be read in connection; as, for instance, Isaiah, ix., 53, with the gospels for Christmas and the Passion.

Sooner or later a Christian must take a general view of the whole Bible, from Genesis to the Apocalypse, from the creation to the end of all things. God is the Alpha—such is the substance of the first

* Astonishing misinterpretations of the Bible prevail among the people, who even cite texts in defense of their sins. The distribution of the Bible can, therefore, never render the ministerial office superfluous. The people need profound and pious interpreters of the Holy Scriptures, especially in our own times, when evil-minded interpreters are seeking, by every means, to lead them astray.

chapter of the Bible. God is the Alpha and the Omega, the beginning and the end, who is and was and is to come, the Almighty—such is the oft-repeated lesson of the last book of the Bible, the Revelation of John; and these lessons are the foundation of all our faith and hope.

Thus the Bible appears as a history of the world from the beginning to the end; from its first creation to that future renewal of it which is to begin with the coming of Christ.

With the reading of the Bible may very early be joined the learning, by rote, of the smaller Lutheran catechism. Luther himself, in his preface, has given most excellent directions for using it.

Many of the catechisms which appeared subsequently were expansions or explanations of the smaller Lutheran catechism, and collections of applicable biblical references. Some of them are useful only for the teacher, as the larger Lutheran; others, as Spener's, are intended both for the teachers and the older scholars. Among the reformed catechisms, the Heidelberg holds the first place. A celebrated man of learning said of it, "That child's book, which begins 'What is your only consolation in life and death?' makes men."

The catechism is a dogmatic system, closely interwoven with ethics, for children and laymen, and set forth in question and answer. It is not the child who answers for himself, but the word of God answers through the mouth of the ignorant and immature child. The answers are texts of the Bible, or are based upon them.

Catechising is directly the opposite of the socratic procedure of the rationalistic ministers, who endeavor to question out of the children what they assume to be innate and natural religious ideas. Thus they try to lift them, through the chain of cause and effect, up to God, as the highest and ultimate cause.* Jehovah's method at Mount Sinai was far otherwise. He did not question the ten commandments out of the children of Israel, overcome by sacred terror, but thundered them into their hearts, so that the mighty impress of that legislation has propagated itself for three thousand years, down to their latest posterity.

With reading the Bible and the catechism should be connected the learning of pious hymns. With the narrative of the birth of Christ might be learned, for example, Luther's Christmas hymns "From Heaven high" and "Praised be thou, O Jesus Christ;" and with the history of the Passion, "O thou bloody, wounded head." Children learn best by singing the hymns; the words impress themselves vividly and permanently upon the mind by the help of the melody.

In what I say on this point I do not refer merely to singing in

* See my "*History of Education*," 11., 302.

schools; I wish, with Herder, that "the old times and the old spirit" might return, "in homes and churches;" "when the old hymns were sung with devotion and the whole heart; when no father began or ended a day otherwise than in the beautiful singing-circle of his family. May God bring that sincere, joyful, and praisefully-singing period back again."

But now the song is silent in many pious families; where the children should now rather learn their hymns from the devotional recitation of their mother than from their own reading.

At a more recent period, war has been declared by many against learning by rote; and, as the history of pedagogy shows, the memory has been treated as the lowest and the reason as the highest mental gift. "Memory-cramming" was spoken of with the utmost contempt; and it was laid down that children should learn nothing by rote which they had not already intelligently understood. If this is correct, then they ought neither to learn the smaller Lutheran catechism nor texts from the Bible and sacred hymns. In these we have chiefly to do with mysteries of faith, which the understanding can not reach in the longest human life; with a tree whose roots and whose crown reach into the unfathomable depths and heights of eternity. But it is these very mysteries which are our consolation and our hope in life and death.

It is a divine provision, as kind as it is wise, that we have in the memory an intellectual store-chamber, in which we can lay up seed-corn for the future. The ignorant may think this seed-corn dead; but not so he who knows that at the proper time their vital energies will suddenly germinate and grow. If a boy learns the text "Call upon me in time of need, and I will save thee; so shalt thou praise me:" if he knows no time of need in his youth, he will not understand the text. But if in his mature age a time of unforeseen and overwhelming necessity should come suddenly upon him, this text will come before his soul, all at once, like a helping angel of peace and consolation, and he will understand it, and still more than that. If a child learns the text "Though I depart from thee, depart thou not from me," he does not understand it; the thought of death is far from him. But old men in the hour of death pray in the words of the same verse, which they learned when children; they understand them, and more than that.

In the seven full years Joseph laid up for the seven years of famine. When the time of need comes it is too late to gather.

Texts and hymns I call seed-corn. The hymns I mean are those inspired by the power of the divine word. These only should be committed to memory. The living germ has confessedly, in our

modern hymn-books, been cut out of these powerful old hymns. With such dumb, dead seed-corn as this children's memories should not be troubled.*

But shall the Bible, or the hymns, be taught to the child entirely without explanation? There are so many cases of misunderstandings of texts of the Bible, which the teacher might easily have removed by a few words of explanation. The answer is: Whatever is susceptible of explanation should be explained; but the inexplicable mysteries of our faith should be read with the hand upon the mouth.

From a confusion of the explicable and inexplicable of sight and faith come error and controversy. Only little minds claim unlimited insight, will believe nothing, insist every where on seeing and comprehending, and on making every thing intelligible to the children; and expend efforts on empty explanatory chattering about mysteries which require a serious and humble silence. "I have often suffered the efforts of many persons to teach me these things, but saying nothing," says Augustin.†

It is however always better in reading the Holy Scriptures to explain too little than too much; that the divine text may not be hidden or obscured by the human commentary, and that be expanded over much surface which is said clearly and impressively with energetic brevity. The seed-corn of the divine word should not be ground up into meal.

Poetic power should not be weakened by prosaic exposition. To say, "If I take the wings of the morning, and dwell in the uttermost parts of the sea; even there shall thy hand lead me, and thy right hand shall hold me," sounds otherwise, and makes a different impression from an abstract and insufficient exposition of the omnipresence of God.

Explanations relative to real objects are necessary, but should not be pushed further than is necessary; and not to the point of scientific detail. Geography, chronology, and archæology should serve as aids to the understanding of the Holy Scriptures, but should not become independent and superior to it.‡ A map and geography of Pales-

* It is very important that the clergyman should know by heart many old hymns; not merely for use in preaching, but to be able to apply them at proper times in exercising his care over souls, without having first to take out his hymn-book. Ministers regret extremely having been in youth neglected in this particular. Young theological students might learn a verse daily, which would be three hundred and sixty-five a year—thirty or forty hymns—a large treasure of them already.

† And in another place, of those who seek to comprehend God: "Let them prefer to find thee without seeking thee out, rather than not to find thee though they seek thee out." In the former case they would learn self-knowledge and humility, but in the latter self-delusion and pride: in the former, therefore, truth, yea, him who is truth; in the latter, they would fail of it.

‡ An excellent work is "*Guide to Instruction in Biblical History and in the Knowledge of*

tine would be useful in reading the book of Joshua ; but Joshua should not be treated as a geographical compendium.

Practical applications should proceed naturally from the text, but should not be dragged in by the hair of the head, nor protracted into long sermons. They should rather be in the tone and manner of conversation. One who knows and sincerely loves his scholars will find that the Bible, even the historical books of it, offer much more occasion for practical applications than would have seemed probable. I was reading, for instance, the account of Eliezer's conduct when he went after Rebekah for his master, to girls who were, as I knew, to become servants. It was quite natural for me to exhibit Eliezer to these girls as an instance of a reliable servant, who with faithful conscientiousness performed his master's business, and avoided every thing which might obstruct it.

We possess, at present, many Bibles with commentaries, both orthodox and heterodox. Whether they are the former or the latter depends not merely on their contents, but also on their form. We have commentaries which are correct in their teachings, but which, by reason of their diffuse, wearisome, and thoroughly prosaic method, operate as depressingly on the young as if rationalistic. To read them, one would believe that God's Word was only given in order to lay it off into the so-called exercises of the understanding (*Verstandesübungen*.)*

That whole modern phase of pedagogy which was adopted especially under the influence of Rousseau, Basedow, and even of Pestalozzi and his school, has, among other characteristics, that of not merely neglecting, but by evil arts of destroying, the most active faculty of youth, a sensitive imagination. This creative power of unreflecting simplicity, and the religious blessing which springs from that simplicity, are unknown to the dry pedagogues who, by means of an unintelligent torture of the understanding, which anticipates the period of mental maturity, would screw up the child to their much-praised "consciousness," and to the comprehension of every thing in general and in particular.†

If a child, whose imagination is still vigorous and lively, reads the Scriptures without being perverted, the forms and occurrences appear before his mind so that he lives among them as if he were present. For example, the narrative of our Lord's passion, resurrection, and

the Bible, by W. Bernhardt, minister, and principal of the Royal Cadets' Institution. (Leitfaden beim Unterrichte in der Biblischen Geschichte und in der Bibelkunde, &c.) Potsdam, 1842.

* See what was said above on explanations.

† The present mode of instruction in the German language is especially injurious in this respect.

ascension make the deepest impression upon such a child, and secure in him a firm historic faith. For the unimaginative reader—and such at last will even the most active-minded child become under the influence of a mistaken and wearisome style of instruction—for such an impotent and exhausted reader, Abraham, Isaac, Jacob are names, and nothing more; and their narratives are empty words, totally without power to bring the living scenes before their minds. The concrete is, with them, only a ghostly, unsubstantial abstract; and this is the reason why in our times so many complaints are heard of want of historic faith. A generation thus wearied out in the schools will be, if the opportunity serves, easily betrayed by the merely moralizing rationalists, or by the mythicists, who deny all truth. But children not thus corrupted by their teachers will read the Bible, after the manner of the ancient, plain, and pious painters; and will inwardly behold what those painters have outwardly portrayed. Hence the sympathetic pleasure of children in biblical pictures, which rude puritans and modern iconoclasts reject and despise.*

We can not be careful enough to avoid every thing that can in the least injure this simple, plastic comprehension of the Holy Scriptures, or can destroy the capacity for it. These injuries are, however, most likely to be suffered from an incessant, shallow, and prosaic sermonizing and questioning by overwise teachers; which deprives the children of the quiet and stillness and peaceful attention which are necessary to the realizing of the Scriptures.

Instruction at confirmation must be so administered by reading the Bible, catechism, and hymns as that it shall be almost only a short connected review and systematization of Christian doctrine. It should point backward to the baptism, and forward to the expected communion, and its connected entry into the Christian church. That their instruction must be accordant with the doctrines of the church need not be urged; it follows from the conception itself. The clergyman gives the instruction, as the servant of the church.

Of what character should be the religious instruction of gymnasiasts already confirmed? In reply, † refer to two excellent little manuals by Prof. Thomasius. ‡ In the first of these, intended for the middle classes, the kingdom of God is briefly and excellently described, as under the old and new covenants, after the historical development given in the Scriptures; and the pupil receives a compre-

* How different was Luther! "Not that I am of the opinion," he says, "that all the arts should be struck down and destroyed by the gospel, as some superstitious persons maintain; but that I would gladly see them all in the service of him who has given and contrived them."

† "*Outlines of Religious Instruction in the middle classes in literary schools.* (*Grundlinien zum Religionsunterricht in den mittleren Klassen gelehrter Schulen.*) by Dr. G. Thomasius. Nuremberg, 1842." And "*Outlines of Religious Instruction for the higher classes in literary schools.* (*Grundlinien, &c., an den obern Klassen, &c.*) 2d ed. Nuremberg, 1845."

hensive view of the whole Bible, from Genesis to Revelations.* Upon the second of these manuals its author observes that it follows the order of development of revelation. "My purpose in instruction for the upper classes," he says, "is to bring religion near the young, principally but not exclusively on the side of the thinking faculties. Not that I am of the perverted opinion that the secrets of the kingdom of God can be comprehended and demonstrated from without it—no one is further than I am from that belief—but there is a knowledge of revealed truth, an understanding of Christianity based upon faith, upon which the apostles of our Lord insist with all earnestness; and to produce such an understanding I consider one of the most important duties of the religious instructor, especially where he has to deal with youth already somewhat mature. At an age when reflection, not seldom doubt also, begin to govern, it is no longer sufficient and merely to testify to Christian truth in a simple manner; but it must be deduced from its fixed principles and from inner necessity. I know well that this is by no means all; that the proper and latest aim of religious instruction, life in Christ, is not in this way attained. And it was an especial object with me to bring forward the relations of revealed religion to heathenism and its manifold phases, and to discover points of connection between Christianity and the other efforts and knowledge of students; so that it might not be an isolated and separate thing in the midst of their studies of the classics, but a living central point of their whole knowledge and life. Thus it would become clear to them that Jesus Christ is the true light, that shineth in the darkness."

When the religious teacher advances with such Christian wisdom toward the teachers of other subjects, it only remains to be wished that they, on their part, would do the like. The Christian religion must be the heart of all instruction. No study is strange to it, though one may be nearer than another. For example: When the philologist is reading in Tacitus, with his pupils, the life of Tiberius, is not a comparison forced upon him between that and the cotemporary life of Christ? If in Tacitus and Suetonius we become acquainted with a dark and godless world, sunken in sins and hatred, the light, peace, holiness, freedom, and love of the gospel form an astonishing contrast; and we can scarcely believe that the Lord and his apostles lived at the same period with Herod, Tiberius, Caligula, and Nero. It seems as if, in the first century after Christ, extraordinary gifts of evil had been poured out, in contrast with the extraordinary gift of the Holy Ghost. How strongly, in Cicero's *De Natura Deorum*, do we see a state of loss and uncertainty, and the need of a divine reve-

* Of the importance of this general view I have already spoken.

lation! The teacher of history, especially, has innumerable opportunities of referring to Christianity. Or rather, is not the whole of history one great opportunity for the praise of Christ? Antiquity had been longing for him. Not the Jews only, but with more or less consciousness of it the heathen also—all were longing for salvation from sin and death. And all the greatness, goodness, and beauty of the new period was born of the world-renewing power of Christ. More will be said on this point in discussing separate studies; let us return once more to the proper religious instruction for gymnasia.

Prof. Thomasius says, "The aim of the whole (religious instruction in the gymnasia,) should be, in my opinion, to elucidate the Augsburg Confession; so that the pupil may leave the institution with the conviction that the faith which he has learned from the Holy Scriptures is also the faith and the confession of his church." In our own time of agitations and movements, within and without the church, this would be doubly necessary, especially for scholars who are not studying theology, and who will, therefore, afterward have little or nothing to do with ecclesiastical relations.

In continuation of the history of the apostles, a brief church history may be studied, giving especial prominence to the history of the Reformation, and to the missionary enterprises of our own day.

In many gymnasia is read, in the two higher classes, the New Testament in the original. Every person, properly informed on the subject, will approve of not putting it into the hands of beginners, that they may learn the elements of Greek by means of reading it, as is done in many pietistic schools. It is sufficiently well known how repulsive those books become to the pupil who has begun his studies in them. *Fiat experimentum in re vili* holds good in this case also. Grammar, at this reading of the New Testament, must rather be only a maid-servant. But a teacher who unites with pious regard for the Scriptures a thorough knowledge of language, will demonstrate to the pupil the importance of the assistance of so true a servant. And the same is true when he comes to learn the peculiar Greek of the New Testament. Alexander the Great was the means of extending the Greek language over a large area, which gave, indirectly, occasion for the Septuagint translation; and this first broke down the distinction in language between Jews and Gentiles, so that the Old Testament escaped from its esoteric position, and became accessible to the Greeks. The Septuagint, again, prepared the road for the Greek of the New Testament, and thus for the diffusion of Christianity.

It now becomes very important to consider the entirely different meanings of the same word in the heathen authors and in the New

Testament. It was requisite to describe a whole new spiritual world with the words of the old one, and thus the significance of these words was changed from a heathen to a Christian sense; they were transfigured.

This comparison of the New Testament with classical Greek follows naturally after previous studies in language; and is well adapted to bring out the contrast between heathenism and Christianity.

More advanced scholars will also perceive that the more detailed investigations in language of modern times have done much for the profounder and surer knowledge of the Bible, and have freed its interpretation more and more from capricious and innovating arbitrariness. The study of the particles, for instance, has often brought out a more delicate and elegant significance of some Bible word, which was beyond the reach of earlier interpreters. And the deeper it is penetrated, even in the philological sense, the deeper and more unfathomable does the Scripture appear.

Such a study of the original text, far from being a disadvantage, in point of edification, will furnish a firmer and deeper foundation for faith, and will render it more independent of opinions. There is a common notion that while, in reading Luther's translation, nothing but the meaning is to be attended to, and thus the reader can give himself entirely up to it, the reader of the original text must first labor through linguistic difficulties, which put hindrances in the way of his edification. But what if the same evil arises from precisely an opposite cause? It is well known that most men are very little impressed with the greatest natural phenomena—the blue vault of heaven, the sun, moon, stars, &c.—because they see them daily. The inhabitants of the vale of Chamouni wonder at Mont Blanc as little as do the Neapolitans and Genoese at the sea. In like manner, men become accustomed to the Holy Scriptures only too easily, and undergo a species of stupefaction about it because they know it from childhood, and even by rote. Nothing is so good a remedy against this stupefaction as to go from the translation back to the original text. What was known so long becomes suddenly new, and is also accompanied with a feeling that this original has a sure and unfathomable depth, stimulating to profounder feeling and living, which must be lacking even in the best translation.*

Conscientious parents and teachers are often in doubt as to the proper amount of religious instruction in family devotions, in attend-

* In relation to the reading of the New Testament in the original, I differ from the author of the excellent article "On Evangelical Religious Instruction in the Gymnasia," in the "*Evangelical Church Gazette*," (*Evangelische Kirchen-Zeitung*,) 1841, No. 2, &c., although I quite agree with him in the main principle. In ascribing no great influence to religious instruction in the family and by the confirming clergymen, while he depends entirely upon that in the gymnasium, he seems to have been influenced by his own experience. But how would it be if the gymnasia were quite heathen, and the family and the clergy Christian?

ing church, and in the employment of Sunday. They are doubtful whether they do not apply too little time to religious instruction, so as to omit some important part of it, by devoting to it a much less number of hours than to most other subjects of study.

The Lord has fixed one Sabbath to every six week-days. He knows well that man, oppressed by his earthly tabernacle, can not long endure the pure atmosphere of the lofty region of Sunday. This principle must be remembered in judging of the proportion of time to be observed between religious instruction and devotional exercises on one hand, and the remaining hours of study on the other. In case of doubt, it is better to give too little religious instruction than too much. Any one who has instructed children who have been previously overcrammed with religious teaching, even to repugnance and nausea, will agree with me here. There is reason almost for despair, when such children hear of the Highest and Holiest with complete indifference; especially if they have been stupefied with diffuse and superficial explanations.

With regard to Sunday, care should be taken not to practice upon such a hyperpuritanical interpretation of the third commandment as will conflict with repeated expressions of Christ respecting the Sabbath. Such puritans as I refer to forbid even to do good on the Sabbath; even to knit stockings and make shirts for poor barefooted boys. They forbid truly spiritual music, the most innocent walks, and what not. Nothing could be imagined more proper to disgust children with the really pleasant system of Christianity. To this extravagant puritanism an opposite is a wicked indifference, which develops into frivolity and recklessness. The curse "In the sweat of thy face shalt thou eat bread" was alleviated by a good God, by the ordinance of a day of rest, in which we may relieve ourselves of the earthly labor of the week, and, in looking forward to our heavenly rest, may enjoy a foretaste of it. It is an ignorant self-enmity with which so many transgress this most loving commandment, and labor restlessly on and on, like so many machines, week-days and Sundays together.

And what multitudes, in the most fearfully sinful manner, violate the day of the Lord—a dreadful desecration which is increasing terribly in our own times.

Every man should protect his own children from the company of such; and should say, like Joshua, "But as for me and my house, we will serve the Lord."

The subject should first be treated on the supposition that the family, the clergy, and the gymnasia are all Christian; and the case should afterward be dealt with where faith and piety are supposed to be lacking in either of them.

APHORISMS ON TEACHING HISTORY.

[Translated from Raumer's "*History of Pedagogy*," for this American Journal, of Education.]

1. VIEWS on the proper mode of teaching history are exceedingly different, and even contradictory. Such oppositions in other departments of study are usually based upon the discrepancy between the old and new pedagogy; but in the case of history it is not so.

2. First, to define intelligibly the object of our discussion. Shall we teach history, in the widest acceptation of the term—what is called universal history, which treats of all periods and all nations?

Although history, under this name, is taught in most gymnasia, yet neither the instruction in it, nor any one manual of it, corresponds to this idea of it. For what text-book "includes all nations?" Are not the Americans, for instance, usually omitted? as well as most of the African nations, except the Egyptians, Carthaginians, and other nations of northern Africa, who were connected with the Romans? And how large a portion of Asia is altogether neglected!

3. This neglect is for two reasons. One is, that we know either very little or nothing at all of the history of many nations. This is the case respecting those of America. The other is, that we prefer not to know any thing of the history of other nations; or, at least, do not wish the pupils in our schools to be occupied with it. Thus, for example, the Indians and Chinese are scarcely mentioned, though there is no lack of historical authorities on these subjects.

4. But there is also a great distinction between the modes of treating such histories of nations as are included in our histories of the world; inasmuch as in some of them we go into much greater detail than in others. We give less fully the history of the Persians than that of the Greeks; of the Russians than of the English.

5. Universal history, in like manner, as we teach it, does not include all people of all times and countries, and it does not give the same degree of attention to those nations of whom it does treat. By what standard does it proceed in this? Is it according to dignity, so that the more enlightened nations are made more prominent, and those less so left in the background? This is by no means the only rule; for, if it were, the Hindoos, for instance, would fill an im-

portant place in it. For how high a position do they occupy in eloquence, poetry, mathematics, &c.

Why do we give so much attention to the Egyptians, for example, when the Hindoos were certainly not their inferiors?

6. The answer is this. In like manner as individual men take particular interest in the biography of their own ancestors, and of such persons as have exercised much influence upon their own training, employment, or labors, so does each nation take most interest in its own history first, and next in that of those nations which are related to it in language, manners, &c., or which have directly or indirectly exercised a great influence upon it.

7. In the history of what nations should we, as Germans, feel most interest?

First: in that of ourselves. History of our own country, ancient and modern.

Second: in that of the Jews, since salvation is of them, down to the time of Christ, and including the destruction of Jerusalem.

Third: in that of the Romans; to whose *Orbis* our nation formerly belonged, and whose influence is perceptible among us even now. Related studies are Latin, the *Corpus Juris*, history of the Catholic church, &c.

Fourth: in that of the Greeks; whom we recognize as directly or indirectly our instructors.

Fifth: in that of such ancient nations as were in more or less close relations with the Jews, Romans, and Greeks; as the Assyrians, Chaldeans, Persians, Egyptians, Phœnicians, Carthaginians, Arabs, &c. These are, however, not so nearly connected with us as are the Jews, Romans, and Greeks, and they are more distantly related to our character and history.

The history of most of these nations is previous to the time of Christ, and belongs to the ancient period.

The Hindoos and the Chinese have not, within the historical period, been either directly related to the Germans, nor in such close connections with any nation in proximity to us as would enable their influence to reach us through them; and thus, with us, they stand in the background.

Since the time of Christ, Europe forms one Christian whole. Still, the Slavic races are further from us than the Romance ones, or the German ones; not to mention still slighter shades of difference, as, for instance, the fact that, among the Romance nations, the Italians are sensibly more nearly related to us than the Spaniards, and they than the Portuguese.

8. These remarks may furnish a standard by which to adjust the

extent of the attention devoted to each nation in text-books and school lessons; which is the point to which I am to speak. The case is entirely different, when a historical investigator devotes his attention to some obscure national history, without any reference to its relations with his own country, and which is very properly omitted from school studies. For such a student the human race is one; and even those races, whose relationship to and connection with our own is hidden in the darkness of times long forgotten, come gradually astonishingly near to us. How unmistakably, for instance, does a comparison of Sanscrit with German point to a primeval unity of the German and Hindoo races.

9. After the object of historical instruction is determined—that is, what is to be taught—the question arises, How are we to set about instructing; what is to be our method? In this respect, also, is there the greatest variety of opinions among instructors.

In the first place, there is an opposition similar to that in the case of geography. The beginning may be made, that is, either with general or with particular subjects. In geography, for example, one begins with discussing and describing the whole surface of the earth; while another commences, as old Merian did, with describing single towns.

10. Thus, in history, a beginning may be made either with a sketch, of the most generalized kind, of the history of the world—we have seen what is to be understood by the history of the world—or with biographies of individual men.

Of these two extremes the first naturally induces the second. “What can boys do,” ask some, with general history? They will learn names and dates of years, and nothing more. Where the scope of the subject is so great, the matters which are of most importance to youth, such as vivid portraits of individuals, great men, instructive occurrences, &c., can not be properly considered. We would, therefore, begin with the biographies of Alexander, Cæsar, Mohammed, &c.; and this method must certainly be more agreeable to the young than the general historical method.

To this the opponents of this method would reply:—“Did these heroes, whom you would describe, live as isolated appearances, in an age otherwise empty? Did not each of them belong to his nation? Can I comprehend Cæsar without knowing the Romans; or the Romans, without knowing the Greeks and Carthaginians? Shall I not therefore be obliged, in order to delineate my hero, to describe his nation; and indeed all the nations which were in close connection with it? And does not this, of course, bring us to the method of general history?”

I do not subscribe to either of these conflicting views: each of

the parties seems to me, however, to be right in its objections to the other.

11. In late years there have been those who have maintained that we ought to begin the instruction in history with that of the native country; since that is nearer to us than Greece, Rome, &c. This view seems at first so simple and natural that it attracts us; but, upon closer consideration, one who is moderately acquainted with the history of Germany would be slow to adopt it. Are not the most important periods of German history—such, for instance, as the mediæval contest between the popes and the emperors—of a character far too difficult for the intellects of boys? Do they not require, for even a moderate understanding of them, a comprehension of the science of church and state, and of their mutual relations? And other equally significant questions might be asked; as, for example, whether a boy of from ten to twelve years old is capable of understanding the movements of the Reformation?

12. I now turn from methods which I do not approve to the consideration of those which I consider correct.

The first beginning of historical instruction is, in part, coincident with religious instruction. Christ stands upon the bounds which separate ancient and modern history. Ancient history is related to him, lives in him; and he is the creator of the modern period, and will remain with us until the end of the world.

In this department we first become acquainted with the evangelists—the history of Christ—and thus acquire the capacity to learn aright, both in ancient history and modern, whither the former tended and whither the latter is tending.

Historical instruction proper I would commence with the Old Testament. My reasons are these:—*

1. Because the Old Testament history does not begin arbitrarily at any particular period, but at the beginning—the Creation.

2. Because this history is at once so simple and so vividly graphic. The persons and scenes of the Old Testament impress themselves involuntarily upon the mind. Its descriptions and narratives excite the children's imaginations to the forming of mental pictures, which remain in their minds, instead of merely passing through their memories, like mere names which have no actual existence. The Bible does eminently well what is required by the adherents of the biographical method of studying history.

3. Because the history of the Jews is a remarkably individualized one. It is the history of the people of God, chosen out and set apart

* It should be understood that, for the purpose of historical instruction, many parts of the Old Testament should be omitted, and left to be read at a maturer age.

from the heathen; and for this very reason it is more intelligible when separate from others—not incessantly referring to foreign nations, whose existence connects itself with its own, and thus requires some full knowledge of their history. This makes the mastery of it much more simple, and enables the attention to be directed, without divergence or confusion, to this one nation exclusively. This limitation of the subject is excellently adapted to the dimensions of the minds of school-children.

4. Because the history of the Jews is a theocratical one, in which the finger of God is visibly seen. God, to whom all his works are known from the beginning, the educator of the human race, often withdraws himself from sight in the history of other nations, as if he had given men over to themselves; and it is a characteristic of profound historical research and knowledge to look beyond the accidents of the time, and to recognize the justice of God ruling over the nations and over individuals. In the history of the Jews, on the contrary, the divine punishment follows sin, as the thunder does the lightning; while the blessings of the just—as in the case of David—fall visibly upon him and his posterity.

5. Because the Old Testament history not only reveals the true God in his justice, but also in his infinite mercy. While it relates the origin of sin, and with sacred impartiality reveals the sins even of men of God, yet it is a book of encouragement and of hope; because it every where points toward the coming Saviour.

Such a history furnishes the first point of view from which correctly to understand and estimate the history of other nations. It is the foundation—and even more, it is the living heart—of the history of the world. As Palestine was a land most isolated in situation, yet admirably adapted to become related to the Roman world, so the ancient Jewish history is a most individualized and isolated one, and yet contains within itself a living energy which enables it, at the epoch of Christ, to open out into a most comprehensive history of the world.

With the Old Testament are connected the histories of the Assyrians, Chaldeans, Medes, Persians, and Egyptians; for which, indeed, the Bible itself is one of the authorities. Daniel refers to Alexander the Great. The Apocrypha, with Josephus, fills up the gap between the return from exile and the time of Christ. And at this last point the history of the Greeks and Romans joins on to that of the Jews.

13. We now come to a point of divergence. Hitherto, history, entirely biblical, has been the same for all Christian children; but here there arise distinctions, depending on condition and sex.

Boys will either study for a learned profession, or not. The former

study Greek and Latin, and can and must be introduced to the sources of Greek and Roman history. These sources include not merely the historians, but all the classic authors; for they all characterize their nations.

Now, should the boys be carried through a detailed history of both the classic nations, omitting the classic authors, before they read the latter? By no means; but still they should study a brief outline of it, with reference to the future reading of the classics. This outline will serve to fix correctly their ideas in chronology, just as their previous geographical studies have done in space. But it is not intended that this portion of study should be completed during their attendance at the gymnasium.

The case is different with boys of the higher ranks, who will not study a profession, and with girls. These may study a more detailed history; since nothing can be left for a subsequent reading of the classics. But this history must still be written throughout in an easy and popular style, and must not demand any previously acquired learning in order to its comprehension. Both Greek and Roman history must be presented in their relations to the kingdom of God; and the opposite characters of heathenism and Christianity must be presented. A description of the Roman Empire at the time of Christ is of special importance.

14. We now come to modern history. Roman history forms the transition to it, belonging as it does to both ancient and modern times. Boys preparing for the university may study, for this, Tacitus; but not the writers on the Augustan period. At about the epoch of the Antonines begins a period, the original authorities on which are scarcely studied except by professional historians. How few are there who read Cassiodorus, Jornandes, the Byzantine historians, the Latin writers of the middle ages; how many, indeed, even understand the older and middle-age High German?

At this point, it will be said, come in the eminent modern historians.

I can not refer, for this purpose, to classic writers generally, as I did for ancient history. One reason for this is, that only a few among the modern writers are really able; and among these there are few, again, whose treatment of history is not quite beyond the capacity of youth. Such a one is Spittler, for example. A second reason is, that to read Herodotus and Sallust is an actual intellectual labor for the pupil; he is obliged to pay earnest attention to the course of the history to master his tasks. And it is only too commonly, on the other hand, that young persons read the German historians merely for amusement, very much as they seek

after romances, to pass away the time in indulging their imaginations.

The teacher, I say, should not refer to the modern historians as he does to the ancient ones; especially, not as if they were soon to be read in school. By this I do not mean that he should proceed as if they did not exist; he should give his pupils a sketch of modern history, as of ancient, with reference to the fact that they will sooner or later read the good German historians, and perhaps the English ones. This sketch should be fullest of our own history; and more or less so of the other European nations, according as they are nearer to or further from us, or have more or less interest for us.

15. The question will arise, How many facts, &c., should the pupil fix in his memory? I reply, first, Rather too few than too many. That is a very great error, into which teachers of history fall, of often laying upon their pupils burthens which they themselves could not endure. Instead of selecting remarkable men and occurrences, and giving the proper dates of them to be memorized, they torment the boys with a mass of minutiae "for future oblivion;" that is, which they will forget as soon as they leave the class. There is no better means than this for inspiring them with a most thorough disgust for history, and one from which they can afterward scarcely free themselves.

The opposite extreme from this cramming process must, however, be avoided—of being too kind to the boys, so as to make them inefficient and afraid of labor. There are teachers so tender of the boys that they are reluctant to make them commit to memory the multiplication table. Every one knows how easily the memory of the young receives and retains facts, names, and dates, unless, indeed, an unwise teacher has broken it down by unreasonable burdens or entire neglect. It is well known that, when this has happened, the sufferer, when grown up, can only with difficulty, or not at all, repair the damage thus inflicted. But we are in after years thankful to our instructors in history, if we retain from their lessons as much even as the succession of the German emperors and the length of their reigns; and are thus enabled so to measure our own historical studies as that we can proceed in them without having our mental processes interrupted by defects of recollection.

16. The more thought is bestowed upon the plan for historical instruction to be pursued in our schools, the more difficult will it appear to lay down any universal rules on the subject. And these rules should, in any event, be only of a most generalized character; and not such as to bind down the teacher to any course of details. The reason of this chief rule is, that historical instruction is eminently dependent upon the personal gifts of the teacher. Shall he, for in-

stance, make much or little use of a free, narrative method? Should he not rather select extracts from historians and read them? I reply, This depends upon whether the teacher has the talent of narrating—a very uncommon one. It supposes not only a man of historical knowledge, but the gift of narrating historical facts simply, lucidly, orderly, and fluently, without error or hesitation. And it also requires, above all, a clear and sensible mind, heartily despising that mere declamation for effect, which is only too often made a cloak for ignorance, and is well adapted to destroy at once the scholar's taste and his sense of truth.

If the teacher is skillful and conscientious, as few rules as possible should be prescribed to him, and it would be better to have none at all; for no one can properly claim to understand teaching better than the teacher himself, whose mind has been expressly trained and practiced in his calling as its proper field of labor. Such prescribed rules must, at best, be able to restrain mediocre and bad instructors from ruining their scholars entirely. If unskillfully made, they constrain and confine the best teachers.

17. We have very many text-books of history, from the briefest compends up to voluminous and detailed works.

The former are intended for school use; and furnish very brief, condensed sketches, which are to be filled out and made vivid by the teacher's oral instructions. The pupil, during his study, obtains from them the subjects which are to come up during instruction; and the manual serves, by means of recitation from it, as an aid to the memory, as the short entries in a memorandum-book do. These compends may be even without any style at all—in a tabular form.

Other compends pretend to possess a good and readable style, and that no additional oral matter from the teacher is necessary. They are calculated to assist persons studying without teachers, without any other aid. They claim, notwithstanding, to be compends; although, as a general rule, they embarrass the teacher who uses them, because they deprive him of the most important and interesting portions of his materials. The pupil who prepares himself from a compend of this nature is sated with the subject when he comes to the class, and the teacher's words have no interest for him. Indeed, the teacher can, in this case, at most, do no more than to give instruction, by conversation and examination upon prescribed tasks, out of the book, prepared by the pupil for each lesson.

Voluminous historical manuals are intended only for those who study without a teacher. They can not fill the place of compends in instruction.

18. There is as great a difference between historical compends for

men and those for boys as between a catechism and a system of dogmatic theology, or between a grammar for beginners and one for philologists. This difference consists not so much in the greater or smaller number of historical facts as in the selection of them; in its choice, for instance, of the more abstract civic and ecclesiastical relations, or of more pictorial representations of great men and occurrences. It depends upon the spirit in which the book deals with history.

A childlike and delicate tact may be exercised in the selection from the text-book of what is proper and comprehensible for beginners. The youngest pupils will prefer historical matter which is as near as possible in character to stories; they only gradually grow into a feeling for historical truth. Observe, for instance, what are the actual points of interest to children. They take pleasure in hearing of Marathon and Salamis, and of the campaigns of Alexander; but none in the contests between the patricians and plebeians of Rome, of the agrarian law, &c. They are not usually as much interested in Cæsar as in Alexander.* In brief, they are pleased with whatever stimulates their imagination by beauty, greatness, nobility, chivalric bravery, and adventurousness; but not with any thing that is cold or purely intellectual, such as the subject of civic relations and civil controversies. Such matters are repulsive to them.

There are compendiums, as well as teachers, who do not use sufficient care in observing what children like and can understand. We are now speaking, let it be remembered, of school-children, not of students, who have reached the verge of adult age and of civic life. These latter very properly require a presentation of the subject which does not merely seek to please by an exciting narrative, but which shall tend to direct and fix their minds in a knowledge of the true and serious nature of the approaching labors of their life as citizens, and for the great and solemn problems of human life generally.

We have thus discussed the beginning of the study of history. What, now, is its ultimate object—the purpose of all the labor bestowed upon it? What are the highest aims which we have in view in the lower as well as the higher stages of progress in the study? Let us prepare to answer by deciding a narrower preliminary question:—What do we desire to learn from the biography of an individual man? I reply, The problems of his life, and their solution. The history of the world is the biography of the human species—under which nations are the varieties. What are the gifts and the problems of humanity—of single nations? “There are many gifts,

* Of the Romans, children—like Livy—make a special favorite of the elder Scipio.

but one spirit." Whence do we come—whither do we go—we, all men, taken as one representative man?

When an individual dies, we ask, What has become of him? And millions and millions have, in like manner, died during the course of time, and what has become of them? History plays over graves; and future generations, like past ones, are all drawing toward the great necropolis. When will the dominion of death be ended? Does the end of Time—the beginning of Eternity—now approach, when they shall no longer be born or die?

The fancy of man is lost in the darkness of the past, and its future fate in that of the future. No man has investigated and understood death; and none has escaped over the limits of that unknown land from which no wanderer returns.

At this point Revelation appears, displays to us a part of the future, and opens to us the knowledge of our race—so highly gifted, so fallen away from God, and saved and forgiven through Christ. It encourages us as to the departed, and prophesies the resurrection of the dead and the Last Judgment. At this tribunal, love will be the rule of procedure; to him who hath loved much, much shall be forgiven.

What pride lost, the lowliness of Christ has recovered. With the crucifixion and resurrection of Christ began a new creation, the regeneration of a fallen and saved world, the establishment of the kingdom of God, in which all contentions shall cease. It is the kingdom of a love that shall never cease, because it is stronger than death.

GEOGRAPHY.

[Translated from Raumer's "*History of Pedagogy*," for the American Journal of Education.]

PESTALOZZI mentions a schoolmaster who instructed his scholars in geography so skillfully that they were well acquainted with the road to the East Indies, but very ill with the roads and paths about their own village. And Rousseau says: "I assert that no child of ten years old, who has had two years' instruction in geography, can, by using the rules which have been given to him, find his way from Paris to Saint Denis; or can even find his way about the curved paths in his own father's garden, without making a mistake. And these are the learned men who know, to a hair, whereabouts are Pekin, Ispahan, Mexico, and all the countries of the earth."* The reason of this practical incapacity Rousseau found to be that the children were taught maps only; the names of cities, countries, and rivers, which existed, for the scholars, only on the maps where they were shown to them. He advised, on the contrary, to commence instruction in geography by furnishing the boys with correct knowledge of the neighborhood of their own place of abode, and making them draw maps of it.

These views of Rousseau seemed the more reasonable to me, because I had spent years in geognostic researches among the mountains, and knew by experience the heaven-wide difference between a knowledge of a map and of a country. I composed a dialogue upon teaching geography, in which I set forth Rousseau's views in detail. The speakers were Otto and George. "Before I made my first tour to the Silesian mountains," says George, "I read over all that I could find respecting them in books of travels. The result of this reading was, that I formed in my mind so distinct an idea of those mountains that I could have painted them from these descriptions. I came among the mountains themselves; and, to my astonishment, the mountains of my imagination had no resemblance whatever to the real ones." And he says, again, "Permit me to add something further, in order to make my meaning clear. If any one inquires of you about the features of your room, or your house, you describe them to him according to the representation of them which is before your mind; not according to such a representation before your

* Second book of "*Emile*."

mind of ground-plans or elevations. If you are asked about a house in your neighborhood, you answer in like manner, not according to any representation before your mind of a plan of the city, but according to a representation—such as your faculties have made it—of the city itself; you say through what streets the questioner must go to reach the houses, and you point it out to him by shape, color, and peculiarities. And you can in the same way describe localities in the neighborhood of the city—unless you are an inveterate stayer at home. But how will it be if any one inquires of you for directions to a place say twenty-five miles distant? Will the picture of the road in that case still be clear before your mind, as it runs in through the fields and the woods, so that you can tell through what villages and over what waters it passes, how you must leave this mountain on the right hand and that castle on the left? Or will not your imagination in this case be at fault; will you not have forgotten many portions of the road, and have but an obscure recollection of others? May you not even have quite forgotten the whole road?" And when Otto answers, "This is the case for which maps are intended," George replies, "Then you must have within you the representation of the maps instead of that of the localities, and give your directions wholly from that, or else your recollection of the map will mingle in a confusing manner with that of the ground." And, at last, when the question is put, "How does the road run from your residence in Germany to Canton, for instance, or Irkutsk?" it appears that all representations in the mind of the extensive regions over which you must travel will quite disappear, and the representation of the map will entirely occupy their place.

Otto now calls attention to the necessarily limited extent of the knowledge of most persons respecting countries. No Titan, he says, is born, who can give information about the whole earth as fully as we can about our own homes and places of abode—who carries in his mind representations of all lands and nations. We must therefore make use of indirect knowledge, of some kind, in the place of direct. Whether this indirect knowledge shall begin with the district in which the learner lives, or the kingdom—whether with a smaller or larger area—is of but small importance.

George. What you say is like what I once heard alledged against the intuitional method in arithmetic, which Pestalozzi urged so earnestly. What is the use of it? asked its opponents; in the case of large numbers, all actual pictures of them must disappear from the mind. Who can imagine even a hundred apples? Away, therefore, with all intuitional arithmetic.

Otto. I agree with them.

George. I do not. I think the power of intuition should be developed as far as to the number ten, which can be counted on the fingers. So far the smallest capacities might attain. Then the tens, and afterward the hundreds and thousands, might be treated as units, and thus, by means of the wonderful decimal system, the most monstrous numbers can be dealt with. Without this intuitional knowledge, from one to ten, the children are liable to run into a mere course of juggling by means of the decimal system, without gaining a clear and intelligent knowledge of arithmetic.

Otto. And what is your application of all this to geography?

George. The numbers from one to ten are the boy's place of abode, the man's country; they are the Archimedean point in geography. He who understands them thoroughly may acquaint himself with other countries.

George now proceeds to explain how, according to Rousseau's system, the boys may be carried onward from the knowledge of, and ability to map out, the neighborhood—their home and its vicinity—to an acquaintance with foreign countries and the ability to describe them. During youth and manhood, he says, they may take journeys, especially within their German fatherland, and to countries most interesting to Germans, and may thus enlarge their direct knowledge of countries. But, he adds, how great soever their knowledge is, it can never include the whole earth; and this fact forces us to use substitutes—to supply the defect by means of a symbolical knowledge of the earth. And he explains this symbolical knowledge as follows:—

The sphere of the individual man is limited in space and in time; he can not exceed the measure of his bodily growth, nor add a single year to his life, nor do wings bear him over the earth. Yet his mind belongs not merely to the immediate present, but to a greater spiritual universe. Thus there is an incongruity between the wide aspirations of his mind and the limitations of his mortal body. The use of symbols is a mode of reconciling this incongruity.

There are two kinds of symbols; artificial and natural. The artificial symbol brings before the mind original ideas, by means of representations; while the natural sees the original idea in the parts of it. Permit me to give a brief illustration of these two kinds of symbols. You can represent Paris to yourself by plans of the city, panoramas, models, descriptions—by the most various kinds of representations, based upon an actual immediate observation of Paris. You see the city mirrored in another mind. These I call artificial symbols. But suppose you could remain for some time in some house in Paris, without leaving it. You would see and hear from your

window the various noise and haste, the running, and the outcries of laborers and tradespeople, the mountebanks and marionnettes, cabs and water-carriers, national guards and chestnut-sellers, cobblers and fishwives, and thus, by your observation of a small part of the city, you would obtain a knowledge of it as a whole, by the method of natural symbols. *Ex ungue leonem.*

Now put the earth in the place of Paris. We have all manner of representations of it: globes, maps, reliefs, pictures, and engravings of localities, cities, and buildings, descriptions of all countries, and general descriptions, compiled from the descriptions of individual immediate observers. These representations are, some of them, of late invention, such as reliefs and panoramas; and in part they have been so improved, within the last century or two, that they must now be treated as entirely new subjects—as is the case with maps.

Thus there has arisen, during these last centuries, a most earnest and thoughtful endeavor to create, by means of these various representations, a new earth on the earth—the greatest of all artistic efforts. To this end point the untiring zeal shown in collecting beasts, animals, and minerals from all parts of the world; and the investigations of all the nations, their languages and manners. Who can tell how far this unwearied zeal will go? As man's susceptibility to impressions increases by early travels within his own country, and at the same time his own powers of representing, and his capacity for comprehending the representations of others, which again are on their part becoming more and more perfect, who can tell to what a degree of broad, general comprehension of the whole earth one can attain who is acquainted with his own country, by means of intercourse and artificial symbols?

In describing natural symbols, George says:—

As at Paris you would become acquainted with Paris itself by looking out of your window, and not with a representation of it—learning the whole from a part—so should you gain from your own country a knowledge of the whole earth; this portion of the earth should be to you a symbol of the whole of it. Do not the sun, moon, and stars shine upon your own country as they do upon all the rest of the world? Does not the magnetic needle, that living representative of the earth's magnetic axis, point to the north before your eyes? Are not the mountains of your own country constructed almost exactly as are those of all other parts of the world; and are not her plants and animals the same, or of the same species, which are found throughout a great part of the world? Open your eyes, and your own home will be seen to be as a new paradise, having gathered together in it all the creatures of the earth. Learn, however,

first of all, to know and love your own people ; and this will lead you to the comprehension of humanity as it exists throughout the whole earth. Thus direct knowledge of your own country is an object in itself, and affords the means of understanding representative descriptions of the earth—the geography of artificial symbols—while its thorough development also forms a basis for the geography of natural symbols, which shows, in our own country, the features which characterize the whole earth.

Four years after writing this dialogue, I went to Nuremberg, and there taught geography for the first time. The question came up, whether my views in this department of instruction, based upon Rousseau's, would stand the test of practice ? And I must confess that they did not.

Taking walks—an aimless wandering about the neighborhood—was very pleasant to the boys. But when a definite purpose was contemplated in these walks—when the boys were made to gain correct knowledge in them, consciously and of purpose, and were again made to use all their knowledge in drawing a map, all their enjoyment of the walk was at once destroyed. Instead of being a relaxation and a relief from the school-lessons, they became merely peripatetic lessons themselves. This dislike of theirs proved to me clearly that my theory of geographical instruction was wrong ; and I gave it up.

I afterward, however, attained my purpose of making my pupils use a knowledge of their abode and its vicinity as an introduction to the understanding of maps, and even of the globe, in a manner apparently similar to that which had failed, but really very different. During the geographical instruction which I gave in Erlangen, I began, for instance, with a large plan of the city. The pupils examined this with the most lively interest, and picked out all the streets, their own homes and those of their acquaintance, and the churches and other public buildings. They could not satisfy themselves with looking, and their researches had no end.

After this I gave them a large and very fully detailed plan. On this the city itself was, of course, smaller than on the first plan, but was still clearly laid down. The pupils now first carefully compared the two representations of the city, and observed their resemblance, and how they differed only in the difference of their scale.

They then looked out upon this map all the neighboring localities with which they had become familiar during their walks, and followed the roads from the city to one place and another, vying with each other in the exercise. Those who were less accurate in their

knowledge afterward of themselves directed their excursions to points not known by them, and others searched out new routes. Without my having at any time imposed this acquisition of correct knowledge upon them as a task, they came at last to have a good knowledge both of the localities themselves and of the map of them. The map did not become, what Rousseau finds so much fault with, "a mere set of marks, without any equivalent conception in the mind of the thing represented."

After this map of the neighborhood of Erlangen, I placed before them one of Middle Franconia. The area of the last map occupied but a small space on this. But, on the other hand, it included a much larger surface; and the pupils could pick out upon it Nuremberg, Fürth, Forchheim, Bamberg, and other places which they knew, and also the villages, &c., which they had observed on the roads to these larger places.

I need not add the details of the course by which I went on to exhibit Middle Franconia as but a small part of Germany, that as one part of Europe, and Europe as one part of the whole earth.

Even while the pupils were occupied with the neighborhood of Erlangen, I at the same time began to instruct them, in the simplest manner, about the cardinal points, the rising and setting of the sun at different times of the year, and its place at noon. Those city streets which ran north and south, and over whose southern ends the sun thus stood at noon in summer, were of great assistance in this course of instruction.

I am here only discussing the first beginning of geographical instruction. If now it be inquired, Why is this method adapted to beginners, and not the systematic examination of localities and map-drawing along with it? the explanation is to be found, as I have already shown, in the dislike of children to what is purposeful and methodical. In the school, they are satisfied to have every thing go on in the fixed routine; but they think it unendurable and even unjust to apply school discipline to their whole lives, and even to their walks. And, moreover, it is natural for beginners to prefer good and well-drawn maps to the imperfect and ill-looking ones which they scratch off with so much pains and weariness. And, again, when they find out, as by my method, that they have been acquiring knowledge in taking walks, they are as delighted as was M. Jourdain in the "*Bourgeois Gentilhomme*," when he found out that he had been talking prose all his life without knowing it.

After having made a beginning in this way, I was at a loss to know what geographical text-book to use in my subsequent instruc-

tion. In most of the older manuals I failed to find a proper arrangement, either in general or in the description of particulars; and many of them were also faulty in selection of materials, and in the proper proportions of it.

The lack of proper general arrangement appeared most prominently in the fact that the authors had not sufficiently distinguished between what is proper for a universal geography and what belonged to a description of particular parts of the earth and countries.*

To illustrate the extreme want of good order in describing subordinate portions of the earth, I give the following enumeration of German mountains and lakes, which I request the reader to follow on a map: "The principal mountains are, the Harz, (Brocken, 3,495 feet high;) Schwarzwald, (Feldberg, 4,610 ft.;) the rocky Alps, the Rhætian and Noric Alps, (Orteles or Ortles, 14,814½ ft.; Grossglockner, 11,982 ft.; Hochhorn, 10,667 ft.; Platey-Kugel, 9,748 ft.; Watzmann, 9,150 ft.;) the Carnic and Julian Alps, (Terglou, 10,845 ft.;) the Fichtelgebirge, the Schneeberge, 3,468 ft.; the Kahlenberg, the Birnbannerwald, the Sudetic Alps, and Riesengebirge, (Riesenkoppe, 4,950 ft.;) the Moravian mountains, (Spieglitzer Schneeberg, 4,280 ft.;) part of the Carpathians, connected by low heights with the Moravian and Sudetic chains, the Thuringian mountains, the Erzgebirge, the Spessart, the Rhone mountains, the Böhmerwald, (Rachel, 3,904 ft.; Arber, 4,500 ft.;) the Wesergebirge, Westerwald, Odenwald, Ardennes, Vosges, Hunsrück, &c. Lakes: Lake of Constance, (seven miles long, three miles broad, and more than three hundred fathoms deep;) Chiemsee, Lake of Cirknitz, the salt and sweet lake of Mansfeld, the lakes of Mecklenburg, Brandenburg, and Pomerania, the Dümmersee, the Traunstätter and Hallstätter in archducal Austria, the Steinhuder Lake," &c.

Nor is this example of confused and disorderly arrangement from the earliest best geography, but from the favorite manual of Stein, which has been translated even into Polish, and from the fourteenth edition of it.

But many geographical manuals are also deficient in proper selection and proportion of materials. They contain unimportant matter, and omit the most important. Murray, for instance, in his description of Cologne, mentions Farina's *eau de Cologne*, but not the cathedral. They sometimes contain statements of results in natural science which are quite problematical or even altogether inadmissible—such as youth should not be informed about. They should receive, as far as possible, only what is entirely true.

* I have expressed myself more fully on this point in my review of Murray's Geography, reprinted in my "Crusades," (*Kreuzzugen*) Subsequent examples will illustrate the point.

It is also often the case that geographers quite fail in an accurate understanding of their subject, and of the limits between it and the provinces of other sciences; for the idea of geography is entirely different from what it was in the time of Busching. It is in our time as if all the arts and sciences had appointed a rendezvous with geography for a great family feast on occasion of the first discovery of their relationship. Here gather astronomers, physicists, botanists, zoölogists, mineralogists, philologists, statisticians—who can enumerate them all?—bringing the fruits of labors too vast for description, to throw them all into one great common structure. They seek to gather together every thing which the wide earth offers, so that it may be seen and understood.

It is accordingly of great importance to observe a proper proportion among all these, and to select judiciously; so that the geography shall not come out a hydrology, zoölogy, nor mineralogy; so that in general no department shall exceed its proper limits. That many fail in this respect is shown, for instance, by V. Hoffmann's geographical writings. In his work "for all classes," entitled "*Germany and its Inhabitants*," (*Deutschland und seine Bewohner*,) the description of the Rhine and its tributaries occupies sixty-three pages; and he mentions 481 streams in the valley of the Rhine, 337 in that of the Elbe, 215 in that of the Oder, 487 in the German part of that of the Danube. In his "*Europe and its Inhabitants: a Manual and Reading-book for all Classes*," (*Europa und seine Bewohner: ein Hand- und Lesebuch für alle Stände*,) he gives a list of measured heights of land, and of uninteresting lengths and breadths, occupying no less than 191 pages. In the same work, intended "for all classes," he gives a hundred pages of Latin names of animals to be found in Germany; as, for instance, of 85 tape-worms, 54 snails—such as *Helix holosericea*, *H. Olivieri*, *leucozona*, &c. In this way school geographies are filled up with Latin names of plants and animals which the boys have never seen and probably may never see; and the author flatters himself that he puts forth an intelligent method of instruction and natural science, and good intuitional exercises.

I wrote, in 1831, a manual of general geography; in which I endeavored, as far as possible, to supply these deficiencies of my predecessors. Future writers will, in turn, supply my own.

At the same time, I published a "*Description of the Earth's Surface: an Introduction to Geography*," (*Beschreibung der Erdoberfläche: eine Vorschule der Erdkunde*,*) for beginners; and made use of it in giving instruction subsequent to that which I have already

* This was extracted from the second part of the manual.

described. In this I begin with some very simple lessons in mathematical geography, especially respecting the sphericity of the earth, the ideas of axis, pole, equator, parallel, latitude, longitude, tropics, polar circles, and zones. Then I briefly discuss maps, and show how these either represent the whole earth or parts of it; and how the degrees are marked upon them. I have found it very useful here to compare some maps with a globe. I ask such questions as, for example, What country is that, which extends from the 9th to the 21st degree of longitude, and from the 36th almost to the 44th degree of latitude? Or, In what country do the meridian of 40° and the parallel of 37° north intersect? And the pupils can put similar questions to each other.

When I have proceeded from the city-plan of Erlangen as far as to the globe, and have connected with it the instruction above mentioned in mathematical geography, I take up my "*Description*," together with the well-known and excellent maps of Sydow. In this work of mine I endeavored, as far as possible, only to deal with general subjects, and to consider together only things properly related. What I mean by this is sufficiently indicated by its opposite, as shown in the list of German mountains from Stein. I will, however, add an illustration. The description of seas* mentions five principal ones; and all others are given as dependents of these five. I consider in a similar manner the mountains, which are usually treated as if entirely isolated, and having no connection with each other. Such, for instance, is the case with the mountains surrounding the Bohemian Elbe valley; and the chain of mountains which, under various names, runs from Calabria to the Peloponnesus, and sends out a branch from Macedonia to the Black Sea.

This principle, however, appears most clearly in the case of the rivers. Under the old arrangement, when the political divisions of the earth's surface were also used in classifying the descriptions of mountains, rivers, &c., the Rhine, for example, had to be mentioned in the descriptions of no less than twenty-two countries and small states; and the student was left to put together for himself, as well as he could, a single picture of the river, out of these twenty-two scattered notices. And, again, if we are to consider as one, and in one description, not merely the whole Rhine, from its sources to the North Sea, but also all its tributaries—the Neckar, Main, and Moselle, and the smaller streams again which run into these, as the Kocher, Jaxt, Regnitz, &c., we should, in this case, mention the extent of the domains of kings and princes, but only the great domain of old King

* Not including inland lakes.

Rhine himself.* My description names the most important towns on each bank of each river: there are comparatively few important places which do not stand on a river.

This book is as brief as it could be made without making it unintelligible; with the intention of not depriving teachers who should use it of the most attractive portions of what they might themselves add to its information, such as fuller details in the character of rivers, mountains, &c.

The book, so far as it is to serve the purpose of instruction, is a description of maps; and it was necessary that these should agree with it. But, as it appeared, this was not the case, as the maps usually employed in the schools adhered to political divisions, while my "*Description*" neglected these and proceeded chiefly by mountains and rivers. It was very inconvenient, for instance, to follow out the Alps on the separate maps of Italy, Switzerland, Germany, &c., and the more so as these maps were mostly drawn to different scales. This difficulty is avoided by Sydow's maps. When the pupil has obtained, by means of these, a general view of the waters, mountains, and levels of the whole earth, he may then, for the first time, begin to use maps with political divisions. With the aid of this they may first give the boundaries of some particular country;† and then mention which of the mountains, rivers, &c., which they have been studying about, belong in whole or in part to that country. Thus, to France belong the whole of the Cevennes, the northern side of the Pyrennees, and the western of the Ardennes; of rivers, the Seine, Loire, &c., entirely, but the Rhone, Moselle, Maas, &c., only in part. Of the French cities which are important enough to be taken notice of by a beginner, most have already been mentioned in the previous study of the rivers; as Paris, Rouen, Bordeaux, Lyons, in following the course of the Seine, Garonne, and Rhone.‡

Oceans, mountains, and rivers are elements of geography which go back to a period quite beyond human history. Cities are the most ancient monuments of men. Abraham saw Damascus, and lived near Hebron; Jerusalem existed a hundred years before David; Rome is in the third thousand of its years. Whatever revolutions happen, in the course of time, to nations—their abodes, and boundaries, and dominions—cities outlive almost all changes; only a comparatively small number of large ones—such as Babylon, Persepolis, Palmyra,

* Schenkendorf calls the Rhine

"An ancient monarch, nobly born."

† They should also give its length and breadth in degrees, using at the same time the globe, which has been used, as I mentioned, in the first beginning of mathematical geography.

‡ The few other important cities, such as Marseilles, Toulon, &c., may be added at this time.

and Carthage—being quite given over to desolation. Our own country exemplifies, within a smaller space and time, the same relation of cities to history. Mentz—first Roman, then the seat of archbishops and electors, then under the French dominion, and now Bavarian; Treves and Cologne—earlier Roman towns than Mentz, afterward the seats of archbishops and spiritual electors, and now Prussian; &c.

These ancient cities, then, which have survived the changes of time, and the seas, mountains, and rivers, which existed before man, are the permanent monuments with which it is of inestimable importance that pupils should become acquainted, for the sake of all their subsequent historical studies. They will thus readily understand the geography of the ancient historians. When they see the maps of ancient Gaul, Spain, &c., they will at once recognize the Arar as the Saone, the Matrona as the Marne, the Bætis as the Guadalquivir, &c.; Rotomagus as Rouen, Lugdunum as Lyons, Cæsarea Augusta as Saragossa; Abnoba Mons as the Black Forest; &c.

The geographical instruction thus far described is either immediately concerned with actual intuition by the senses or is closely connected with it. In this way the pupils have gained a knowledge of the seas, mountains, plains, rivers, and lakes, and the most important countries, and their boundaries, mountains, rivers, and cities. It is now time to give them a brief and clear description of the various races of men, languages, religions, and forms of government.

After all this, there remains but little to say of the description of particular countries—that is, of what particularly characterizes each individual country and nation, and distinguishes it from others. Here is the first place where more detailed descriptions of the principal cities can properly be given; pictures of them being used where practicable. But nothing should be protracted too far.

In this manner, according to my view, should the foundation be laid for future geographical and historical studies. These, again, may be carried further and relieved, by the reading of good travels, newspapers, missionary reports, &c. The pupil will now find his own knowledge so confirmed that he can proceed with no further aid, if he has good maps. He will also find himself sufficiently at home in any part of the earth to understand its ancient geography.

But all this fixation and extension of geographical knowledge is chiefly gained by means of books and maps. It is only in the first commencement of it that we make use of any immediate knowledge of a very small part of the earth's surface—namely, of the pupil's place of abode, and the vicinity of it.

It may be asked whether then I have wholly given up my earlier views, above described, on the method of instructing in geography? By no means. I only convinced myself, as I have shown, that the practice of draughting the neighborhood of home, with which that method begins, was not proper for beginners. Older scholars, who have gained a knowledge of drawing, may, however, practice it with advantage. But this prosaic method, as I may call it, of observing and delineating, should always have a poetic side; it should be made useful in instructing the pupil to draw landscape from nature, and especially to gain facility in sketching.* If travels in Germany and in such other countries as are most beloved by and interesting to us Germans are the best preparatory school for understanding all the countries and people of the earth, the young must be made ready for these travels by the acquisition of such knowledge and accomplishments as will be of most service in them. But landscape drawing and architectural drawing occupy an important place among these.†

An adult person, desiring to know what further knowledge and accomplishments are useful to those who travel, would ascertain to the best advantage from reading the travels of distinguished writers, like Goethe, Humboldt, &c. The acquirements of these men are shown by what they accomplished.

Here I pause. Having thus endeavored to trace the course of geographical study from its very first rudiments, I refer, for the ultimate aims of geographical study, to what I have extracted from my dialogue on geography, already given.

* I have given my views more at large on the relation between landscape painting and map drawing in the first part of my Miscellaneous Writings, p. 29.

† Unfortunately I am no draughtsman. In order in some measure to supply this deficiency, I used, while among the Silesian mountains, to make out from elevated points a sort of panoramas, on which I entered, with the aid of a compass, the names of mountains, towns, &c., in their proper directions, putting the furthest further and the nearest nearer from my own position in the center of the paper. These panoramas frequently proved each other's correctness. If, for instance, I had laid down Mount B. south-east from Mount A., then, in drawing from Mount B., Mount A. would be north-west of it.

INSTRUCTION IN NATURAL SCIENCE.

[Translated from Raumer's "*History of Pedagogy*," for the American Journal of Education.]

INTRODUCTION.

I PRESENT here materials both new and old. I printed some essays on instruction in natural science as early as 1819 and 1822, in the first and second volumes of my "*Miscellaneous Works*," (*Vermischten Schriften*;) and in 1823 I wrote a programme "*On Instruction in Natural Science in Schools*."

Although, during an uninterrupted course of teaching since 1823, I have made new experiments, and have had occasion here and there to seek out and to open new paths, yet my original views on the subject have not substantially changed.

Even during the period of my own studies, I felt a repugnance to the usual course of this instruction. From 1805 to 1808, I heard lectures on mineralogy in Freiberg, from my never-to-be-forgotten teacher, Werner. His school has scarcely its parallel; pupils came to Freiberg from all parts of Europe, and even from Asia and America. And from that school what men have proceeded—Alexander von Humboldt, Steffens, Novalis, Schubert, Weiss, Mohs, and how many more!* Werner's oral delivery was a model of lucidity and order; and his descriptions of mineralogical species left nothing to be desired. But when he had described perhaps ten species, and had scarcely a quarter of an hour left, he would have the cases which contained these ten groups opened on the table before us. It was a very torture of Tantalus, to gaze with straining eyes at these, endeavoring in so short a time to obtain a distinct impression of the appearance of so many different species. To do this, indeed, was impossible, even for the most ardent and attentive learner; and they would have gained, not an actual knowledge of minerals, but only fragments of it, had Freiberg afforded no other means of acquiring it. But traders in minerals came there from the most distant countries, and of them the students, amongst whom some were usually quite rich, purchased. Every one had a larger or smaller collection of minerals; and they showed their treasures to each other, and talked about them, and

* While I was in Freiberg I ate at a boarding-club, which consisted, besides us Germans, of a Swiss, a Frenchman, a Roman, a Spaniard, and three Russians, one from Nertchinsk, which is near the Chinese boundary-line.

studied them together. But this was not enough. After, therefore, I had attended the lectures twice, I engaged private lessons from Werner, merely for the sake of going through his excellent collection under his direction. When, in 1811, I was appointed professor of mineralogy at Breslau, I saw that, under the circumstances of that situation, I must pursue a different course from Werner's, and must proceed as much as possible by the way of intuition, and keep the oral part of my instruction in the background, in order that my pupils might gain some actual mineralogical knowledge. For Breslau offered none of the outside assistance which was accessible at Freiberg; the academical collection being the only one from which the students could gather any information.

I shall hereafter describe the method to which I resorted. Besides the students, I had other hearers also. I offered to the rector of the Breslau Gymnasium to instruct any of his scholars who might have a special taste for mineralogy, and had the pleasure of always having some gymnasiasts under my teaching during my eight years' stay there; and my experience in Göttingen was similar.

I was transferred, in 1819, from Breslau to Halle, where I taught on the same plan, and also gave the mining pupils practical lessons, in the neighborhood, in the mode of examining mountains. In 1823 I left Halle and went to Nuremberg. Here, as instructor in a private school, I had an opportunity of instructing boys of from ten to fourteen in mineralogy, and had the use of a good collection for the purpose. I also endeavored to make my pupils acquainted with the vegetable kingdom, by the method which I shall hereafter describe.

I received my present appointment to the professorship of natural history and mineralogy at the University of Erlangen in 1827. Here I taught mineralogy to the gymnasiasts in the same manner which I had previously made use of; but to the students in a somewhat different one. Instruction in general natural history was a somewhat novel employment for me. It was evident that in this department I could not, as in mineralogy, begin with the observation of nature herself. How could this be done, for instance, in mathematical and physical geography? It was a matter of course that, as things then were, oral instruction must be the principal resource, notwithstanding that very many points might be made as clear as possible to the senses by means of exhibiting natural objects, pictures, maps, models, &c.

So much I have said by way of preface, to give the reader a general view of the course which I pursued in learning and teaching natural history; and to make it properly clear that mineralogy was my chief object.

I. DIFFICULTIES.

The teacher of natural science might well turn dizzy when he considers the vast compass of his subject, and the mental power and exertion which they demand.

Their extent is increasing daily. Where Hipparchus and Ptolemy saw 1,022 stars, Lalande and Bessel saw 50,000; where the Greeks and Romans knew 1,500 species of plants, Stendel's "*Nomenclator Botanicus*" for 1821 gave 39,684, and its second edition, in 1841, no less than 78,005, without reckoning the cryptogamia. Thus the number of botanical species has nearly doubled itself within twenty years. In zoölogy there has been a similar increase. The twelfth edition of Linnæus' "*System*" included about 6,000 animals, while Rudolf Wagner, in 1834, enumerated about 78,000. The greatest German mineralogist, Werner, who died thirty years ago, in 1837, would not now know the names of more than one-third of the species of minerals now recognized.

In physics and chemistry there has been a similar growth. This can not be so well expressed by numbers; but almost any one can recall many of their doctrines, of which nothing was known a hundred years since.

The teacher, in casting his eye over this broad ocean of knowledge, might well despair of being able to fix upon a beginning, a path to pursue, and an object to aim at, for his pupils. And this despair might well increase, on considering how far scientific training is carried in these various sciences, and what demands are made both upon pupil and teacher. In most branches of natural science—including the higher ones—mathematics holds the scepter; and to him who is not master of that study the gates of their paradise seem to be entirely closed.

II. OBJECTIONS TO NATURAL SCIENCE IN THE GYMNASIUM ANSWERED.

But these difficulties in the nature of the study are not all. Still others, raised by the adversaries of natural science, arise against its pursuit in the gymnasium; and of these we shall now speak.

Unless, say these adversaries, you propose to claim, with Jacotot, that we ought to be able to teach what we do not understand, you must admit that instruction in natural science must be given up, for the reason that there are no teachers who understand it. We answer, It is not to be denied that heretofore the incapacity in this department of many teachers has been plain enough. Without any knowledge of minerals, plants, or animals, they all lectured to the boys out of Raff's or Funke's natural history, made them commit to memory the descriptions of animals, &c., and then questioned them on them. But men always generally escape from such errors as this.

Our hopes of obtaining competent teachers of this department are increasing, because attention has of late been earnestly devoted to the purpose, and because there have been established in the universities, for those who devote themselves to mathematics and natural science, seminaries, corresponding to the philological seminaries.*

But, rejoin our opponents, even supposing that teachers of natural sciences have been trained thus, what good can they do as long as the gymnasia are destitute of the necessary means of instruction? Have you any expectation that, in times so troubled as the present, and when demands are made upon the income of the state from so many quarters, collections in natural history, physics, &c., will be given to our gymnasia? Let us be rejoiced if our universities are furnished with all these means of instruction.

Such objections as these are based upon the mistaken idea that all instruction in natural science is superficial unless it is carried to the greatest extent. For the apparatus of instruction must be richer, better, and more costly, in proportion to this extent.

But no such scope in this department is proper for the gymnasia; and that very scantiness of apparatus, of which so much complaint is made, would actually sometimes be a benefit, by constraining teachers to moderation in pursuing these studies.

To give an example:—The course in botany could be abundantly furnished for all necessary purposes from the flora of each neighborhood. No forcing-house, not an exotic plant, would be requisite in addition. Nor is any place destitute of gardens sufficient to enable the scholars to observe the growth of plants, from their first sprouting to the blossom and fruit; a study worth more than a knowledge ever so thorough of the "*Philosophia Botanica*." And, in like manner, every place has its fauna, in its domestic animals, first, and in others. It is most difficult to furnish the needed materials for mineralogy; as, in this study, crystals are required. But even here good specimens can be obtained, with very small means, of the species which occur most frequently, such as quartz, iron pyrites, lead ore, &c.† There may often be found, again, in chemical laboratories, apothecaries' shops, &c., very fine crystals, costing very little, as of alum, &c. Lastly, many gymnasia might obtain assistance from the universities, by gifts of duplicates, &c., from the overplus of the collections of the latter. From the duplicates at Breslau, I furnished small collections, at a very moderate price, to thirteen educational institutions.

But these considerations would not comfort the opponents of nat-

* Such a one was established at Bonn, in 1825; a second, in 1835, at Königsberg; and a
 † Seminary for Real Teachers," at Tübingen, in 1838.

† Particularly if small specimens are used.

ural sciences in the gymnasia; they would now come out with their real meaning—the reason of their reasons. The business of the gymnasia, they say, is properly classical education, by and for the classic authors. This requires so exclusive a devotion of all the time and powers of the student, that none can remain over for instruction in natural science. Education should not give the scholar superficially universal learning; it is better for him to learn one thing well than a heterogeneous mixture of many things badly.

This view I have already controverted in my account of Sturm and his gymnasium. This teacher, with the utmost professional skill, was led astray by the idea of our opponents. He taught Latin, and almost Latin only. Greek was next; and no instruction whatever was given in Hebrew, German, modern languages, mathematics, history, geography, natural science, or drawing. The simplification can not be pushed further, nor better managed; and yet Sturm complains of the small results obtained.

One thing well is better than many ill; but the accent should be laid on “ill,” not on “many.” In the gymnasia, many things can be taught with great success, if it is done in the right way, at the right time, and in the right proportions. And, on the other hand, a man may limit himself to one thing, and teach that ill; as, for instance, if he teaches Latin only, and that with the design of enabling his pupils to speak and write it as if it were their mother-tongue.

The universities, say our opponents again, should afford the necessary means for those who desire to become acquainted with natural science. Doubtless they should, but not for elementary scholars in that study. They furnish the means for the higher philological studies, but do not undertake to teach beginners *mensa and amo*.

It is the more proper that the gymnasia should instruct in the elements of natural science, because boys are much better adapted to those studies than youths or men. How easily and firmly do recollections of plants, animals, and minerals impress themselves upon the mind in our earlier years; and how strongly is a child inclined to make himself acquainted and familiar with every thing which surrounds him! But with the elements of Latin it is wholly different. These have no excitement for the boys. And for the very reason that the material world is so stimulating to him, and occupies him so much, is it so hard for him to busy himself exclusively with the more intellectual elements of language. Let them now be compelled in that direction which is opposed to the tendencies of their child's natures. Will not such a measure result in their becoming unnaturally warped in mind, and ultimately insensible to all the beauty of the

heavens and the earth—and to all the beauty of the classics, too? For to feel the latter there needs a training of eye and ear to elevated enjoyment.

I have mentioned that I instructed gymnasium pupils in mineralogy in Breslau and Erlangen. These usually attended at 11 A. M., at the end of their morning-lessons. It may be imagined that they came so weary as to be disinclined to attend. Very far from it; they came punctually, and of their own free will. They took hold of the study with all their hearts; and indeed showed in most cases far more disposition to like it, and clear comprehension of it, than many older than they. It was here that I learned how well the rudiments of natural science are adapted to boys, and that, when they have been working hard at their studies in language, it is a proper and natural impulse which leads them to refresh and recreate themselves by studying crystals and flowers.

A writer on natural science has required that each pupil should, at least, bring with him to the university a few thousand names in natural science—expressions being by this, of course, intended for correct ideas in natural objects. Without pretending to fix on any precise number, this at least is certain, that, to students possessed of such a supply, lectures could be delivered of a kind very different from those which must now be delivered—lectures which would deal with generalized views, and would treat profoundly of their subjects. The gymnasias must bear the blame of the fact that the universities have to instruct in the very A B C of natural science. If it be asked in what classes of the gymnasium (including the Latin schools) instruction in the natural sciences should be given, I reply, In the lower and lowest; for experience has shown me that the younger boys are capable of retaining ideas of minerals, plants, and animals as well as, and usually even better, than youths.* And these beginners in Latin, whose school-life is all effort and labor, need something in the nature of refreshment more than any other scholars. It is not until they comprehend the classic authors that they find a pleasure in their studies in language.

But teachers in languages are apprehensive that adequate instruction in natural science will render their boys averse to the former study, not to mention the time that would be occupied. Experience has, however, convinced me of the opposite. Those pupils who distinguished themselves in my mineralogical classes were also among the foremost in the gymnasium.

* The case is different with those departments of natural science which require mathematical knowledge, and do not so much depend upon the intuition of the senses. These—mathematical geography, for instance—should only be taught in the higher classes.

The fear that the study of natural science will render the pupils averse to that of languages can have no substantial basis, except when it is made a mere superficial diversion, instead of a serious and thorough study. In this latter case it does not seek merely an unintelligent communion of the senses with the material world, but the development of words, as an intellectual blood, from silent examination; an adequate translation of intuition into words. In this way it has the greatest influence upon thorough cultivation in the mother-tongue; a cultivation which proceeds from things themselves. And, as the poet says, the mother language is the mother of languages; what is useful for the former is indirectly favorable to the acquisition of the others.

I have even seen cases where the study of natural science first awoke a real liking and capacity for language. Things which the beginner at first sees corporeally, singly, which it is difficult for him to comprehend and to survey to his satisfaction, have afterward, under the dominion of the senses and the understanding, and by means of language, become arranged together, connected, describable, in short thoroughly understood. One name describes innumerable individual substances; and the natural philosopher sets down upon a few pages, briefly and clearly, the result of many years' investigations. The student feels doubly the magic power of words for having first felt the resisting power of the material world; and he experiences a pleasure as if, after a long and wearisome journey on foot, he should suddenly receive wings, and ascend easily and swiftly into the heights of the air, looking down upon the long, weary way over which he had before been traveling.

But the thorough mastery of one subject of study trains the student to thoroughness in others, even the most different. If he has acquired, by his studies in natural science, a clear, definite, and sure view and comprehension of the creation, and a corresponding power of expression, he will afterward acquire similar clear and definite conceptions as to language, and will learn to speak and write clearly and definitely on whatever subject he understands.

The influence of natural science will be especially valuable upon the study of history. The former pursuit requires, unconditionally humble and self-denying views of the material world, and treats as absurd that silly or proud obstinacy which would lay down narrow limitations, and then confine nature within them; and thus it educates the mind to the habit of forming clear and undistorted views of things. And a mind thus trained becomes capable of ready and correct views of men and human life. It can recognize, in minerals and plants, and in men also, a fixed and unvarying plan; and all disfigure-

ments or distortions, for the sake of aiding any superficial theories, will be painful to it.

It is common, in gymnasia, to give only one, or at most two, hours' recitation a week to studies not reckoned as important as those we have been discussing—as geography, for instance; and this plan is often carried through three or four years, in successive classes. This, it seems to me, is an unfortunate method. It occasions those studies to be esteemed mere side-studies, of which a less thorough knowledge will serve. The pupil is sure to see this, and governs himself accordingly. If he receives, for instance, twelve hours' instruction a week in Latin and but two in geography, he not only estimates that the value of Latin is to that of geography as twelve to two, but he takes less pains in studying his geography, because his teacher is less strict in his requirements in it. And his examination and testimonials will only confirm his views on this point. But no pupil should esteem any thing which is taught him a secondary study.

Instead, therefore, of creeping along in this spiritless manner through several classes, at the rate of one or two hours a week, it would be much better to devote as much as four hours a week to the study during a year, and then to stop. Natural science, for instance, might be studied for one year at four hours a week, and geography in its place the next year; and so on. This plan would give the pupils a liking for the study, as they would feel that it had some life in it; whereas, the other mode would render it tedious and long protracted, and would afford them no pleasure at all, and least of all that of thorough learning and investigation.

If the boys have, in the under classes, got the ideas of minerals and plants well impressed on their minds, there need be no fear that they will forget them. These ideas may perhaps pass a little out of fresh remembrance; but, in the second grade of the study, at the university, they will soon return again. The student will not then have to work up his lessons with a botanical hand-book, by means of laborious comparison of descriptions; he will at once know that this flower is a daisy and that a dandelion, because he has always known it from a boy. He will not have to learn what the flower is, but only its Latin scientific name; and thus he can bring to the more comprehensive and profound investigation of the vegetable world eyes and understanding already trained.

III. EXTENT OF ACQUIREMENT.

I allude once more to the perplexity and doubts which, in view of the extent and depth of the natural sciences, must annoy the teacher who does not know how and where to begin, toward what end to

look, and what way to pursue. I have already in part shown how these difficulties may be overcome.

But the question to answer here is, whether knowledge of nature, and pleasure in it, are the exclusive privilege of the learned by profession; and, further, of that portion of them who have reached the highest point of learning? Are there not degrees in knowledge; and can not even the beginner find pleasure in the truth of that degree to which he has attained, if it be really truth? The teacher need not trouble himself about the 78,000 species of plants, nor the difficulty of classing the gramineous and umbelliferous plants. Let him take pleasure in his success, if his pupils have become acquainted with a few hundred characteristic plants, and have studied closely the growth of a few of them from their first sprouting to the ripening of their seeds.

Similar principles are true in the other departments of natural history. Most of my scholars in mineralogy have been able to devote to it but one half-year. My task was, to determine what they could learn within this time—not half-way and dimly, but wholly, clearly, and surely; and thus I dared not fix my limit at too great a distance. Where I did fix it will hereafter appear. At present I will only say that my best pupils acquired a satisfactory acquaintance with the most important, simple, and clear species of minerals,* and a clear perception, derived from actual observation, of the consistent laws which prevail throughout them. It is a consideration which may console the teacher of natural science, for the low degree of knowledge reached by his pupils, that even the greatest masters, who have attained to the highest point of learning, have confessed, with ingenuous humility, how much was that of which they were ignorant.†

IV. BEGINNING.

“We have but little solicitude,” I think I hear some say, “for the more or less of knowledge of nature which our pupils shall attain, but much about our own ignorance where and how to begin instructing in it. For we are convinced that eminent men have fallen into error on this point.”

The difficulty of adopting the right mode of beginning occurred to me when, twenty-five years ago, I undertook to give practical instruction in studying mountainous countries to the Prussian mining pupils; and induced me to write the following considerations upon the commencement of geognostic studies.

I will now state the method which, in my opinion, the student should follow.

* Such as fluor spar, lead glance, iron pyrites, garnet, &c.

† This is an expression which has a very different meaning in the mouth of the master and in that of the scholar.

He should first examine, in all directions, the neighborhood of his residence, and should make himself so thoroughly acquainted with it that he can call it up before his mind whenever he chooses. Such an acquaintance is the result of the unconscious and fresh pleasure which youth, joyful and free from scientific anxieties, will find for itself in such an examination, obtaining in this artless way a simple general impression of the vicinity, not forced upon him artificially by a teacher. He is not teased, while he is rejoicing in the blue heavens and the rapid motions of the clouds, in the oak woods and flowery meadows, where the butterflies play, by a professor with a kyanometer, to measure the blue of the sky with, nor by a recommendation not to stare into the woods, but rather to ascertain whether the oaks are *Quercus robur* or *Quercus pedunculata*; or, not to look at the flowers in the meadow all at once, as if they were a yellow carpet, but to take his Linnæus and determine the species of this ranunculus. No entomologist is setting him to chase butterflies and impale them. Neither is the youth, when inspired to devotion by the snowy Alps, glittering in moonlight, like so many spiritual, silvery forms of giants, annoyed by a geologist talking to him of granite, gneiss, and limestone, or of the junction and inclination of strata. The young enjoy the heavens and the earth as a susceptible painter or an ingenuous poet does. In this first paradisaic pleasure is planted the seed of the perception of an intellectual world, whose secrets will not be fully ascertained and understood even after the longest and most active life of scientific effort. But most teachers, by the dispersion of these simple impressions of nature, forcibly destroy these earliest pleasures of children, the brightness of the imaginary world which they see. Even the great Pestalozzi falls into an error on this point, when he says that "It is not in the woods or meadows that the child should be put, to become acquainted with trees and plants. They do not there stand in the order best calculated to display the characters of the different families, &c." That is, we ought to take the child into a botanic garden, arranged on the Linnæan system, so that he may study plants in the order of their species. To me this seems like saying that the child ought not to hear a symphony, because that would be a mere chaos of sounds to him; he should rather have played to him, first, the first violin part, then the second, then the parts for the bass viols, the flutes, clarionets, trumpets, &c. It is true that in this way he would hear the separate parts, but not the bond of thought which makes them a symphony. Jahn was much more judicious in his gymnastic walks, when he said, not "we are going botanizing, geologizing, or entomologizing," but merely, "we are going to walk." How much more naturally do our youth, when the

bird-of-passage instinct seizes them at the university, wander through the father-land and rejoice in its grandeur, and lay it deeply to heart, without any idea of a premature, and painful, and usually repulsive studying of any particular subject. I hate this analyzing and lifeless elementarizing of the first youthful impressions of nature—this foolish, superficial, heartless, frivolous directing of the understanding prematurely out of its natural path—which is so sure to chill the youthful heart and render it old before its time. The utmost attainments of a mind thus trained must be—unless aided by remarkable natural qualities—to observe with the bodily eye; to use the reason, but not with pleasure; to derive mere lifeless ideas from creation; and to represent the objects thus conceived in equally lifeless descriptions, like the ghastly wax figures which afford a repulsive imitation of living men.

There is, however, a mode of learning intelligently, which is not chilling, but thoroughly genial and appropriate. But, it should be observed, the mode of instruction just described has a diametrical opposite in that whose advocates despise the adult reason, and would constrain themselves to remain children always—to feel, and only to feel. Among these advocates are prominent the numerous disgusting, pitiful poetasters of our time, who undertake to deal with nature in so remarkably childlike a manner. Their false simplicity and innocence is to real childlike innocence what a French actress, who plays the smart chambermaid, is to a truly noble young damsel. He who feels himself a man should endeavor in manly wise to understand and represent nature with as deep poetic feeling, and as gigantic understanding, as that which Shakspeare used in delineating men and life. But I return to my subject.

If the first mental growth of the young is watched over in holy quiet, the results of the mode of training which I recommend, how prosaic soever they may appear, will not be prosaic. The recollection of youthful devotional premonitions will become a hope of realizing them, and will enliven, strengthen, and inspire every effort. After you have enjoyed the unmingled, complete, rich pleasure of a full symphony, you willingly undertake the wearisome labor of becoming familiar with each part of it; for each is to you not a dead thing, but a living portion of the whole symphony, whose collective remembrance lives in your soul. And if now, knowing all the separate parts, you hear the symphony again, you hear with pleasure both each separate part and the united sound of all; and your apprehension of the whole symphony, previously simple and obscure, develops and becomes clear.

In a similar manner the learner proceeds, from passively offering himself to receive impressions, from an artless susceptibility to the

collective impression produced by the locality examined, to an active effort to distinguish this impression into its component parts. The great compound picture of the district about him divides into innumerable little ones, of towns, men, animals, trees, flowers, and in like manner do the mountains—for instance, their minerals, and their structure.

What has been said of the method of geognostic study, both of its rudiments and of its ultimate purpose, is applicable, as we shall see, to other branches of natural science.

V. SCIENCE AND ART.

“As the susceptible painter, the ingenuous poet, rejoice in the heavens and the earth, so does the youthful heart.” And, I may add, the future geognosist. But, it will be asked, does this laborious and prosaic workman proceed from the same initial point of education as the passionate and delicate painter? I answer, decidedly, Yes; and, I add, other departments of art begin, in like manner, coincidentally with other departments of science. If a boy loves flowers, he may become equally a botanist or a flower-painter. The celebrated painter of animals, Paul Potter, the author of “*Reynard the Fox*,” as well as the great zoölogist, Cuvier, all, as boys, took delight in animals, and had an eye susceptible to them. A liking for beautiful mathematical bodies may characterize a future mineralogist, or mathematician, or architect. Susceptibility to colors indicates a future painter or a future optician; and an ear for music, either a musician or an acoustician. Nor do the different roads of the artists and naturalists, who proceed from the same point, ever become entirely separate. Michael Angelo was a great anatomist; Durer wrote on perspective, and on the relations of the human body; Otto Philip Runge constructed a theory of colors. Goethe sang of flowers, and wrote his valuable “*Metamorphoses of Plants* ;” he had an eye seldom equaled for the beauty of mountains, and he both observed and described them in a masterly manner, according to their geognostic character. A man who is endowed with susceptibility to beauty, and the artist’s power of representation, and also with clear and energetic thought, will produce scientific works containing beauty, and artistic works of profound thought. It is not only true that we find united, in extraordinary men, great capacity both for science and art, and that the first rudiments of scientific and artistic training are frequently the same, but we see that many arts need the aid of science, and many sciences of the arts. The architect must understand mechanics; the painter, perspective, anatomy, and the chemistry of colors: botany and zoölogy require good pictures of plants and animals; and mineralogy, clear and accurate drawings of crystals.

Science seeks principally truth; but art, beauty. While the botanist endeavors to establish as correctly and completely as possible the idea of the species Rose, the painter tries to present his ideal of a *Rosa centifolia*; and the poet leads us, through the gardens of poetry, to roses of unimaginable beauty. While the Greek sculptor carved the Lions of St. Mark, Cuvier gave us an excellent description of the king of beasts. From the school of Werner came scientific works on mineralogy and mining, and likewise the miners' songs of Novalis.

I have lengthened this discussion, in order to bring out a pedagogical rule to which I have already referred in speaking of teaching geognosy. It is, to have constant reference, not only at the beginning but throughout all the course of instruction in natural science, to the beauty of God's works; to cultivate the pupils' susceptibility to this beauty; and to develop, along with the receptive faculty, however directed, the power of representing as perfectly as possible the thing seen: so that, for example, the boys shall learn not only to examine and recognize plants and crystals but to draw them. It is more necessary to refer to this, because the beauty of which I speak is so wholly indifferent to so many teachers. They make no endeavor to learn whether their pupils take such pleasure in flowers, and examine them with the same penetrating attention that a flower-painter uses. They rather make their tyros analyze them, pull them to pieces, physically and mentally count their anthers and pistils, &c. Before the boys have even gained a thorough and familiar idea of the flower, they are made to endeavor to get an idea of its species in this destructive manner.

Especial haste is used, in those departments of natural science which are based on mathematics, in proceeding from observation by the senses to abstract mathematical theory. It is no wonder that this is the case in our day, when atomistics and mechanics, in a mathematical form, are every where forcing themselves forward, and where so many are seeking after mere bare truth only, without any reference at all to beauty.

VI. MATHEMATICAL AND ELEMENTARY INSTRUCTION IN NATURAL SCIENCE.

Mathematics are the root and blood of a knowledge of the laws of nature and of art.* It reveals the laws of crystallization and of chemical unions; the number of petals and of anthers; the figure, size, and motions of the stars. It is the soul of the firmness of mighty cathedrals, of harmony in music; it gives the painter proportion and

* "The form was in the archetype before it was in the work; in the divine mind before it was in the creature."—Kepler, "*Harmon. Mundi*," I.

grouping, and lives in the hexameters of Homer and the choral measures of the tragedians.

But can we for such reasons, when instruction is required in music, drawing, &c., answer, Yes! we teach mathematics, and shall thus at least indirectly prepare the pupil for the studies which you wish? By no means; and as little would it serve where instruction in natural science is required. These considerations lead to the very important question of the relations between mathematical instruction and instruction in drawing, music, natural science, &c. On this point there are two opposite opinions; one of which would place mathematics at the beginning of the courses, and the other at the end.

In support of the former of these doctrines, it may be said, "If we grant that mathematics form the theory of laws of nature and art, what could be more appropriate than to begin with it? When the scholars have gained a thorough acquaintance with pure mathematics, they thus become capable of easily mastering any natural science, or of acquiring knowledge and skill in the arts. In the pure mathematics is the point for setting the lever which will move the world; it is the center from which light radiates to innumerable points on the circumference—to innumerable sciences and arts. Should the teacher rather choose to select from their multitude one point or a few, and thence seek to reach the center?"

This view is plausible, but untenable.

The history of the arts and sciences is opposed to the idea of beginning with instruction in pure mathematics. The course of development of the human race has not confirmed its propriety, either. The fact was not that minds of a purely speculative character, operating entirely within themselves, developed pure mathematical truth, which others afterward applied to nature and art. In this sense, there have been almost no applied mathematics. The truth is, that a gradual and deliberate apprehension of purely mathematical relations has developed in such departments as music, surveying, architecture, drawing, astronomy, geology, &c.,* from a beginning of purely material conceptions, yet guided by the principles of mathematics, hidden within them as a human instinct. From this heterogeneous world of phenomena its common elementary spirit, the spirit of pure mathematics, arose subsequently. This succession of the sciences can not be too carefully remembered, for every scholar has to go through one more or less similar.

It is also a great error to believe that a person thoroughly grounded

* How completely new is the world of beautiful inter-related mathematical bodies which has arisen from the investigations into natural crystals, and how utterly were the great early mathematicians without an *a priori* knowledge of it!

in pure mathematics is thus fully prepared for all the arts and sciences which are based on mathematics—that he can juggle with them by means of his formulas. Is it supposed that one who has learned general bass—the mathematical basis of music—has by that means trained his feelings and his ear? Does knowledge of perspective make a painter; or of metrics, a poet? Is one who knows how to calculate a crystal a mineralogist?

On the contrary, the reason, during those years when it is dormant, but the senses are active and hungry, is powerfully stimulated by pure mathematics, and developed at the expense of the senses. The boy, under an unnatural mental excitement, and thrown into this wholly subjective train of thought—this activity of the reason exclusively within itself—loses his quiet, peaceful, and natural bodily sensitiveness to the material creation. He will even, in time, lose the humility with which he sought after the laws of God's world, with self-sacrifice and sincere industry, and with which he felt a pious joy in discovering them; and he imperceptibly becomes a scientific egoist, having no feeling for faith in any thing except in his own mind and mental labor; and who, even if he discovers a natural law, can only rejoice in it as in the child of his own intellect—as if he were a law-giver to the creation. I am not exaggerating. Only consider any one of many trained naturalists, who have been educated in this way, whether they are not such as I have said.

If, now, we would preserve a natural and proper susceptibility to nature in our pupils—if we would protect them against such a premature and bald forcing of the growth of the understanding—we must permit them to begin their studies with the natural and easy observation and practice of youth; and gradually bring them forward from this to a properly pure mathematical mode of investigating and training.

Mathematical instruction, too early put in the place of physical observation of nature, is so far from compensating for it that it is injurious to it. Bacon's observation is here eminently in point: "Mathematics should terminate the study of natural philosophy; it should not introduce or create it."*

VII. INSTRUCTION IN MINERALOGY.

With Werner opened a new era not only in the science of mineralogy but also in the method of instructing it. Before him, scientific mineralogy was scarcely known; or the thorough knowledge, description, or classification of minerals. Naturalists were satisfied with un-

* What has here been said will be illustrated by subsequent examples. Further details will be found in the chapter on Geometry.

derstanding and teaching such of their peculiarities as were most obvious. Gold, they said, is yellow, bright, and heavy. But these same terms might be used to describe copper pyrites, or iron pyrites—as in Messing. Werner perceived how defective were such descriptions; and how far they were from being sufficient to describe the peculiarities of a mineral or a species—and still more to distinguish with entire certainty one mineral, or one species, from another.* He believed that not merely this or that prominent characteristic of a mineral, but all of its characteristics, the most obvious and the most recondite alike, should be understood and expressed. It was in this belief that he wrote his "*Theory of External Characteristics*," (*Lehre von den Äussern Kennzeichen*.)† What he here aimed at was, in fact, an exhaustive statement of the sensible characteristics of minerals; though all that he stated himself to seek was the best, fittest, and most invariable expressions for their characters, their species, and their grades. The motto of his book was "Be not facile in choice of words; in order that you may agree in things." And he arranged these characteristics in a definite and well-adjusted order.

In describing all the peculiarities of a mineral, he paid all his attention to the order, clear comprehension, and expression of its external characteristics. He endeavored to set forth in words the whole of the peculiarities of the mineral, in the most correct manner, so that his description should fully state the elements of the whole impression made by the mineral upon the senses.

In a similar manner he described a species of minerals; but with this difference, that, whereas the single stone has one definite color, one definite mode of crystallization, &c., the species to which it belongs usually includes a variety of related colors and crystals, which must be described.

Not to enlarge upon the brief general theory of classification with which Werner began, he commenced his mineralogical lectures proper with instruction in the external marks. This was followed by a description of the species closely connected with it, and by a rapid exhibition of the groups described. His oral lecture, which was of great value in itself, was the prominent feature; and the actual display of the groups of minerals was quite subordinate.

"Words are good," says Goethe, "but not best." This was true in the present case. I have already mentioned how we strove in vain not to be confined to a mere description of the minerals, but to ob-

* It is this defectiveness in descriptions which leaves us so often at a loss to know what mineral the early writers—Pliny, for instance—meant by any given name.

† This work appeared in 1774, and was translated into various languages. Werner was twenty-four when he wrote it.

tain a knowledge of the minerals themselves; and how it was chiefly this unpleasant experience at Werner's lectures which afterward caused me to work out another quite opposite method in teaching mineralogy.

It seems to me the natural way of beginning, to let the pupil first examine the mineral, without at the time enlightening him with any oral explanation whatever. In this way he receives a first simple impression on the senses. If this impression is remembered, he may then be told the names of the minerals examined.*

It is important to begin with instructing in external characteristics, because this instruction communicates the results of the most thorough analysis of the general idea into its constituents. It would be wrong to begin by making the pupil observe in one mineral the weight alone, in another only the color or only the hardness; for such a method would break up the quiet, thoughtful, receptive mood proper to obtain an apprehension of the total idea.

But after having mastered this total idea of the mineral, the pupil must, especially if he desires to compare it with similar minerals, and to distinguish it from them, reduce this idea to its constituent peculiarities, even to the varying modifications of these peculiarities. For instance, on comparing gold with iron pyrites he will find both yellow; but there is a great difference between the pure, clear yellow of gold, and the pale whitish of the pyrites. He finds gold to be soft and malleable, while the brittle pyrites will give off to steel abundant sparks, large and smelling of sulphur, &c.

Thus, by a careful comparison of the separate peculiarities of both minerals, their great difference will clearly appear; whereas, without such a process, only an indistinct notion of them would be had. Indeed, there are many minerals of which the general idea would lead into great errors without a closer analysis of their qualities. Thus, the student would be much more likely to class a beautiful yellow polished crystal along with the topaz than to rank it as similar to a piece of insignificant, opaque, homely, white quartz, though the latter is its proper place.

Werner's theory of external marks is very simple, and quite sufficient to enable mining officials to deal with the minerals which they are likely to meet with. These officers can not go into delicate investigations. For example, the purely scientific mineralogist determines the specific gravity of a mineral by means of a fine balance. The specific gravity of water is taken as the unit, and that of the mineral is reckoned from it, and carried out to three or four decimal

* The commencement of mineralogical instruction is entirely like that of geognosy and botany; in every case, a vivid and permanent impression should be had of the total idea before any analysis of it.

places. The specific gravity of water being thus 1,000, that of gold is 19,258. The miner can not usually attempt so accurate a determination; but he can make that which Werner gives. He makes five grades of specific gravity; and very judiciously taught his pupils to determine these, without balances, by poisoning the substance in the hand. He required them to be able to say only "Gold belongs among the extraordinarily heavy minerals;"* not that "its specific gravity is 19,258."

What Werner did not require from mining officers we can still less require of new beginners in mineralogy; they must first learn to estimate specific gravities by the hand.

Werner's mode of dealing with other points was similar. He treated his subject exhaustively, but was very far from giving a delicately accurate physical description of every separate item; nor will he be found to furnish a mathematically developed crystallography.†

As crystallization is one of the most important, if not the most important, characteristics of a mineral, I shall devote a little space to it.

The angles of crystals are mathematically true and unvarying; but the size of the side varies infinitely, without affecting the angles. Thus, for instance, we seldom find a cubic crystal with six equal sides; but the right angles of its sides and corners are invariable.‡

The beginner will find his study of the polyhedral crystals much perplexed by these variations of the size of the surfaces; and, to assist him, he is usually furnished with models, in which the corresponding sides are made equal. His model for the cube, for instance, has six equal squares; that of the octahedron, eight equal and equilateral triangles.

Above all, the beginner should be drilled in the recognition of crystals by the eye; and his perceptions of their beautiful symmetry, and of the various relations connected with this symmetry, should be trained.

I can not here set forth the details of the method which I should recommend in teaching mineralogy.§ I shall only observe, in general, that the teacher must be careful not to carry the pupil too soon from the use of his senses to the mathematical part of his study.||

* This class includes minerals whose specific gravity is over 6,000.

† It is not meant that the teacher ought to restrict himself entirely to Werner's theory of the external marks; there are many points (in crystallography especially) which must be made more clear and definite than he made them. But, like Werner, the teacher must never lose sight of the elementary attitude.

‡ More will hereafter be said on this point.

§ On this point I refer to the chapter on Geometry, and to my "*A B C-Book of Crystallography*," (*A B C-Buch der Krystallkunde*.)

|| What here follows may be used as additional to what was said above of the relation between mathematical and elementary instruction in natural science.

It is enough for the beginner to know that the cube has six sides, twelve edges, and eight corners. But that the edge, that the diagonal of a side, and the axis of the crystal, are to each other as the square roots of 1, 2, and 3, is a fact with which he has no business; nor has it any thing to do with the recognition of natural crystals. Nor need he be given the use of certain mathematical aids. He should describe the twelve edges of a cube standing on a horizontal surface thus: four horizontal edges above, four below, and four vertical ones. But he should not say, out of Euclid, "There are six quadrilateral surfaces, and the cube has therefore $6 \times 4 \div 2 = 12$ edges. That such a calculation does not afford a full description of its form appears from crystals, whose surfaces consist of equal numbers of sides, but not of sides of the same form. Vesuvianite, [*das Leuzitæder*,] for instance, has a surface of twenty-four trapeziums, and therefore $24 \times 4 \div 2 = 48$ edges; but twenty-four of these are entirely different from the other twenty-four.

A beginner, if he understands subtraction, can by another formula ascertain very easily the number of angles of a body, of which he has not the slightest knowledge through his senses. This is, that the number of angles of a body equals that of its edges, diminished by that of its surfaces less two.* If, therefore, I tell the beginner that a certain body has 540 edges and 182 surfaces, he can instantly say by his formula that it has $540 - 180 = 360$ angles. But, if I give him the body itself, he is not in the least able to form such an idea of it as to determine that some of its angles are formed from six surfaces, &c. He may perhaps not even be able to state, without first reasoning with himself, how many surfaces, edges, and angles there are in a cube. In short, his formula serves him, according to the familiar German proverb, as an asses' bridge. He neither understands it nor what he discovers by its means; and the readiness with which he ascertains results by its use hinders him from strenuous labors to discover the right thing in the right way.

But how, is the next question, shall the pupil learn to analyze the external marks of minerals—to consider the mineral with reference to each individual characteristic? I reply: The best introduction to this knowledge is to take him through a collection arranged by external marks; in which each group, as far as possible, shall lie before him in the order of its colors, crystallization, &c. The teacher will need to give but very little aid—only to put into words what the pupil sees, or to require the more advanced pupils to do it themselves.

* $A = E - (S - 2)$. From this, E or S can be determined, if the number of angles and surfaces, or of edges and angles, is given.

This investigation of the collection should follow the general theory of external marks; which is indeed only an arrangement of the characteristics which the pupil has learned to know from the examination of single species.* When the pupil has in this way attained a moderate degree of skill, in the objects and technics of the study, then, and not before, he is prepared to read mineralogies. Where the mineralogical author has translated minerals and species into words, a pupil thus trained can translate the words back again into minerals. Every word is to him a living incantation, which awakes the slumbering ideas previously impressed upon his mind.

But, in order that each word may awaken the corresponding conception in the mind, all ambiguity must, as we have already shown, be avoided, and only one fixed term be used for each mineral and each characteristic. This was what Werner meant by his "Be not facile in choice of words, in order that you may agree in things." And the converse is true: Be not facile in selecting things, in order that you may agree in words. To understand words is only possible when things are understood. The utmost definiteness in terms, the most accurate expression, will be useless to the scholar, unless the most definite corresponding impressions exist in his mind, to be called up again by those expressions—by words. "No description," says Forster, in his "*Views on the Lower Rhine*," (*Ansichten vom Niederrhein*), "will convey to another what my own eyes have received directly from the object, unless he has something with which to compare that object. The botanist may describe to you a rose with the most appropriate terms of his science, may name all its parts even to the smallest, may state their relative size, form, position, substance, surface, and coloring—in short, he may give you such a description as, if you had the rose before you, would leave nothing to desire—and yet it would be impossible, if you had never seen a rose, for him thus to call up an image of it which should correspond with the original. No painter would dare undertake to paint from description a flower which he had never seen. But take but a single look, one single observation with the senses, and its image is indelibly imprinted upon the mind." Can any one doubt whether Forster is right, or that learned man who flattered himself that he had so perfectly described a certain cabinet of antiquities that it might safely be entirely destroyed, because a skillful sculptor could completely restore it from his description? If Forster is right, which I do not doubt, then it must needs be admitted that the endeavor is utterly foolish to teach a knowledge of minerals by mere oral instruction and reading of books.

* For further details on this point see Appendix II.

I have thus endeavored to describe the method of my instructions in mineralogy, and its reasons; and to show how the pupil may be gradually carried onward, from his first silent and simple observation of nature, to a full and intelligent comprehension and description of minerals and all their peculiarities.* It remains to offer some observations on the traits of pupils.

VIII. CHARACTERISTICS OF PUPILS.

There is a universal method of instruction, applicable to all pupils, and based upon the nature of its subject, which is the same for all pupils, and upon the universal qualities of human character. I have hitherto discussed this method, which was that followed by me in teaching mineralogy.

It is usually thought that he who is master of a department of study is a qualified teacher of it; too little regard being had to his knowledge of his pupils. And thus many teachers are deficient in an understanding of the universal relation that exists between the pupil and the study, and in the skill in teaching which depends upon that understanding—the universal method.

I soon learned, however, not usually instructing by the ordinary method of lectures, how little there is in common in mineralogical instruction and in the universal method. I found pupils of so distinctly different and even opposite characters that I saw plainly that it was impossible to instruct them all in the same way. And the longer I taught the more I felt the necessity of studying the peculiarities of pupils with the same attention which is usually devoted only to the subject of instruction; that the teacher of natural history should be able to draw up as good a monograph upon single scholars as upon single species. But in order to pay attention to each individual pupil, and to be able to instruct him in a proper manner, the teacher must be such a master of his subject that no difficulty will arise to embarrass him while he is teaching. In this mode of regarding each single pupil I have had many experiences, bad and good; of which I will here mention a few.

And, first, the bad ones.

Complaints are made of inactive muscles, of weak arms, shoulders, and legs; but much more complaint should be made of imperfect senses, and especially of eyes dulled almost to entire insensibility. This I have found, to my sorrow, in many pupils, particularly the older ones. And no wonder. Brought up in the city, among books, their eyes were directed to almost nothing except reading and writing,

*It is only after having reached this point that they should take up mineralogical chemistry.

a sad and grievous slavery, in which the unfortunate senses were left almost destitute of any pleasure, stimulus, or refreshment, and without any cultivation by use. The eyes of the younger pupils were more active, because they had not been so long in slavery. There were however some exceptions among the older ones, in the cases of those whose early experience had obliged them to use their eyes; as in some miners and smelters, young people from the country, and a painter's son.

This dullness of eye was partly bodily, but chiefly mental. It was only very gradually that the torpid bodily senses grew more acute, and that the active reciprocal stimulating influence between mind and senses, so long disused, was re-established. What made this re-establishment specially difficult was the fact that most of them, brought up under oral instruction on all subjects whatever, partook of the prevailing belief that every thing in the world could be communicated orally, even mineralogy; and that therefore there was no need whatever for a direct observation of nature by the senses. They were in despair at any attempt to induce them to make such observations; and intimated that their teacher was pre-eminently endowed for that purpose by nature, and that it would be far wiser for him to tell them what his good, well-trained eyes saw in the minerals than to try to make them see, with their incapable and untaught eyes. There were but few of them whom I could make understand why mere oral lectures were useless in this pursuit; and I succeeded but with a few, who were practicing bodily exercises. I said to them that they needed to exercise their eyes in this study, as much as they did their arms and legs in their gymnastics; and that they might as well expect to learn to run and leap by attending lectures on Jahn's Gymnastics as to become acquainted with minerals by lectures on them. This made the case clear to these few.

Again, there was another class of pupils with whom I had great difficulty in being understood. This new requirement, to use their torpid eyes, and to examine the minerals attentively and quietly, seemed very extraordinary to them. It was as if I was making them read a book in a foreign language, which I could translate, and which, out of obstinacy, I would not. Innumerable questions betrayed their thoughts. I ought at least to tell them the names, before they examined the minerals. And when I replied, that those pupils who gained clear and definite ideas of the appearance of the minerals, without knowing their names, would please me infinitely more than those who should remember their names without their appearance, they did not understand me; for they had usually been accustomed, in their study of geography, history, &c., to satisfy their teacher with

the emptiest memorization of names. I had the most trouble with some grown-up persons, whose powers of thought had been un- naturally stimulated, and who had thus lost that quiet mood of mind which is indispensable for enjoying the benefit of a real thorough and intelligent receptivity. They were incessantly interrupted and diverted by notions that occurred to them—the untimely misconceptions of a cursory, superficial mode of observation.

But this will suffice for these unfortunate experiences; which I do not lay to the account of my pupils, but which were the necessary outgrowth of the period. I am the less disposed to blame my pupils for these things because I myself, when a scholar, had the same experience, even sometimes to a greater degree. I was even earlier in my conviction that every thing could be learned out of a book; and in feeling the same despair at being set to use my eyes. During subsequent years, especially, I have enjoyed a large overplus of pleasant experiences, even with pupils who were at first exceedingly awkward. If the visual powers are once awakened, if the least mutual stimulation is awakened between the senses and the mind, the susceptibilities of the mind and the senses increase with every day.

It appears, from what has been said, that every pupil develops himself in his own peculiar manner. Some of them were lucid, intelligent, prompt, appropriate, definite, and certain in answering; while others were more inclined to feeling, quiet and withdrawn within themselves, slower to understand and later in attaining power of expression.

Some seemed to have equal talents for every thing; while others were inclined in some one direction. Some, particularly, seemed to have a remarkable susceptibility to color and luster, but to be quite wanting in perception of form; while others were precisely the contrary, having an acute eye for form, but being deficient in feeling for luster or color. These last were often inclined to proceed quickly from actual observation of objects to mathematical treatment of them; some even carrying this tendency so far as to begin it altogether prematurely, and as to be entirely indifferent whether an octahedron was the most beautiful diamond, or a wooden one. In this way they forgot the most important consideration for them; namely, that they were dealing with the marvelous creations of God, not with the mere thoughts of men.

The active and sensitive eyes of those who had a feeling for color and luster, on the contrary, became gradually educated to a full apprehension of the crystals, in all the beauty of their forms and modifications. They also comprehended the mathematical laws of these

forms, so far as they could be deduced immediately from actual observation of them; but showed a want of facility in mastering the pure mathematics of the subject, and a dislike for it.

Some pupils showed similar tendencies toward particular groups of minerals, and dislikes for others; and they mastered more easily a knowledge of those they liked, even when they seemed, to one free from any prepossession on the subject, much more difficult than the others.

These and other peculiarities of pupils, which I can not fully describe without giving an account of each individual pupil, became the cause of my opinion that teaching exclusively in one general method is quite impossible.

IX. INSTRUCTION IN BOTANY.

In the private school at Nuremberg, where I instructed for three years, I also taught botany. The plants used were found in the neighborhood of the city, or in the garden of the institution. The most common garden-plants, as being best known and most useful, were made most prominent—as domestic animals were in zoölogy. When the boys returned from their excursions, the plants they had collected were laid fresh together on a table, examined, and named. At the end of the lesson, each pupil entered the names on a paper, and afterward in a book, divided as follows:—

TIME.	NAME.	PLACE.	REMARKS.
May.	Granulous Saxifrage.	Mögeldorf.	Has a granulated root.

The pupils might write under "Remarks" whatever they chose; and each, of course, inserted what had struck him most in looking at the plant. I have already observed that I considered it a very great error to require from beginners a complete and exhaustive description; inasmuch as this must be based upon a previous analysis of a total conception, which they have not yet attained.

These registers of plants served afterward as botanical calendars, from which could be seen where and at what time certain plants could be found; as, saxifrage at Mögeldorf, in May, &c. They also now began, of their own accord, to classify the species into genera. A boy brought in a plant, and was told that it was a speedwell, and after a few days he brought in another, and very correctly said, "Here is another sort of speedwell." So simple and natural, in strongly-marked plants, is the arrangement into genera of species.

It will be found judicious, lest this scientific examination should make them indifferent to the beauty of the flowers, and make them too exclusively occupied with the use of the intellect alone, to employ such as show sufficient taste for it, in drawing flowers.

During the first summer my pupils acquired a knowledge of between three and four hundred varieties. This is rather too great a number than too small; it is better to get a thorough and permanent acquaintance with a few plants than an indistinct and superficial one of many.

X. NECESSARY INCONSISTENCY.

Bacon says,* "There is scarce any entrance to the domain of human science than to the kingdom of heaven, into which one can not enter unless he become as a little child."

The poet† makes a similar demand upon the public, at the representation of his dramatized plays; where he demands that the spectators shall for a time forget their education and their knowledge, and "become children again." But the people answer him, "We thank God that we are no longer children; our education cost us pains and sweat enough."

I have before complained that the pupils at our schools of learning dive so entirely among books and lectures—in a world of words, and so entirely shut out from any active intercourse with nature and life—that they have usually, by the time that they enter the university, forgotten the first impressions of nature which they received in childhood, and seem even to have lost the child's capacity of receiving them. Their minds, in this case, must now be first awakened anew to nature, and brought back to their former childlike condition, not exclusively by actual observation, but chiefly by words—by the stimulus of properly-directed oral lectures.

It was from this point of view that I endeavored to perform my task of lecturing on general natural history. And even in my lectures on mineralogy, I accommodated myself to the necessities of the case. That is, although I regularly instructed my younger scholars in the manner I have described, yet in the subsequent academical lectures I varied, in one respect, from it. In order to render oral instruction possible, I was forced, whether I would or no, to begin with instruction in external marks; with a practical explanation of the technical mineralogical terms. In other respects I remained quite true to my earlier method.

XI. "MYSTERIOUSLY REVEALED."‡

Instruction in mineralogy, botany, and zoölogy leads, as we have seen, from actual inspection to the development of the ideas of species, genera, &c., which are component parts of created beings, and are revealed by examining their appearances. These ideas connect what are of like kinds, and separate them from those unlike them.

* Nov. Org., I., 68.

† Tieck, in "Puss in Boots," (*Phantasia*), 2, 247.

‡ "Thou stand'st mysteriously revealed." Goethe's "Winter Journey to the Harz." *Harzreise im Winter.*)

But when we have correctly learned and expressed these generic ideas, have we thus arrived at the actuality of their existence?—have we learned what is the essence of their being and life?

Haller, who all his long life unweariedly and honestly investigated nature, may answer :

“No spirit, however creative, can pierce the secrets of nature.”

No created spirit he meant, of course; the Creator is to be excepted. And the great Bacon agrees with Haller:* “It is falsely claimed that the senses of man are the measure of things; on the other hand, all the apprehensions, both of the senses and of the intellect, correspond to the essential nature of man, not to that of the universe. The human understanding is like an uneven mirror in reflecting objects—it mingles up its own nature with their nature, and confuses and colors them.” And Newton’s doctrine is the same, when he says, “We see only the forms and colors of bodies, hear only their sounds, feel only their outer surfaces, smell only their perfume, taste only their flavor; the essence of their being we can perceive by no sense and by no reflection.”†

Goethe at one time controverted Haller’s assertion, but afterward agreed with it. He says,‡ “The true, identical with the divine, will never permit itself to be directly perceived by us; we discern it only in reflections, examples, symbols; in single and related phenomena; we become aware of its existence as an incomprehensible life, and yet can not escape the desire of comprehending it.”

Cuvier repeatedly admits that there are incomprehensible mysteries in his science. Thus he says, “The operation of external things upon the consciousness, the awakening of a perception, a conception, is a secret impenetrable to our reason.” The great zoölogist, who has surpassed all in investigating the laws of the animal creation, comes upon the question—what is life? and how does it exist? and he confesses that these important questions can not be answered; that life is a profound mystery.§

We often hear the confession, “How vast is that of which we are ignorant!” We readily admit that we know nothing of the interior of Africa, or of the lands near the poles; that probably many new plants, animals, and minerals may be discovered there, and the like;

* Nov. Org., I., 41.

† Principia, 3, 1, 675. (Le Seur’s ed., 1760.) “Their essence we can perceive by no sense, no reflection; and much less have we any idea of the essential substance of God.”

‡ Works, 51, 254.

§ Cuvier’s “*Animal Kingdom*,” translated by Voigt, vol. 1, 9, 10. “All the endeavors of physicists have been unable to inform us how life is organized; whether of itself, or from some external source.” “The existence of organized bodies is therefore the greatest secret of organic economy, and of all nature.”

But what if we are convicted of universal ignorance of every thing included in the domain of science? I repeat: Have we effected a perfectly exhaustive investigation of any single existence or fact in nature? Is it not rather the case that every such fact has both its comprehensible and incomprehensible side, and, like the moon, turns one side toward us, sometimes lighter and sometimes darker, but keeps the other always turned from us?*

Did not Cuvier, so mighty in investigating the laws of the animal creation, yet find each animal a riddle, and was he not thus brought to confess that life was a riddle to him?

When the mineralogist measures and computes, with his utmost accuracy, the primitive rhomboids of calcareous spar, and determines mathematically its relation to the many hundreds of crystallized forms which that mineral offers, does he, for all this, understand these rhomboids? Can he tell how it is that it becomes possible to split them in three directions, parallel to the three parts of rhombic surfaces, so that each surface of cleavage shall be a perfect plane—polished, and with angles mathematically true? We shall look to him in vain for answers to these questions.

The astronomer, of all men, claims to be the most scientific. He computes with accuracy the movements of planets, and comets, and moons, at vast distances of time and place, and demonstrates the most delicate observation in his astronomical prophecy as the correctness of a problem is demonstrated by the proof. Is there here also room for ignorance? I reply: Count one hundred while the minute-hand of a watch is going from twelve to one, and go on counting at the same rate. You can then predict with certainty that when you have counted six hundred the hand will stand at six, and when you have counted twelve hundred it will have completed its circuit. But notwithstanding this prediction, you may perhaps never have opened the watch, and may know nothing whatever of its construction or mechanism. Even so is it with the astronomer. However accurately he can compute the path of Jupiter, can he for that reason tell what are the essential qualities of Jupiter?† What man can even answer

* "Because that which may be known of God is manifest in them." "For we know in part . . . but when that which is perfect is come, then that which is in part shall be done away . . . now I know in part, but then shall I know even as also I am known."

† Newton, who, as we have seen, considered the real essence of all bodies entirely incomprehensible to man, would of course reply that such requirements could not be satisfied. The originator of the theory of gravitation, he repeatedly declared that he knew only qualities of gravity, not its essence. Thus he says, "I have explained the phenomena of the heaven and of the sea by the power of gravity, but I have not assigned any cause for gravity." Again, having stated the qualities of gravity, he says, "But I have not been able to deduce from the phenomena the cause of these properties of gravity, and I offer no hypothesis." (Princip., l. c., p. 676.) And in like manner in the "Optics." (Clarke's ed., 1740, p. 326.) "There are efficient principles, such as gravity, whose existence is testified to by natural phenomena; but what are the causes of these principles has never been explained. Every

the question, What is the essential nature of the earth—of this very earth on which you live? And if any one should pretend to have an answer to it, he may be replied to with the reply of the Earth-Spirit in Goethe's Faust:

"Thou art equal to the spirit which thou comprehendest—
Not to me."——

Such considerations should not, however, lead to an apathetic despair of understanding any understanding of nature, but should only counteract the illusive notion that man can understand created things in the way in which only God, their creator, can understand them.* To us nature is "mysteriously revealed."

But, it may be inquired, what is the value of this discussion in a work on pedagogy?

I reply: A recognition of the wonderful union of revelation and mystery in nature, and the clearest possible perception of the boundary between them, will exercise a most important influence upon the character of the teacher and upon his study of nature.

The mysteries of nature will direct him in humility and earnestness toward eternity; while he will investigate what is susceptible of being known with conscientious and persevering industry, thanking God for every pleasure which he receives from discovering the beautiful and invariable divine laws.†

And how can this state of feeling and this knowledge in the teacher fail to have the greatest and most excellent influence upon his methods of instruction?

Any one doubtful as to the goodness of this influence will be convinced of it, if he will examine the bad influence exerted on their scholars by such teachers as are destitute of the knowledge and feeling which give it; who live in a narrow circle of overestimation of themselves. For them there are no mysteries; they can comprehend every thing. And then it most commonly happens that they fail to observe and learn what is really attainable, while they weary themselves in vain over the incomprehensible; and thus, instead of ascertaining divine laws, they hatch out a parcel of chimeras, which in their presumptuous blindness they set up as being those laws. The proverb may well be applied to them, that they make fools of themselves by thinking themselves so wise. And they make their scholars fools.

where the qualities are manifest, but their causes are hidden." And again, "There are originating causes (*principia*) of motion, as gravity. But the causes of these I leave to be investigated."

* "By universal analogy."—(Bacon.)

† As Kepler repeatedly does.

XII. LAW AND FREEDOM.

Beginners are dismayed at the apparent irregularity of crystals. On comparing, for instance, the model of a cube, of six equal sides, with a cubic crystal of fluor spar, whose sides are very unequal, he fancies that, notwithstanding the right angles of the spar, there is by no means as entire a regularity in the natural crystal as in the artificial model.

To remove this error, we may first consider the way in which laws prevail in the vegetable world. When the botanist says of the lily that its blossom has a six-petaled campanulate corolla, six anthers, a sexfid, capsule, &c., a German lily will answer the description as well as a lily from Mount Carmel. And so do the carefully painted lilies in old paintings; they have a six-leaved corolla, six anthers, &c. Thus the generic description, which the botanist gives, applies to lilies of all countries and periods. The close adherence to the law is evident; but an ignorant person, on learning so much, might probably conclude that all lilies were all exactly alike, and that accordingly great monotony must prevail throughout the creation. Such was the idea of the electress who denied Leibnitz's assertion that no leaf was precisely like another; but all her endeavors to find two precisely alike were quite in vain. It would be equally impossible to find two lilies exactly alike, though they grew upon the same stem. "The law of the Lord is unchangeable," but their unchangeableness does not produce a disagreeable monotony among the individuals subject to it; but under its protection there prevails an agreeable variety and unconstrained beauty.

This appears still more clearly in the animal kingdom; most of all in the human race. Here the law becomes less and less apparent, and the freedom of the individual is so prominent that the wicked quite forget the power of God, either over individuals or the race. "The fool hath said in his heart, There is no God," but the pious finds peace in the love of God, and says, "I desire not to be free without Thee; let my will be thine and thine mine."

From this culminating point of revealed freedom and concealed law, to return to the silent mineral world. While the ungodly may fall into the delusion that he is entirely independent and free, we may take the mineral kingdom as the realm of entire dependence. Here we find no notions of freedom.

Freedom, in the moral sense, can be predicated only of men; the freedom, that is, of individual action. But a first suggestion, a dawn of this freedom, an evidence that God desires not a world of uniform puppets, but of free and independent creatures, is revealed in the

realm of nature, by this infinite variety of individuals, included under one and the same generic idea.

And this is true even of the crystals of the mineral kingdom. If we find a crystal prismatic, six-sided, and terminated at each end by a six-sided pyramid, we shall find the number of surfaces, and the angles, invariable; but there is an infinite variety in the size of the sides of the prism and pyramids. No crystal is like another, any more than a leaf. And it is this very variety in size which brings out the beautiful relations* which do not appear from the model, because all its similar surfaces are of equal size.

The pupil's attention should be directed to these relations; and he will thus escape the mistaken idea that the natural crystals, instead of being really like the artificial model, are only attempts to be like it.

CONCLUSION.

It is my heartfelt wish that instruction in natural science, in former periods entirely neglected, may be increasingly given; but that it may be given in the right spirit and in the right way, so that the feelings, senses, and understandings of the young may be trained by it, from their early years, to a clear and ascertained comprehension of the creation—that other Holy Writ.

Any one imagining that such a course of training would enslave the senses, would most wrongfully confuse the right and holy exercise of the senses with their beastly abuse. For the natural philosopher uses his senses to the honor of God; and if he makes them serve base lusts and passions, he will by that means blunt and finally destroy their loftier susceptibilities. Therefore the teacher of natural history must, above all, urge upon his pupils the necessity of holiness; must contend against wicked lusts; must cultivate in them chaste and pure feelings, and childlike innocence of heart. He must seek to secure for them a consecration such as a divine would properly require in order to the pious study of the Holy Scriptures.

Such a devotional method of investigating the creation takes a more and more spiritual form. Mere mortal and bodily envelopes disappear: and immortal thoughts, rooted in God, awaken and stimulate to a higher life.

Thus also is developed the whole man. In the imaginative period of childhood, the material world, so rich in suggestions, surrounds and enchains him. His senses are being more and more developed, up to the period of adult life; they are the means for influencing his immortal soul. As he reaches the limit of earthly life, they begin to

* Such as the parallelism of the edges.

disappear; and we then complain that the powers of our eyes and ears are decaying. But let us not complain; let us herein recognize a token that in the man, his bodily senses sated with the phenomena of this earth, all things are spiritualizing and growing clearer; and that he is thus ripening and adapting himself for a higher life. All earthly things are ended; heaven is opening to us.

NOTE.

AIDS FOR TEACHING MINERALOGY.*—Besides the academical collection at Breslau, I made use in my instruction there of two smaller ones. The first consisted of only ten cases, containing specimens of all the important groups, and was intended for beginners; not only for their first inspection, but to afford some rough instruction in manipulation. *Fiat experimentum in re vili*; and accordingly this first collection was of little value; so that any little injury from unskillful handling could do but small harm.

After this the pupils came to the second collection, which occupied fifty-four cases. The specimens were small, but mostly fresh and clean. In going through with this collection I mentioned the names of groups; so that the pupils obtained an intelligent and actual list of names, and a general view of all the groups. Some details of colors and crystals were omitted.

It was only after this that I introduced them to the main collection, of three hundred and fifty-five cases. In going through this collection, the pupils might, as in the others, take each specimen in their hands, but must replace it in its paper box. Where it was useless or injurious to take them in the hands, as in examining the colors, for instance, it was of course not practiced. If the pupil has been made acquainted with the careful handling of the specimens, this method does not injure them. The collection is not intended merely for the teacher's scientific investigation, and still less for empty show; but principally for the instruction of the pupils; which can not be thoroughly done without permitting this handling. This purpose of the collection also decided me not to expend its income for expensive curiosities, or the novelties of the day, which are commonly of very small relative scientific value, and to the beginner of none whatever. In the place of one unimportant scrap of euclase can be bought a large number of instructive crystals of quartz, calcareous spar, &c. This principle is of course not applicable to collections which are not at all, or not entirely, intended for instruction, and which are sufficiently provided with all common specimens, and with incomes.

The chief collection was arranged generally on Werner's plan. According to this, the pupil had to go through the groups according to their separate peculiarities; first according to color, then transparency, then luster, crystallization, &c.

To afford the pupil a scientific gratification as soon as possible, I was accustomed to permit him, if capable, to take some single group, whose crystallization was easy, and go through with it; such as lead glance, fluor spar, &c. Thus he gained a first clear comprehension of the wondrous intelligence that pervades nature. If there were two pupils, perhaps not precisely equal, but of about equal capacity, I caused them to go through the collection together; which was beneficial to both. On the contrary, nothing is more harmful than to class together in this way pupils of unequal capacity. The more capable is impeded, or wearied, by the slow progress of him who is less so; and the latter again despairs

* What is here said relates to my instructions in mineralogy at Breslau. No objection should be made respecting the richness of the collection there; for something can be done, even with smaller means.

at the rapidity of the former. I kept a diary, in which I daily entered briefly the work of each pupil, and how he had done it. This is of the greatest use in tracing and guiding their development. If the number of pupils was large, I found the following arrangement very convenient. I had all the more difficult crystals numbered, according to Haüy's plates, and the number lay with each one. The pupils, who had made sufficient progress, made a written description of the crystals, and laid their paper next to the described crystal. Thus only a very brief comparison of their description with my own was necessary. If they agreed, well; if not, the pupil studied the crystal further, until the descriptions coincided—unless, indeed, there had been an error on my part. Of such an occurrence I am never ashamed. I do not desire to be to my pupils an undisputed authority, but a teacher who understands his duty to them; and his first duty is love of truth.

GEOMETRY.

[Translated from Raumer's "*History of Pedagogy*," for the American Journal of Education.]

THE school-days of the writer fell in the latter years of the last century. At that time the opinion prevailed that but few scholars had a talent for mathematics; an opinion, indeed, which seemed to be supported by the usually trifling results of mathematical instruction. Later defenders of this department of study, however, controverted this doctrine. It is not the pupils, they said, who are deficient in capacity for learning mathematics; it is the teachers, who have not the talent for teaching it. If the teachers would follow the proper method, they would learn that all boys have more or less capacity for mathematics. •

When I remember how often even the more talented of my companions fell into despair from finding themselves, with the best inclination, unable to follow the instructions of their mathematical teacher, I find myself ready to agree with these defenders.

At the end of my university course, I went to Freiberg. At the mining school there, under the able instruction of Werner, I first became acquainted with crystallography, which had inexpressible attractions for me. The more I advanced in this study, and the greater my love of it, the more clearly I saw that crystallography was for me the right beginning, the introduction, to geometry. What if this is the case, I reflected, with others also; especially for students of a more receptive tendency, who are repelled by the rigors of logical demonstrations?

No one can quite escape from himself; and the reader will forgive me if, in the following views upon elementary instruction in geology, I exhibit too much of the course of my own studies in it. He can, however, abstract what is merely personal from what is applicable to others.

And now to my subject.

Formerly geometry and Euclid were synonymous terms. To study Euclid was to study geometry; he was the personification of geometry. His "*Elements*," a school-book for two thousand years, is much the oldest scientific school-book in the world. Composed three hundred years before Christ, for the Museum at Alexandria, it was exclusively

used in ancient times, and in modern times also, down to the eighteenth century.

To this imposing permanent eminence of Euclid's "*Elements*," for two thousand years, corresponds its great diffusion among civilized and even half-civilized nations. This is shown most strikingly by the great number of translations of it. It has been translated into Latin, German, French, English, Dutch, Danish, Swedish, Spanish, Hebrew, Arabic, Turkish, Persian, and Tartar.*

With few exceptions, there is the utmost harmony in praise of Euclid. Let us hear the evidence of a few authors. Montücla, the historian, says, "Euclid, in his work, the best of all of its kind, collected together the elementary truths of geometry which had been discovered before him; and in such a wonderfully close connection that there is not a single proposition which does not stand in a necessary relation to those preceding and following it. In vain have various geometers, who disliked Euclid's arrangement, endeavored to break it up, without injuring the strength of his demonstrations. Their weak attempts have shown how difficult it is to substitute, for the succession of the ancient geometer, another as compact and skillful. This was the opinion of the celebrated Leibnitz, whose authority, in mathematical points, must have great weight; and Wolf, who has related this of him, confesses that he had in vain exerted himself to bring the truths of geometry into a completely methodical order, without admitting any undemonstrated proposition, or impairing the strength of the chain of proof. The English mathematicians, who seem to have displayed most skill in geometry, have always been of a similar opinion. In England, works seldom appear intended to facilitate the study of the sciences, but in fact impede them. There, Euclid is almost the only elementary work; and England is certainly not wanting in geometry."

The opinion of Lorenz agrees entirely with that of Montücla. In Euclid's works, he says, "Both teacher and pupil will alike find instruction and enjoyment. While the former may admire the skillful association and connection of his propositions, and the judgment with which his demonstrations are joined to each other and arranged in succession, the latter will enjoy the remarkable clearness and (in a certain sense) comprehensibility which he finds in him. But this ease of comprehension is not of that kind which is rhetorical rather than demonstrative, and this absolves from reflection and mental effort; such an ease, purchased at the expense of thoroughness, would be beneath the dignity of such a science as geometry. And more-

* Montücla, I., 24. The list of editions and translations of Euclid's "*Elements*" occupies, in the fourth part of Fabricius' "*Bibliotheca Græca*," sixteen quarto pages.

over Euclid himself was so penetrated with a sense of the derivation of the value of geometry, from the strict course pursued in its demonstrations, that he would not venture to promise even his king any other way to learn it than that laid down in the '*Elements*.'* And in truth, the strictly scientific procedure, which omits nothing, but refers every thing to a few undeniable truths by a wise arrangement and concatenation of propositions, is the only one which can be of the greatest possible formal and material use; and authors or teachers, who lead their readers or pupils by any other route, do not act fairly either to them or to the science. Nor have the endeavors, which have at various times been made, to change Euclid's system, and sometimes to adopt another arrangement of his propositions, sometimes to substitute other proofs, ever gained any permanent success, but have soon fallen into oblivion. Geometry will not come into the so-called 'school method,' according to which every thing derived from one subject—a triangle, for instance—is to be taken up together. Its only rule of proceeding is to take up first what is to serve for the right understanding of what comes afterward."

Thus Lorenz considered Euclid's work unimprovable, both as a specimen of pure mathematics and as a class-book. Kartner thought the same. The more the manuals of geometry differ from Euclid, he said, the worse they are. And Montücla, after the paragraph which I have quoted, proceeds to detail the defects of the correctors of Euclid. Some, disregarding strictness of demonstration, have resorted to the method of inspection. Others have adopted the principle that they will not treat of any species of magnitude—of triangles, for instance—until they have fully discussed lines and angles. This last, Montücla calls a sort of childish affectation; and says that, to adhere to the proper geometrical strictness in this method, the number of demonstrations is increased as much as it would be by beginning with any thing of a compound nature, and yet so simple as not to require any succession of steps to arrive at it. And he adds: "I will even go further, and am not afraid to say that this affected arrangement restricts the mind, and accustoms it to a method which is quite inconsistent with any labors as a discoverer. It discovers a few truths with great effort, when it would be no harder to seize with one grasp the stem of which these truths are only the branches." †

* "There is no royal road to geometry."

† This reads as if Montücla had read many of the modern mathematical works. The abridgment and alteration of the "*Elements*" began as early as in the sixteenth century, and in the second half of the seventeenth the number of altered editions increased. Such were "*Eight books of Euclid's 'Elements,' arranged for the easier understanding, by Dechales,*" (*Euclid's elementorum libri octo, ad faciliorem captum accommodati nuctore Dechales,*) 1660; and "*Euclid's 'Elements,' demonstrated in a new and compendious manner,*" (*Euclid's elementa nova methodo et compendiarie demonstrata,*) Sens, 1690, &c. Montücla may also have had

The opinions of the admirers of Euclid seem to agree in this: that the "*Elements*" constitute a whole, formed of many propositions, connected with each other in the firmest and most indissoluble connection, and that the order of the propositions can not be disturbed, because each is rendered possible by, and based upon, the preceding, and again serves to render possible and to found the next. As a purely mathematical work, and as a manual of instruction, Euclid's "*Elements*" are so excellent that all attempts to improve it have failed.

On reading these extracts it might be imagined that all the world was quite unanimous on the subject of instruction in geometry, and that all acknowledged as their one undoubted master this author, who has wielded for two thousand years the scepter of the realm of geometry. But far from it. We find strange inconsistencies prevailing on the subject, which are in the most diametrical opposition to these supposed opinions respecting Euclid. For how can we reconcile the discrepancy of finding the same men who see in Euclid such a closely knit, independent, and invariable succession of propositions, omitting, in instruction, whole books of the "*Elements*?" If they make use of the whole of the first book, this only proves that they consider that book as a complete and independent whole. Others go as far as through the sixth book, omitting, however, the second and fifth; and still others take the first, sixth, then the seventh, and then the eleventh and twelfth, entirely omitting the thirteenth. Can a book of the supposed character of this be treated in such a way, losing sometimes five, sometimes nine, and sometimes twelve of its thirteen books?

But how, I ask again, can we reconcile such treatment with such descriptions of Euclid's "*Elements*?" If we closely examine these descriptions, however, we shall see that, notwithstanding the lofty tone of their laudations, they still lack something. All praise the thorough and close connection of the book, but nothing more. It is as if, in representing a handsome man, he should be made only muscular and strong-boned; or, as if the only thing said in praise of Strasburg Minster should be that its stones were hewed most accurately, and most closely laid together. But is there nothing in the work of Euclid to admire except the masterly, artistic skill with which he built together so solidly his masonry, his mathematical proposi-

reference to the "*New Elements of Geometry*," (*Nouveaux élémens de géométrie*,) Paris, 1667. This was by Arnauld, of the celebrated school of Port-Royal. Lacroix says of it, "It is, as I believe, the first work in which the geometrical propositions were classed according to abstractions; the properties of lines being treated first, then those of surfaces, and then those of bodies" "*Essays on instruction generally and in mathematics in particular*," (*Essais sur l'enseignement en général et sur celui des mathématiques en particulier*,) By Lacroix, Paris, 1816, p. 289. Unfortunately, I have been unable to examine Arnauld's work. By Lacroix's description, it would seem to have been a forerunner of the Pestalozzian school.

tions? Is there not very much beauty in the scientific thought, so profound, so comprehensive, and so thoroughly diffused through every part of the work? The great Kepler was even inspired by this beauty, and was exceedingly enraged at Ramus' attack on Euclid, especially against the tenth book of the "*Elements*." Ramus said that he had never read any thing so confused and involved as that book; whereupon Kepler answers him thus: "If you had not thought the book more easily intelligible than it is, you would never have found fault with it for being obscure. It requires great labor, concentration, care, and special mental effort, before Euclid can be understood. * * * You, who in this show yourself the patron of ignorance and vulgarity, may find fault with what you do not understand; but to me, who am an investigator into the causes of things, the road thereto only opened itself in this tenth book." And in another place he says, "By an ignorant decision this tenth book has been condemned not to be read; which, read and understood, may reveal the secrets of philosophy."

Kepler also further attacks Ramus, for not subscribing to the assertion of Proclus—although it is evidently true—that the ultimate design of Euclid's work, toward which all the propositions of all the books tend, was the discussion of the five regular bodies.* And Ramus has put forth the singularly rash assertion that those five bodies are not forthcoming at the end of Euclid's "*Elements*." And by thus destroying the purpose of the work, as one might destroy the form of an edifice, there is nothing left except a formless heap of propositions.

"They seem to think," says Kepler, further, "that Euclid's work was called '*Elements*' ($\sigma\tau\omicron\iota\chi\epsilon\tilde{\iota}\tau\alpha$) because it affords a most various mass of materials for the treatment of all manner of magnitudes, and of such arts as are concerned with magnitudes. But it was rather called '*Elements*' from its form; because each subsequent proposition depends upon the preceding one, even to the last proposition of the last book, which can not dispense with any preceding one. Our modern constructors treat him as if he were a contractor for wood; as if Euclid had written his book to furnish materials to every body else, while he alone should go without any house."

Kepler's estimate differs materially from those first given, in that he does not only praise Euclid's skill in building firm and solid masonry, but the magnificence of his whole structure, from foundation-stone to ridge-pole. But later mathematicians have found fault with Proclus and Kepler for bringing into such prominence the five regular

* Except those which treat of perfect numbers, Proclus says, in his commentary on the first book of Euclid, "Euclid belonged to the Platonic sect, and was familiar with that philosophy, and accordingly the whole of his elementary course looked forward to a consideration of the five 'beautiful bodies' of Plato."

bodies, and finding in them the ultimate object of Euclid's work. Even Montucla and Lorenz do this, although, as we have seen, they agree wholly with Kepler and others in finding that the chain of propositions in Euclid's "*Elements*" is a most perfect one, and that no proposition is stated which is not based upon a previous one. But it would have been impossible for Euclid to construct such a chain, had he not at the beginning of it seen clearly through its whole arrangement; had he not, during the first demonstration of the first book, had in his eye the last problem of the thirteenth. For no architect can lay the first foundation-stone of his building until he has clearly worked out his drawings for the whole.

The most superficial observation will show that Euclid begins with the simplest elements, and ends with the mathematical demonstration of solid bodies. He commences with defining the point, line, and surface; treats of plane geometry in the first six books, and comes to solids only in the eleventh. The first definition in this book, that of bodies, follows on after the former three. Lorenz gives us the reason why Euclid inserted between plane and solid geometry, that is, between the sixth and eleventh books, four other books. "The consideration of the regular figures and bodies," he says, "presupposes the doctrines laid down in the tenth book on the commensurability and incommensurability of magnitudes; and this again the arithmetical matter in the seventh, eighth, and ninth books."

The five regular solids, in point of beauty, stand altogether by themselves among all bodies; Plato calls them the "most beautiful bodies." We need not therefore wonder at Euclid for taking, as the crown of his work, the demonstration of their mathematical nature and of their relations to the most perfect of all forms, the sphere. In the eighteenth proposition of the thirteenth book, the last of the whole work, he demonstrates the problem. To find the sides of the five regular bodies, inscribed in a sphere. If this proposition was not the intended object, it is at least certainly the keystone of the structure.

Many things show that the demonstration of the five regular bodies, and of their relations to the cube, was really the final object of the "*Elements*." The Greeks, from their purely mathematical sense of beauty, and remarkable scientific tendencies, admired and studied this select pentade of bodies, which played a great part first in the Pythagorean and afterward in the Platonic school. But that Euclid, who seems to have been instructed by pupils of Plato, followed Pythagoras and Plato in this respect, if we are not convinced of it by the "*Elements*," is clearly enough shown by the quotation given from Proclus, and by the following ancient epigram:—

“The five chief solids of Plato, the Samian wise man invented,
And as Pythagoras found them, so Plato taught us their meaning;
And Euclid based upon them renown wide-spread and enduring.”

This epigram from Psellus furnishes an indubitable confirmation of the views of Proclus and Kepler, respecting the arrangement and object of Euclid's great work.

I observed that, in former times, to study Euclid was to study geometry. This will serve as a sufficient apology for the space which I am bestowing upon the “*Elements*.”

What was it, is the next inquiry, which caused the later mathematicians to vary so much from Euclid's course, and to omit whole books of his work? We will allow them to answer for themselves.

Of the first six books, and the eleventh and twelfth, Montüela remarks that they contain material which is universally necessary; and are to geometry what the alphabet is to reading and writing. The remaining books, he continues, have been considered less useful, since arithmetic has assumed a different shape, and since the theory of incommensurable magnitudes, and of the regular bodies, have had but few attractions for geometers. They are not however useless for persons with a real genius for mathematics. For these reasons, both Montüela and Lorenz recommend these five omitted books to mathematicians by profession. Of the tenth especially, Montüela says that it includes a theory of incommensurable bodies so profound that he doubts whether any geometer of our day would dare to follow Euclid through the obscure labyrinth. This observation is worth comparing with the expressions of Kepler and Ramus, above mentioned, on the same book.

Of the thirteenth book, which, with the two books of Hypsicles to follow it, treats of the regular solids, Montüela says, “Notwithstanding the small value of this book, an editor of Euclid, Foix,* Count de Candalle, added three more to it, in which he seems to have endeavored to discover every thing that could possibly be thought of respecting the reciprocal relations of the five regular solids. Otherwise, this theory of the regular solids may be compared with old mines, which are abandoned because they cost more than they produce. Geometers will find them at most worth considering as amusement for leisure, or as suggestive of some singular problem.”

What would Kepler have said to this opinion?

As soon as we consider Euclid's work otherwise than as a single

* François Foix, Count de Candalle, who died in 1594, in his ninety-second year. He founded a mathematical professorship at Bourdeaux, to be held by persons who should discover a new property of the five regular solids. The first edition of Candalle's Euclid, with a 16th book, appeared in 1566; the second, with 17th and 18th books, in 1578. It is Latin, “*Autors Franc. Flussate Candalla*”

whole, we see at once a necessity for modeling the eight "universally necessary" books into a new manual, of reorganizing it, and accommodating it to a new object. Distinguished mathematicians have undertaken such a remodeling, mostly including as many as possible of Euclid's propositions, and even of his groups of them, in their manuals. But how, it will be asked, can a work, so compactly organized as Euclid's, be capable of being taken to pieces, and its *disjecta membra* be arranged into a new manual? The explanation is as follows:—Although Euclid set out from one fixed point to reach another, yet he did not proceed in one straight line from one to the other, without any divergence. His single propositions, and still more the groups of them, have a species of independent existence, such that they can be recomposed into new manuals, whose arrangement is wholly different from that of Euclid.

"It is with the fabric of the thoughts
As it is with a weaver's master-piece;
Where one thread governs a thousand threads,
And the shuttle flies backward and forward,
And the threads fly unseen hither and thither,
And one stroke affects a thousand combinations."

These expressions of Goethe's Mephistopheles are entirely applicable to Euclid's master-piece.

Shall we now reject these good modern manuals, and use in our mathematical studies the thirteen original books of the "*Elements?*" Even Kepler, the most thorough-going admirer of Euclid, would object to this. He defended and praised the "*Elements*" as a magnificent scientific work, but not as a school-book. He would never have recommended our gymnasiasts to study the tenth book, although he charged the celebrated Ramus with having fallen into a grievous error in thinking the book too easy, since it required intellectual exertion to understand it. Montücla, although he expressed himself strongly against a false, enervating, and unscientific mode of teaching mathematics, yet says that geometry must be made intelligible, and that many manuals have subserved this end, which he has gladly made use of in instructing; and that he would recommend the exclusive use of Euclid only to those of remarkable mathematical endowments.

But were Euclid's "*Elements*" originally a manual for beginners? Shall we compare the learned mathematicians who came from all countries to Alexandria to finish their studies under Euclid, Eratosthenes, or Hipparchus, with gymnasiasts sixteen years old? The Museum at Alexandria was at first, that is in Euclid's time, a mere association of learned men; and only afterward became an educational institu-

tion.* Euclid therefore wrote his "*Elements*" for men who came to him already well experienced in mathematical knowledge and exercises. It was because the book was not a school-book that Euclid gave his answer to the king who required him to make geometry easier.

But what was the origin of the book?

The reader may perhaps apprehend that this question will lead me into historical obscurity, and obscure hypotheses. But there is no danger.

Montücla says that Euclid, in his book, collected such elementary truths of geometry as had been discovered before him. We know, of at least some of his problems, that they were known before Euclid; such, for instance, as the Pythagorean problems. But, nevertheless, Euclid remains entitled to the credit of having performed a service of incalculable value in the form of the most able and thoroughly artistic editing.

We have already stated the idea which guided him in this task of editing; it was to proceed from the simplest elements, by means of points, lines, and surfaces, to mathematical bodies, and finally to the most beautiful of them, the five regular bodies, and their relations to the cube.

But would geometrical studies, commenced at the very beginning on Euclid's principles, have led immediately to an elementary system such as his? Certainly not. If they would, what occasion would there be for so much admiration of them, and of calling them *Elements par excellence*, and their author "*the Elementarist?*"

No man would ever have begun with a point, a non-existent thing, (*ens non ens*), and from that proceeded to lines, surfaces, and lastly to solids. Solids would rather be the first objects considered; objects of the natural vision, and the pupil would have proceeded by abstracting from this total idea to the separate consideration of surfaces, which bound solids; lines, which bound surfaces; and lastly of points, which bound lines.

After having proceeded to this ultimate abstraction, to the very elements themselves of the study, Euclid worked out his elementary system as a retrograde course; a reconstruction of solids from their elements. And this reconstruction could only be effected by the aid of precise knowledge and intelligent technical skill; of a full understanding of the laws and relations of figures, solids, &c.

Acute Greek intellects, investigating solids and figures, and subjecting them to actual vision, would of course discover many of their laws at once, and readily. Others, however, could not be perceived by intuition, but could be disclosed to the understanding only at a

* See Klippel, on the Alexandrian Museum, 114, 228.

later period.* In examining this cube, for instance, it would appear at once that its sides were equilateral and equiangular; and that one of its horizontal sides was bounded by four vertical ones. But that its edge, diagonal of a side, and axis are to each other as $\sqrt{1} : \sqrt{2} : \sqrt{3}$ could not be perceived with the bodily eye, but appears by the help of the Pythagorean problem.

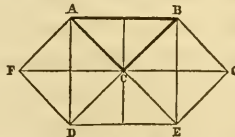
The demonstrations, as is sufficiently evident, must have begun with such as were concrete, simple, and visible, and proceeded to such as were more comprehensive, abstract, and beyond the scope of the senses. For instance, the application of the Pythagorean problem to all right-angled triangles would scarcely have been undertaken at the beginning. But in the case of isosceles right-angled triangles, inspection would show, by a very simple demonstration, that the squares of the sides were together equal to the square of the hypotenuse.† If this were proved, the question was then easily suggested, Is it true of all right-angled triangles? If a square were divided by a diagonal into two triangles, it was evident that each of them contained one right angle and two half right angles, the sum of the three being two right angles; and then the question would naturally occur, Is this true of all triangles?

In the same manner it would be necessary to proceed from the simplest and most regular solids and figures to the more complicated and less regular; from those most easily seen by the eye to the more abstract, requiring the use, not of the senses, but of the reason. When at last the most comprehensive demonstration and definition had been learned, there would be no further mention of the previous concrete cases, which had been an introduction to the study of the more abstract ones, but the cases to consider would now be those involved in the definition and demonstration last found.

It has repeatedly been observed that the teacher of a science must adhere to its proper course of development, and must in his instructions follow it more or less strictly. Every pupil ought once to follow this path, which its first discoverers and investigators worked out after

* See my "*A B C-Book of Crystallography*," (*A B C-Buch der Krystallkunde*), pp. IX., XI., XXIII., and 164; and Harnisch, "*Manual of the German Common School System*," (*Handbuch über das deutsche Volksschulwesen*.) 1st ed., 1820, p. 232.

† The demonstration may be somewhat as follows:—



A B C, isosceles right-angled triangle. A B D E, the square of its hypotenuse, contains eight small triangles, and the squares on its sides together contain also eight, and all of these small triangles are of the same size and shape.

so many and long-enduring errors, but which the present pupils, with their teacher's aid, now find out in a shorter time, and with certainty.

According to these principles, to which I subscribe, I consider it natural to begin teaching geometry with treating of solids, with which it is highly probable that the actual development of the science began; and to proceed from that point, by abstraction, to the elements. It is here that Euclid's method should be adopted, and that we should proceed by demonstrations, from the elements up to solids. In the former course, it is instruction that leads, and reason silently follows; in the latter, the reason speaks, and the intuition must place faith in it.

Many mathematicians are now agreed that Euclid's demonstrative course of instruction should be preceded by an introduction of an intuitional character. In the theory of forms brought forward by Pestalozzi and his school, in particular, was discovered a preparatory course in geometry, in which intuition was the chief actor, as is the reason in geometry proper.*

Still, however, the beginning was not made with solids, but, in accordance with a method of elementarizing which was pushed even to caricature, with points—unmeasurable, dimensionless points. Lines come next, and were taught in innumerable and aimless combinations. Lastly, surfaces were discussed; for of solids Schmid's well-known Theory of Form, the predecessor of many more, scarcely spoke at all, and what little was said was not worth mentioning.†

The necessity was afterward felt of beginning with a solid—the cube, for instance; but merely with the design of showing from it the process of abstraction by which to proceed from the solid to the point. As soon as this had been briefly done, they then commonly proceeded to the combination of points, lines, &c., and to other operations, as were just alluded to. How important soever this theory of form may seem to me, and however much I may honor the intelligence, industry, and effort with which this new course of discipline was worked out by able pedagogues, still I can not possibly recognize the method which they followed as the right one.‡

What I would recommend is, that instruction in geometry should begin, not with such a brief analysis of one or another solid into its geometrical elements, but with a continued study, at some length, of many mathematical solids. And now, if solids are to be both the beginning and the end of the elementary study of geometry, the

* Part 2, p. 101.

† Diesterweg "Guide," (*Wegweiser*.) Second edition, part 2, p. 183, &c.

‡ I entirely agree with the acute and able judgment passed by Curtmann on the study of Form in common schools, and on Froebel's "eccentric proposal to use geometrical combinations as a principal amusement for children." See Curtmann's "*School and Life*," (*Die Schule und das Leben*.) p. 62.

question naturally comes up, What bodies? Shall they be those of which every stereometry treats—the prism, pyramid, sphere, cone, and cylinder? Shall it be the five regular solids?

The opinion of Montücla, already given on this point, might perhaps alarm us, even if inclined toward an affirmative. He compares the theory of the five regular bodies to ancient mines, which are neglected because they cost more than they produce. “Geometers,” he continues, “will use them at most for a leisure amusement, or as suggestive of some singular problem.” But such old mining works are opened again, and afford great profits; and the merest leisure sometimes is the occasion of solemn earnestness. Of many of the solids which the ancient mathematicians constructed, with scientific geometrical skill,* the originals have been found in nature in our own times; and, besides these, an innumerable multitude of other beautiful forms, in which are revealed laws of which no mathematician ever dreamed.

It is mineralogy which has opened to us this new geometrical world—the world of crystallography. With this I first became acquainted, as I have already mentioned, in Werner’s school, at Freiberg. When I afterward came to Yverdun, in 1809, and made myself acquainted with Schmid’s Theory of Forms, this latter appeared to me the most uncouth of all possible opposites of crystallography.

This theory of forms consisted of endless and illimitable combinations. The object seemed to be to find at how many points a line could be intersected; but no reference was made to the question whether the figures resulting from such combinations were beautiful or ugly. But, in the absence of a sense of mathematical beauty, great caution must be used in approving a course of mathematical instruction which consists principally of mathematical intuitions. Nothing of any value, as I have mentioned, was said of solids. Every thing seemed designed to keep the boys in incessant, intense, and even overstrained productive activity, without any care whether the product was of any geometrical value. A formal result, it might be said, was the chief thing sought.

But how diametrically opposite was the study of crystallography at Freiberg to this unnatural and endless production of mathematical misconceptions! It began with a silent ocular investigation of the wonderfully beautiful crystals themselves; works of Him who is the “Master of all beauty.” A presentiment of unfathomable, divine geometry came upon us; and how great was our pleasure as we gradually became acquainted with the laws of the various individual forms,

* Including several of the thirteen Archimedean solids.

and their relations. Nobody thought of any special formal usefulness in his study of crystals; it would have seemed almost a blasphemy to us had any one told us to use the crystals for our education. We quite forgot ourselves in the profundity and unfathomable wealth of our subject; and this beneficial carelessness seemed to us a much greater formal benefit than could have been obtained by any restless running and hunting after such a benefit.

The opposite impressions thus received at Freiberg and Yverdun are indelibly impressed upon my mind. And I readily admit that all my inclinations drew me toward a quiet investigation of God's works; an inward life from which my actual knowledge should gradually grow. In proportion as I have experienced the blessing of this peaceful mode of activity, I find an incessant, restless, overstrained activity more repulsive to me, and I am frightened at the pedagogical imperative mood, "Never stand still!" It is to me as if all beautiful Sundays and their sacred rest were entirely abrogated, and as if I were forced to hasten forward, restlessly and forever, without once delaying for peaceful contemplation, though the road should lead through the summer of paradise.

But to return to my subject.

When, twenty-four years ago, I wrote my "*Attempt at an A B C-Book of Crystallography*," (*Versuch eines A B C-Buch der Krystallkunde*,) I remembered, while employed on that common ground of mathematics and mineralogy, Schmid's Theory of Forms, and expressed the hope that a scientific crystallography, proceeding according to the laws of nature, might accomplish, in a regular manner and with a clear purpose, what the theory of forms of Pestalozzi's disciples had endeavored to do without regularity or definite purpose.

I was convinced that such a connection with the subject of crystals must give to the treatment of the theory of forms a character entirely new, and entirely opposite to that previously usual. Wherever beginners were required to practice this incessant combination and production, they would now be employed in becoming familiar with natural crystals and models of them. They should not be confined exclusively to models, lest they should fall into the error of supposing themselves to have to do only with human productions; and of imagining that there are no other mathematics except those of man. Natural crystals lead the pupil to a much profounder source of mathematical knowledge; to the same source from which Plato, Euclid, and Kepler drank.*

* Mohl's valuable work on the forms of grains of pollen shows that among them are several mathematical ones; as octahedrons, tetrahedrons, cubes, and pentagonal dodecahedrons. (Mohl's Contributions, Plate I., 3; Pl. II., 30, 34, 35; Pl. VI., 17, 18; &c.) Schkuhr had already described dodecahedrons and icosahedrons. Thus mathematical forms are found also in the mathematical world.

I will here give some details to show that proper instruction in crystallography will serve the same purpose which was sought by the theory of forms. Every solid, I would first say,* fills a certain space, and the questions to ask respecting it are,

1. What is the form of the solid (or of the space which it fills?)
2. What is its magnitude, (or the magnitude of the space which it fills?)

Similar questions arise respecting limited superficies. If now we compare two solids, or two surfaces, they may be either,

a. Alike in form and magnitude, or congruent; as, for instance, two squares or cubes of equal size. The squares will cover each other, the cubes would fill the same mold.

b. Alike in form but unlike in magnitude, or similar; as two squares or cubes of different sizes. Of two similar but unequal solids, the smaller, A, may be compared with the larger, B, in a decreasing proportion. If any line of A equals, for instance, one-half of the corresponding line of B, all the other lines of A are to the corresponding ones of B in the same proportion.

c. Unlike in form but alike in magnitude, or equal; as a square and a rhomboid of equal base and height; a square prism and a crystal of garnet, where the side of an end of the prism equals the short diagonal of one of the rhombic surfaces of the crystal, and a side edge of the prism is twice as long as the same diagonal.

d. Unlike in form and magnitude.

The theory of form, as its name indicates, is chiefly concerned with the forms of bodies and surfaces; and so is crystallography. The latter deals only incidentally with the materials of bodies, and treats chiefly of the shape of single crystals, and the comparison of different ones, with the design of discovering whether they vary from each other or not.

I was occupied many years with elementary instruction in crystallography; and from these labors resulted the "*Attempt at an A B C-Book of Crystallography*," which I have already mentioned.

In the course of this instruction I found by experience how much not only older persons but even boys of ten or twelve are attracted by these beautiful mathematical bodies, and how firmly their forms were impressed on their minds; so firmly that the more skillful of them could go accurately through the successive modifications of related forms, without using any models.

Any one who has studied elementary crystallography, as an introduction to geometry, will find this course a great assistance to the understanding of the ancient Greek geometers. He will not ask, as

* See my "*A B C-Book of Crystallography*," p. 162.

the modern mathematicians do, what is the use of investigating the regular solids? And he will find himself much better able to study in the method of the ancients; a method the neglect of which has been lamented by Fermat, Newton, and Montücla. A later writer has described this method as one which speaks to the eyes and the understanding, by figures and copious demonstrations. And he laments that the more recent mathematicians have allowed themselves to be carried to a harmful extreme by the extraordinary facility of the algebraic analysis. "In fact," he says, "the ancient method had certain advantages, which must be conceded to it by any person only even moderately acquainted with it. It was always lucid, and enlightened while it convinced; instead of which, the algebraic analysis constrains the understanding to assent, without informing it. In the ancient method, every step is seen; and not a single link of the connection between the principle and its furthest consequence escapes the mind. In the algebraic analysis, on the other hand, all the intermediate members of the process are in a manner left out; and we merely feel convinced in consequence of the adherence to rule which we know is observed in the mechanism of the operations in which great part of the solution consists."*

Speaking pedagogically, no one can doubt, after the descriptions thus given, whether the geometrical method of the ancients has the advantage, in regard to form, over the analytical one of the moderns. I have shown elsewhere how harmful it is to give the boys formulas, by whose aid they can easily reckon out what they ought to discover by actual intuition; as in the case where a pupil, who scarcely knows how many surfaces, edges, and angles a cube has, computes instantly by a formula, by a mere subtraction, what is the number of angles of a body having 182 sides and 540 edges, without having the least actual knowledge of such a body.

* An instance of the predominance of the analytic method is found in the "*Mécanique Céleste*" of Lagrange, which appeared in 1788. In this, the author says, "The reader will find no drawings in this work. In the method which I have here employed, neither constructions nor any other geometrical nor mechanical appliances are needed; nothing but purely algebraical operations."



ARITHMETIC.

[Translated from Raumer's "History of Pedagogy," for the American Journal of Education]

THE difference between ancient and modern methods of instruction is remarkably clear in the case of arithmetic.

By way of describing the ancient method, I will cite portions of one of the oldest and best reputed of German school-books—the "*Elementa Arithmetices*" of George Peurbach.* This author was, in his time, the greatest mathematician in Germany; and one of his pupils was the great Regiomontanus.†

Peurbach's arithmetic began with the consideration of numbers. "These," he says, "are divided by mathematicians into three kinds: into digits, which are smaller than ten; articles, (*articuli*), which can be divided by ten without a remainder; and composite numbers, consisting of a digit and an integer. Unity is however no number, but the rudiment of all numbers; it is to number what a point is to a line. In arithmetic it is usual, after the manner of the Arabs, who first invented it, to work from right to left. Every figure, when standing in the first place at the right hand, has its own primitive value; that in the second place has two times its primitive value, in the third place a hundred times, in the fourth one thousand times, and so on."

The second chapter is on addition. "To unite several numbers in one, write them so that all the figures of the first place (units) shall stand under each other, and in like manner of the second place, and so on. Having arranged them in this way, draw a line under them, and then begin the work at the right hand by adding together all the numbers of the right column. The sum resulting from this

* "*Elements of Arithmetic. An algorithm of whole numbers, fractions, common rules, and proportions. By George Peurbach. All recently edited with remarkable faithfulness and diligence. 1536. With preface by Philip Melancthon.*" (*Elementa Arithmetices. Algorithmus de numeris integris, fractis, regulis communibus, et de proportionibus. Autore Georgio Peurbachio. Omnia recens in lucem edita fide et diligentia singulari. An. 1536. Cum præfatione Phil. Melancthon*) Peurbach was born in 1423, and died 1461.

† "This philosophy of celestial things was almost born again in Vienna under the auspices of Peurbach. This whole department of learning, (astronomy,) after having lain in dishonor for centuries, has of late flourished anew in Germany, under the restoring hands of two men, Peurbach and Regiomontanus. Their very achievements testify that these two heroes were raised up, for the promotion of that branch of learning, by some wonderful power of divine appointment." This is Melancthon's opinion, as given in his preface to the "*Sphæra*" of Sacro Bosco. Comp. Montucla, "*History of Mathematics*," part 3, book 2; also Schubert's "*Peurbach*," &c.

addition will be either a unit, or an article, or a composite number. If a unit, write it under the line, immediately under the units; if an article, write a cipher* there, and add the number of tens to the second column; if a composite number, write the units under the units, and add the tens to the second column. Proceed in the same manner with the second column, but do not forget to add in the tens resulting from the addition of the first column. When you have finished the second column, proceed to the third, fourth, &c. When you add up the last column, you can, if the addition gives tens, set them down at once."

The instruction in the other ground rules is given quite in the same way; as is the mode of proving examples. For multiplication he especially recommends the multiplication table. "If you have not thoroughly mastered this," he says, "I assure you that, if you do not take pains to learn it, you will make no progress in arithmetic."

This may suffice to describe the style of Peurbach's arithmetic, four hundred years old; the same method has prevailed even down to our own times. It is in this study, as I have said, that the difference comes out most clearly between the ancient and modern styles of instruction. To show this in a single point, let the reader compare Peurbach's recommendation about the multiplication table with an expression of Diesterweg's. The latter says, "The ancient teachers made the famous multiplication table the basis of all arithmetic. They made it the beginning of the study, printed it in the primer, and impressed it mechanically upon the children's memories. Nowadays it plays a more subordinate part; and this single fact may show how far we have left the worthy ancients behind us in arithmetical instruction. * * * The multiplication table, with us, comes after the addition and subtraction tables, and before the division table; that is all."†

The following observations will state the difference between the ancient and modern methods of instruction in arithmetic.

The object of the ancient method was to enable the children to

* *Cifram* or *Zyphram*; others say *figura nihili*, or *circulus*; as Hudalricus Regius, in his "*Epitome Arithmetice*," (1536,) p. 41. Maximus Planudes (in the 14th century) has *τζίφρα* for naught. Fibonacci, a Pisan, wrote in 1202 a "*Treatise on the Abacus*," (*Tractatus de Abaco*), in which he relates that during his travels he learned the Indian art of arithmetic, by which with ten figures all numbers can be written, (*Cum his . . . figuris, et cum signo 0, quod Arabice Zephyrum appellatur.*) (Whewell, l. 190.) Lichtenberg (6, 272) says, "Zero (naught) is derived from *cyphra* and *cypher*, the Latin and English for naught; and these from the Hebrew *sephar*, to count." Menage says, "*Chifre*.—The Spaniards first took this word from the Arabs. It was *Zefro*." Spaniards change f into h; hence, *Zefro*, *Zehro*, *Zero*. When did the German *Ziffer* receive its present meaning?

† In the preface to his "*Handbuch*," Diesterweg says, however, "Any one desirous of multiplying larger numbers together in his head must know the multiplication table by heart. The inferior grade of computation must be facilitated by this great means of assistance, in order to avoid difficulties in the higher grade." This agrees with Peurbach.

add, subtract, &c.; an art of arithmetic was sought, not an understanding of it, a theory of it. As a foreman shows his apprentice how to do his work by categorical imperatives, First do this and then do that, without any whys or wherefores, just so was arithmetic taught, without any effort on the part of the teacher to communicate to the scholar an understanding of the things he did. Nothing was thought of except skill in operating, which was gained by much practice. This mode of instruction was made more natural by the fact that only written arithmetic was taught.

Pestalozzi and his school opposed this method of instruction, and called it mechanical, and unworthy of a thinking being. The child, they said, must know what he is doing; and should not merely perform operations without any understanding of them, according to the teacher's directions. Understanding is the chief object; the training of the intellect as a properly human discipline, without any relation to future practical life. A few of them claimed that, if the scholar acquired nothing but this intelligent knowledge, if it was done in the proper methodical way, his practical skill would come of itself; that, by the knowing about his art in the proper manner, a man becomes a master of it.*

The ancient method, which kept the pupils at unwearied drilling, trained skillful and certain mechanical laborers. The pupils operated according to traditional rules, which they did not understand, and which even the teachers themselves very likely did not understand, any more than the master-mason, when showing an apprentice how to make a right angle with a string divided by two knots into lengths of three, four, and five feet, can also explain to him the Pythagorean problem.

But although by this method the scholar was excellently well prepared for many computations, which he will have occasion for in practical life, yet he will be quite at a loss how to help himself whenever a case shall come up to which he can not apply his rule exactly as he learned to use it. This will appear when he enters upon Algebra; even in undertaking to use letters instead of figures in his much-practiced Rule of Three. Algebra requires every where a clear, abstract knowledge of arithmetical operations and relations—a just distinguishing between the known and unknown quantities which are to be sought or eliminated, and an understanding of the mode of using these in the most varying cases. But all this will be entirely wanting to the mere routinist, whose thinking is done by traditional rules founded on experience. He would in like manner

* An error which they subsequently perceived; and afterward labored at a union of knowledge and practical skill.

find himself unprovided with an intelligent method of mental arithmetic, such as requires independent work by the scholar; for what this school called mental arithmetic was nothing but an inward display of figures, and an inward operation performed upon them.

Three chief adversaries appeared against the ancient mechanical arithmetic, of whom I have just mentioned two.

The first, namely, was Algebra.* This represented special cases in a universal way; and treated special procedures in arithmetic in such a manner that the course of the proceeding—the law according to which the required quantities were found—was clearly expressed. Letters were every where used for numbers—undetermined numbers; for any letter might stand for all possible numbers.†

Thus, in algebra, the understanding and investigating of universal relations and laws appeared as opposed to mere computations, practiced according to a rule not understood, and aiming only at mechanical facility.

In like manner arose the true method of mental arithmetic, which has become so prominent, especially in later and the latest times, in the place of the usual operating upon pictures of figures within the mind. It was seen that upon this intelligent mental arithmetic must be based a right understanding of the mechanical processes of arithmetic. This was, among other reasons, because the mental method obliged the pupil to perform many operations in an order quite different, and even entirely opposed, to that used in written arithmetic.

The third adversary of the old method of arithmetic was the intuition so prominently urged by Pestalozzi and his school. While algebra took the arithmetical laws out of concrete numbers, and established them as ideas, abstractly, Pestalozzi, on the contrary, sought for means of that intuitional instruction which must precede all reckoning with numbers, and without which that reckoning must be without any proper foundation. As algebra developed itself out of concrete arithmetic, so was the idea of number itself, again, to be deduced from the bodily examination of numerable objects of various kinds. "The mother," says Pestalozzi, "should put before the child, on the table, peas, pebbles, chips, &c., to count; and should say, on showing him the pea, &c., not 'This is one,' but 'This is one *pea*,' &c." And he proceeds to say, "While the mother is thus teaching the child to recognize and name different objects, as peas, pebbles, &c., as being one, two, three, &c., it follows, by the method in which she shows and names them to the child, that the words one, two, three, &c., remain always the same; while the words pea, pebble,

* I use this word, like Euler, Montucla, Kries, &c., in its wider sense.

† Kries' "Manual of Pure Mathematics," (*Lehrbuch der Reinen Mathematik*,") p. 72, &c.

&c., always change, as the nature of the object changes which is thus used; and by this permanence of the one, and constant change of the other, there will be established in the child's mind the abstract idea of number; that is, a definite consciousness of the relations of more or fewer, independently of the objects which are set before him as being more or fewer.*

Thus far Pestalozzi adheres to the method in which arithmetic had always been begun, in a manner strictly accordant with nature. Counting had been taught by beans, &c., and especially on the fingers. "You can count that on your fingers" is an old proverb.

He now, however, proceeds further, to artificial school-apparatus for intuition. He and his fellow-teacher, Krüsi, prepared some "intuitional tables" for this purpose. In the first, the numbers from one to ten are separated by marks: a I in the upper horizontal row, II below it, and so on, down to ten such marks for ten. And 175 pages were occupied with exercises to be taught upon these marks.

The second intuitional table is in the form of a square, divided into ten times ten small squares. The ten squares in the upper horizontal row are not divided; those in the second are halved by a perpendicular line; those of the third are divided into thirds by two such lines; and so on, to the last, which is divided into ten parts by nine perpendicular lines.

The second intuitional table is properly followed by the third in the second part of the "*Intuitional Theory*." It is a large square, divided into ten rows of ten small squares. The first of the first horizontal row is undivided, the second halved by a horizontal line, the third divided into three parts by two horizontal lines, and so on to the tenth. The ten squares of the first perpendicular row are divided in the same way by perpendicular lines, and the other squares are divided both by perpendicular and horizontal lines, (corresponding with a multiplication table,) according to their order, in a perpendicular and a horizontal row. Thus the hundredth small square, diagonally opposite that which is not divided at all, is thus divided into ten times the smaller squares, of which each is a thousandth of the large one.

The second table, preceding this, consists of thirty-six pairs of parallel lines, equal in length but divided differently. The pair A and B, for instance, are divided by points into six equal parts; but, besides this, A is divided into halves and B into thirds; the former into twice three-sixths, and the latter into three times two-sixths.

* Pestalozzi, preface to part 2 of his "*Intuitional Theory of the Relations of Numbers*," (*Anschauungslehre der Zahlenverhältnisse*.)

For the method of using these intuitional tables in instruction, I refer to Pestalozzi's "*Elementary Books*," and to Von Türk's "*Letters from Munchen-Buchsee*."* I shall here only offer a few observations on them.

By means of these tables it was sought to elucidate to the children the four ground rules, fractions, and the rule of three, even algebraically. In particular, every number was considered as composed of ones, and was referred to ones as its elementary parts. And this was done not only at first to facilitate a clear understanding, but in subsequent parts of arithmetic, and even to a wearisome extent. Instead of seven, "seven times one" was used; and again, "One is the seventh part of seven." And thus were composed so many strange, wordy problems; as "Three times half of two, and six times the seventh part of seven, are how many times the fourth part of four?"†

Pestalozzi should undoubtedly have the credit of calling attention, by his "*Elementary Books*," to the visual element of arithmetic, which had previously been almost entirely neglected in the schools. Since that time, this element has been much used for primary instruction, and as a means of laying a foundation by the use of the senses for subsequent insight. But at present, most of the arithmetics of the Pestalozzian school vary much from this excessive use of the senses, as is shown by their books of examples.

It is clear that there are limits to the use of the intuitional faculties. Pestalozzi exceeded these in various ways; as in the line divided into ninety parts, and a square divided into ninety rectangles, which we find in his "*Elementary Books*." What eye would distinguish, in his third table, between the square divided into nine times ten rectangles, and that divided into ten times ten, next after it?

The necessity of actual intuition at the beginning of arithmetic also led Pestalozzi into an error. "When," he says,‡ "we learn merely by rote that three and four are seven, and then proceed upon this seven just as if we actually knew that three and four were equal to seven, we deceive ourselves, and the inner truth of this seven is not in us; for we have not that foundation in the evidence of our senses which only can make the empty word a truth to us."

But granting that I can inwardly see the picture of the statement that $3+4=7$ in marks, peas, &c., can I have the same sort of visible basis within me when I would add $59+76=135$; or, rather, $3567+4739=8306$? Are all such operations as these last then destitute of intuition? that is, are they all actually empty words and unintelligent labor?

* Pt. 1, p. 16, &c, p. 51, &c. † Ib., p. 58. ‡ "*How Gertrude Teaches her Children*."

These considerations may enable us to arrive at a correct estimate and application of the use of intuition. It is intended to assist the work of the understanding, by representations which the eye will easily take in and the mind will easily retain; and to facilitate the comprehension of numbers and their relations to each other, and afterward the methods of operating in agreement with the ideas thus received. If the intuitional powers have fulfilled their task, and if a correct understanding has been attained in the small matters at first studied, the pupil may boldly proceed to greater numbers—to numbers so great that intuition can not deal with them at all. Thus, the scholar's intuition on the subject of fractions may carry him, for instance, at furthest, to the subdivision of a line into twenty-four equal parts, and to their designation in their various different ways, as 2×12 ; 3×8 ; 4×6 ; 6×4 ; 8×3 ; and 12×2 . By means of such a line as this a clear idea can be formed of the mutual relations of fractions of different denominators; as, for instance, that $\frac{6}{12} = \frac{1}{2} = \frac{2}{4} = \frac{3}{6} = \frac{4}{8}$ or that $\frac{2}{4} = \frac{1}{2} = \frac{3}{6}$, &c. But the eye is not capable of taking in Pestalozzi's line subdivided into ten times ten portions. In this case the understanding has to assist the eye much more than the eye the understanding.

We have seen that instruction in arithmetic has always commenced with visual intuition, and that Pestalozzi endeavored to erect this natural proceeding into a method—a system which should proceed from a right beginning to a right end, in a right manner. With this design he published his "*Elementary Books*" and Intuitional Tables. And yet, the numerous and even excessive exercises upon these tables had really nothing whatever to do with arithmetic. After the pupil had completed the whole of these exercises, without even knowing the Arabic figures, these last may be made known to him "in the usual manner,"* and their value as dependent on their places. After this comes operations with figures.

But my experience has been, that it is precisely for the understanding of these operations that intuition is most necessary. The tiresome, inanimate marks of the Pestalozzian tables seem to me peculiarly unsuitable for children, who rather require colored or shining things, such as will easily impress their fancy. And again, if these things are to open the road to operations with figures, they must represent not mere units, but must be adapted to the decimal system—the system of Arabic figures. I made use of counters; which, if properly managed, will afford much assistance.†

A difference must be made between numbers and figures. The

* Türk, 101. † See Appendix III. on this point.

same number can be indicated by very different figures; as, for instance,

One.	Five.	Ten.	Hundred.	Thousand.
á	é	í	þ	α
I	V	X	C	M
1	5	10	100	1000

To comprehend the wondrous and almost magic power of the so-called Arabic figures, it is only necessary to work the same example with these and with the Greek or Roman figures.* The example in the note is very simple; the difference will appear more evidently on trying even a very moderately large example in "long division" with the Roman figures. And if there is such a difference even in the elementary part of arithmetic, how much greater will it be in more complicated work!

In later times this written arithmetic, so far from being an object of admiration, has, on the contrary, been so violently attacked that mental arithmetic has assumed a remarkable predominance over it. A teacher wrote a little work, entitled "*Head or Thought-Arithmetic*," in which written arithmetic was almost synonymous with "mindless arithmetic." This reaction, however, was quite natural. We have already seen that in early times pupils were taught only the operations with figures; that they only learned to juggle according to the rules given them, and did not even know how they arrived at the results of their operations. Schiller objects to certain authors that "language did their thinking and wrote their poetry for them." In like manner the wonderful decimal system thought for these scholars, if not even for their teachers themselves.

It is at present a source of satisfaction, that by mental arithmetic this juggling business is to be brought to an end. And for certainty's sake it is strictly forbidden to perform the mental operations with the help of imaginary figures, this being really identical with written arithmetic.

But a proper regard should be paid to the latter; and it should be remembered how soon we come to the limits of mental arithmetical operations where we become obliged to use figures, letters, or visible representatives of some kind. Many persons are inclined to exceed these limits, even by force; and imagine that by the most complicated examples in mental arithmetic they can develop the scholar's capacity to the utmost extent. But a skillful mathematician of

* (A) 432)864(2 (B) OCCCXXXII)DCCCXXXXXIV(II)

This is but a trivial example of the magic of the decimal system; 100,000 florins are how many each to ten men? *Ans.*—10,000 florins. The fault is our own if we do not admire such a system.

Berlin has asserted, in contradiction to these, that "mental arithmetic is not actually an exercise of the understanding, because it requires the use of the memory exclusively." No one can deny this statement as to the use of the memory; nor that those virtuosos, who are accustomed to exhibit their skill in mental arithmetic, are usually of very trifling capacity in other matters.

The correct belief is that of those who, like Diesterweg and Stern, have opposed not merely the earlier mechanical written arithmetic, but have also sought to penetrate the essential principles of the mechanism of it, and to make their pupils understand, so that the latter might make use of written arithmetic with the same clear comprehension as mental arithmetic.

It was seen that the difference between mental and written arithmetic consisted chiefly in the abbreviations which are used in the latter. But the pupil readily apprehends the briefer processes of the latter, when explained to him in full by the teacher.* For arithmetical instruction is concerned with the explanation of abbreviations, from the elements up to the infinitesimal calculus; with marks and formulas invented by the most penetrating mathematical minds. To the pupil these appear to be mere magic marks and formulas, until he is made acquainted with the mode of their production. In the higher grades of the study, however, the pupil may be accustomed to the purely mechanical use of many algebraical formulas and of logarithms, in the same way in which the mechanical use of arithmetical figures used to be taught.

The question how far arithmetical instruction should be carried in one and another school, is in some cases easy, and in others difficult, to answer.

For elementary schools, Diesterweg was right in saying, "Every child should here go so far in arithmetic as to be able to solve readily in writing or mentally such problems as he will meet in common life." In the common schools there should be no prominent efforts after isolated distinction in any department.

It is much more difficult to fix a limit for arithmetical instruction in the burgher schools, because these schools are of very various characters, according to circumstances. The general future occupation of the children who attend the burgher schools has particularly great influence in this respect.

By examining a large number of school programmes, from various parts of Germany, I have found that at present most of the gymnasia proceed to about the same extent in mathematical instruction.

The Prussian ordinance on examinations, of 1834, requires "Thor-

* For an example see Appendix IV.

oughness in the theory of the powers and roots in progressions, and also in the elements of algebra and geometry,* plane and solid; knowledge of the theory of combinations and the binomial theorem; facility in managing equations of the first and second degree, and in the use of logarithms; a practiced knowledge of plane trigonometry; and especially a clear comprehension of the connection of all the propositions in the whole system of lessons."

A hundred years before, in a Prussian ordinance of 1735, no methodical knowledge was required, even of gymnasium graduates.†

On the question whether the gymnasium course should also include conic sections and spherical trigonometry, opinions differ. Only the teachers of two gymnasia declare for instruction in the infinitesimal calculus, while others are decidedly opposed to it, and certainly with entire propriety. Pupils of distinguished mathematical talents should follow their mathematical course further, at the university or at the polytechnic school.‡

There is no study where so urgent a warning is needed against the overstimulus of the scholars as in mathematics. It is known that, in Pestalozzi's institution, Schmid's influence caused this department to occupy a disproportionate space, and pushed every thing else into the background. The children were also experimented on; and were encouraged to exercise exhibitions of arithmetical skill, in the same manner as injudicious gymnastic instructors quite go beyond the limits of their art, and instruct their pupils in rope-dancing, for the sake of exhibiting their own skill in the skill of their scholars. To teach the infinitesimal calculus in a gymnasium is a similar excess.

No teacher should ever seek, by excessive stimulation, to spur on his pupils to an unnatural point of attainment, which most of them can never reach. If a few of them reach the desired summit, they usually retain their place on the peak of their intellectual Mont Blanc only a very short time, and by the most violent exertions. When the teacher ceases his efforts, or they leave school, they throw aside the study in disgust; and, according to the fixed law of nature, the excitement is succeeded by a relaxation. The teacher should be contented and pleased, if his pupils attain to some little excess of knowledge, doing so under healthy natural incentives, not too great

* The ordinance of 1812 prescribed the first six and the eleventh and twelfth books of Euclid.

† See Prof. Lentz, in the *Annual Report on the Royal Frederic College, at Königsberg*," (*Jahresbericht über das Königl. Friedrichs-Kollegium, in Königsberg.*) 1837.

‡ The mathematical instruction at the schools of arts and trades, and polytechnic schools, is meant to determine the future practical ability in mathematics; that in the gymnasia, rather the formal knowledge of it. The former, therefore, requires a higher degree of skill in the pupil, which also must be based upon a scientific knowledge. It must cultivate the roots of the study to develop it.

for their faculties; if they gain an entirely clear understanding and entire facility in the study up to this point. What has been thus acquired is not easily forgotten after the school-years; and, even if he goes no further with that study, he will always retain a certain degree of knowledge, which, if his teacher was intelligent and judicious, can not easily fail him.

I can not resist quoting a case given by Diesterweg, to illustrate what I have said about excessive stimulation of scholars. In speaking of de Laspé, principal of a private institution at Wiesbaden, he calls him a natural genius in didactics, who "accomplishes extraordinary things by the help of enthusiasm. For," he continues, "is it not praiseworthy and instructive, even if on other accounts to be disapproved of, to see girls of twelve occupying themselves, with genuine delight, with mathematical constructions, and, without assistance, solving problems which any one would admit to be difficult for that age. Many instances," Diesterweg continues, "have occurred in de Laspé's school, to show with what enthusiasm an energetic teacher can fill his scholars. I will relate one. High Mining Councilor K.,* during a visit to the institution, at the invitation of de Laspé, gave out to the boys and girls a geometrical problem. All, great and small, teachers and scholars, went to work on it. No one discovered the solution. Thus passed the first day. On the next, all went early to work on it again, but in vain. De Laspé endeavored to renew the enthusiasm of the school, but no one found out the solution. A dull feeling of weariness and despair came over the whole institution. Nothing could be accomplished in this way. The honor of the institution seemed to be at stake; de Laspé worked, and begun and ended his efforts in bad humor. On the fourteenth day he held an evening devotional exercise for encouragement, and prayed that God would strengthen him and the members of his institution for the solution of the problem. What was the result? At about three in the morning, a boy, in his night-clothes, ran to de Laspé's bedside; he had discovered it. De Laspé sprang up and struck a light; the boy went through his operation. It was right! The whole house was called together on the instant, and the triumph made known. De Laspé was a pedagogical genius." So far Diesterweg.

But does de Laspé, according to this account, really deserve the name of a pedagogical genius? Does a teacher deserve that name, who inspires girls of twelve with a truly unnatural passion for mathematics? a man who, when his whole institution has fallen into a dull weariness and despair because neither he nor any body else in it can solve a problem which a stranger has happened to propose to them,

* Kramer. See "*H. Pestalozzi*," by A. D., (*A. Diesterweg*), p. 23.

makes this foolish despair the subject of an appeal to God at an evening-prayer? And do not the question, "What was the result?" and the answer, that a boy discovered the solution—do not these constitute a pietistical statement of a providential answer to prayer? The "honor of the institution, which seemed at stake," is rescued, it is true; but what honor? So far as this story goes, I can see in de Laspé only a restless pedagogical zealot,* who urges his pupils to an unnatural mental over-exertion, by especial use of the spur of vanity; who makes fanatics of them. No more monitory warning could be given of an over-excitement calculated to destroy all childlike character. Let the reader only transplant himself in imagination into the despairing, brooding, and study—the abominable fourteen days' restlessness and excitement—of these teachers and poor children, thus hunted to the death, as it were, by their own vanity.

All this seeking ended at last in the *Eureka* of a boy. But the efforts made by the teachers and pupils together show clearly how the inventive method ought never to be abused; or, rather, they show no particular method was used here at all. The teacher of a science or art ought to know, and be able to do, what his pupils are placed under his care to learn; how otherwise could he teach them? No blind man is calculated to be a guide.

Diesterweg visited de Laspé in 1817, and accompanied him and his pupils in a pedestrian excursion to the Johannisberg in the Rheingau. In passing through that region, whose beauty, famous from ancient times, has attracted to it such a multitude of travelers, to view the mighty stream, its vineyards and peaceful towns, with the wooded mountain in the background, the reader will fancy how delighted teachers and scholars must have been. But he will deceive himself.

They had to take much more care not to get lost while they were at work upon some lessons that required their whole attention. Diesterweg relates in particular the following: "In walking, algebraic problems were given out and solved, for several hours at a time; scholars as well as teachers proposing them. At evening, at the inn, after supper, they 'made language,' to use the technical term; that is, de Laspé discussed the laws of language with the pupils for several hours, no one showing fatigue or weariness. What would our boys say to this? I must publicly confess that I never saw any where so much enjoyment, so much pleasure in independent thinking and investigation."

Such "enjoyment" reminds me of the Dance of Death at Basle.

* I judge only by this story, for I know nothing further of de Laspé sufficient to found an opinion.

NOTE.

COUNTERS IN ELEMENTARY ARITHMETIC.—I used white and yellow counters, of different sizes. The smallest white ones were units, larger ones tens, and still larger ones hundreds. To these I added four yellow sizes; the smallest for thousands, and larger ones for ten thousands, hundred thousands, and millions. I did not immediately go any further.* The units served all the purposes for which beans, marks, &c., have been used; as, practice in counting, division into equal and unequal parts, &c.

In teaching written arithmetic, I found the following use of counters very convenient. The children of from six to eight years old usually knew as much about money as that, for instance, four pfennigs made a kreuzer, and six kreuzers a sechser. I took advantage of this actual experience of theirs to base my instructions. After they had learned sufficiently well to count with the unit counters, I said, "Just as the large sechser is worth six little kreuzers, so is one larger counter worth ten small ones; so we will call the large one a ten. Then I put with the ten nine more ones, successively, and so taught them to count from ten to nineteen; then I added a tenth one, and changed the ten ones for a second ten, and called the two tens twenty. In the same way I went on to ten tens. Now, just as ten ones is a ten, so are ten tens a hundred; which is again represented by a larger counter. On these exercises there may be constant exercises; such as, How many ones in two, three, &c., tens? How many ones, or tens, in one hundred? Then count out ten times ten ones, and then substitute ten tens, to the same value.

By using the counters on the table, the writing and reading of figures will be easily learned. It must only be remembered that the ones stand in the first place to the right, the tens next, &c. Then two ones may be laid down, then three tens, then a hundred, and lastly, at the extreme left, a thousand. Then the pupils may be taught to read them off, thus:—Two; thirty; thirty-two; one hundred; one hundred and thirty-two; one thousand; one thousand one hundred and thirty-two.

Writing the figures connects itself very naturally with these exercises. Supposing the children can write the Arabic figures, they may be told that they must be written exactly as the counters lie on the table; that the first figure to the right represents ones, just as the first counters to the right do; the next tens, &c. The figures should at first be written in the same order in which they are at first explained; beginning with the units.†

It can now easily be made clear what is the use of the cipher in written arithmetic. Let the pupil first lay down twenty-one in counters; two tens and a unit. But, ask him how will he express two tens and *no* unit? There must be a sign to show that there is no unit. I took, for this purpose, small round white pieces of pasteboard, which I put wherever there was no figure, whether in the place of units, tens, hundreds, &c. If it be required to lay down 302, the child placed two ones, a cipher for no tens, and three hundreds.

The orderly placing of the counters, the reading off of the number, and the writing of it should proceed together. If there are several pupils, there may be a division of labor; some laying down counters and others writing, and then each reading off the work of the other.

In this way the children will gain a knowledge of the decimal system, and of the profound wisdom with which the ancient Hindoos arranged their figures by it.‡ But the counters can be further used in explaining the ground-rules, espe-

* It would be well to have 1, 10, 100, 1000 printed on the counters; and on the other side I, X, C, M, according to their value.

† The Roman letters on the counters can be easily used so as to show the value of a figure, one, for instance, in different places.

‡ It was not the Arabs, but the Hindoos—as was already stated—who invented the decimal

ejally addition and multiplication, Under the columns of counters lay a rule, for the line, under which to place the sum. If the units add up to 12, change ten of them for a ten, put it with the column of tens, and put the remainder of 2 under the units, and so on. When with the aid of the counters the children have learned to count, the decimal system, writing and reading figures, and a more or less clear knowledge of the four ground-rules, the counters should be gradually disused.* They might be afterward used again in explaining decimal fractions.

EXPLANATION OF THE USUAL ABBREVIATED PROCESSES IN WRITTEN ARITHMETIC.— I will illustrate by a few examples what is said in the text of the means by which our teachers may endeavor to explain written multiplication and division. For instance, the example in multiplication, 6×11356 , may be worked in three different ways, as follows:—

<i>a.</i>	<i>b.</i>	<i>c.</i>
11356(6)	11356(6)	11356(6)
<hr style="width: 100%;"/>	<hr style="width: 100%;"/>	<hr style="width: 100%;"/>
68136	36	60000
	300	6000
	1800	1800
	6000	300
	60000	36
	<hr style="width: 100%;"/>	<hr style="width: 100%;"/>
	68136	68136

The first, *a.*, is the common abbreviated form; *b.* and *c.* give the solution at length, as it ought to and must be worked, before the abbreviated mode. For the solution of *c.*, we will suppose a case. Six brothers inherit each 11356 florins, What is the entire sum? The multiplicand consists of one ten thousand, one thousand, &c., down to six units. Each heir will have one ten thousand, in all sixty thousand; also one thousand, in all six thousand; and so on; lastly, each will receive six units, in all thirty-six. Add these products together, and you will have 68136. The example *b.* is entirely similar to example *c.*, except that here the multiplication begins with the units, as in the abbreviated mode. The latter will become clear by comparison with *b.* It will readily be seen that the abbreviation consists in this: that the product of each separate place is not written down in full; but that, when for instance the product of the ones furnishes tens, they are kept in mind and added to the product of the tens, &c.; so that the additions in example *b.* are performed in the mind. Thus, $6 \times 6 = 36 = 3$ tens and 6 units, which last are put in the units' place in the product. Then, 6×5 tens = 30 tens, which with 3 tens from the first product makes 33 tens, or 3 hundred and three ones, which remainder put in the tens' place in the product; and so on.

The pupil can thus be shown that the abbreviated operation in example *a.* must begin from the lowest place, so that the overplus from each place may be carried to a higher.

system and the wrongly-named Arabic figures. What other mathematical discovery can be compared with this? See Whewell, I., 191.

* In the arithmetics of Diesterweg, Stern, &c., other modes of making numbers visible are used. As to counters, the question is, whether they can be used in schools for a large number of pupils. Herr Ebersberger, of the Altorf Seminary, advises to fit up a large blackboard with parallel horizontal ledges or gutters of tin, in which large counters may be set up, as letters, &c., are set up in using the board to teach reading, &c. Dr. Mager remarks, in his treatise "*On the Method in Mathematics*," (*Ueber die Method der Mathematik*), that he has used counters in teaching. He says, (p. xviii.), "The second stage brings in the decimal system, first with counters and then with figures. The smallest counters represent units, a larger size tens, the largest hundreds. It is a pleasure to see how the children can use the counters to add, multiply, subtract, and divide. When they can work both with counters and mentally, nothing is easier than to work the same problems in figures; the greater convenience of the written method induces the children to learn it quickly."

PHYSICAL EDUCATION.

[Translated from Raumer's "History of Pedagogy," for the American Journal of Education]

PHYSICAL EDUCATION includes,

1. Care of the health.
2. Inuring to endurance and want.
3. Training in doing; in bodily activity. Gymnastics.*
4. Training of the senses, especially of the eye and ear.

I. CARE OF THE HEALTH.†

The realists have paid especial attention to the care of the health; such as Montaigne, Bacon, Locke, and Rousseau.

At a later period, Hufeland's "*Art of Preserving Life*" has had much reputation. Much of what he says relates to people whose nerves are disordered by overexertion, and is useful for the recovery of such.

Care of health includes, first, diet. The most harmful food had become even customary among us, old and young; and it was at a late date that we began to examine the operation even of the most usual articles of diet. The temperance societies, for instance, have come out all at once against brandy, and its numerous family. All such measures have influenced the diet of the young, but have not had a thorough operation on it. Who does not know how many parents now give their young children coffee every day; and how extensively the children drink tea.

Warnings enough can not be given against the frequenting of the stomach-destroying confectionery-shops.‡ Another fact of the same kind is the sight of even boys walking about with tobacco-pipes and cigars in their mouths.§

Clothing.—Rousseau, and the Philanthropinists, his followers, were the first who declared war against unsuitable modes of clothing

* Bacon, in a section on Athletics, says, "Endurance, both of active exertion and of suffering. Constituents of active exertion, strength, and quickness; enduring suffering is either patience under indigence or fortitude in pain." (De Augm. Scient., 4, 2, 113.)

† I have already treated of the education of the youngest children.

‡ This evil increases in Berlin, every year. In the time of the Turning societies, therefore, they and the cake-bakers were utterly at variance.

§ And have any good results followed from the efforts of the health-police against the sale of opium-cigars, for instance, which were openly vended at the Frankfort fair? Woe to all people who learn to love that poison!

children.* The Turners introduced an appropriate, convenient, and healthful costume; and endeavored at the same time to oppose the foolish vanity of a change of fashions. I shall say nothing at all of the fashions as prevailing among women. To appear new is always the thing sought after, even if a new monstrosity is the result. The sense of beauty seldom betrays, but yet we have seen the hoop-petticoat and the French rococo style reappear.

When shall we cease to make children sleep in deep, stupifying feather-beds, and in unventilated chambers?

Early to bed and early to rise, says the old proverb. Excessive mental labor is harmful to all, especially by night, and is utterly destructive to the young, and most of all when drowsiness is kept away by coffee, &c. Such a course results in a truly horrible condition of overstimulation, in which even a healthy person completely loses control over himself.

The body is a temple of the Holy Spirit. How do those desecrate that temple, whose god is their belly! And it is most fearfully defiled and destroyed by the withering secret sins which have made such fearful progress amongst our youth. But our educators do little to avert the evil—they rather pour oil upon the fire. When, to the influence of stimulating drinks, excessive eating, hot feather-beds, we add that of provocative dances, plays, and romances, and of those indecent pictures which make such deep impressions on the minds of the young, and destructively stimulate and entice during waking and sleep, who can wonder that such sins gain influence over our youth, and destroy them, soul and body? Do we make serious efforts to prevent these influences? Do we not rather behold them with indifference; arranging the dances ourselves, taking the children to the theaters when Kotzebue's and other loose pieces are acted? Is it not so? And does not all the world cry out, Pietism! if any one says a word against this destruction of souls?

But the question has been asked, almost despairingly, by many, How are these secret sins to be prevented? First, by not giving them any assistance by making the young more susceptible to them, by rendering them morally and physically weak and corrupt. And, second, by positive discipline and strengthening of the body. The best protection of all, however, is an education in the fear of God; a means which may avail even when the destruction has gained a footing. Those who are corrupted in this way must be managed according to their peculiarities. To shameless cowards the truth should be told, that their habit is suicide; and that, if they go on in

* See the chapter on him.

it, they have already lived most of their days. The sight of any one who has become idiotic by onanism produces a powerful effect on boys. There are also, however, cases where it is better to encourage, and to give assurances that, upon a cessation of the habit, the body will become strong again, though on that condition only.

Lying goes hand in hand with this devilish secret vice; and bodily and mental filth, and atrophy.

Lorinser's article "On the protection of health in the schools"* directed the eyes of educators to the startling condition of the health of the pupils in our gymnasia. It was asked, What are the universal sources of the destructive physical condition of the schools, that make their pupils die faster than other German youth? Lorinser answered, The evil is based in the number of studies, the hours of instruction, and the home labor.

The number of studies, especially since real studies have made way into the gymnasia, has increased since that time. Still, several Prussian gymnasium programmes indicate that the number of hours of instruction was as great formerly as now; because as much time was devoted to their fewer studies as to our more numerous ones. Thus the reason of the evil should not be found in the number of hours of instruction, unless we answer that the scholars of the present day are less capable of study than they were then. Nor should the number of studies be blamed, without further examination; for fewness of studies has its evils too. Ratich taught "Only one thing at once. Nothing is more injurious to the understanding than to teach many things at the same time; it is like cooking pap, soup, meat, milk, and fish all in the same kettle, at once. But one thing should be taken up in order after another; and only when one has been properly attended to should another be entered upon. A single author should be selected for each language, from whom it should be learned. When he is thoroughly understood, and as it were quite swallowed down, another may be read. Nothing new should be taken up until what went before is understood quite thoroughly, and to entire sufficiency."

On this it has been remarked,

"Is this really according to the 'course of nature?' Would it be natural to eat broth alone, or fish alone, for eight months together, and even longer, as Ratich's pupils studied Terence? Is not a variety of reading matter, as in Jacobs' excellent readers, much more suitable to it? Just as we never eat one thing alone, but bread with meat,

* This appeared, in 1836, in the "Berlin Medical Gazette," (*Berliner Medicinisches Zeitung*.)

for example, it should be the care of the teacher not to clog his pupils with one thing forever. And, as the skillful host tries to furnish dishes which are suitable to each other, and which by their very connection shall conduce alike to good flavor and good digestion, so should the skillful pedagogue teach the same pupils, during the same term, various things, such as will serve to complete each other, and by whose alternation the pupil shall remain fresh, not satiated, but mentally nourished in a healthy way."

A judicious interchange of studies would be favored even by Lorinser; but an injudicious one—consisting merely in a restless changing from one thing to another, without ever asking whether all these single studies will harmonize together, and become one complete whole in the boy's mind—such an interchange I shall, of course, not need to discuss at all. On that point I agree wholly with Lorinser's complaints.

But the chief reason of the bodily as well as the mental bad condition of the pupils seems to lie less in the multitude than in the ill-contrived method of the doing of the school-work. Many things are forced upon the pupils which they do not like; especially a chilly, abstract method of studying language, and an unnatural, over-stimulated mode of mathematical study and production. Nor is this the case at the gymnasium merely; the evil is still greater in the lower schools. And, on the other hand, the pupils are kept away from what is appropriate for them, and from what they enjoy. Such a perverted method of mental stimulation and over-stimulation must necessarily destroy the body as well as the mind.

The case requires particular attention where each teacher in a school is attentive to his own department only, and makes such requirements upon the scholars as if they were under his instruction only, and had no other work to do. Thus, when the historical teacher requires of them to learn the most trifling things, such as innumerable dates; the geographical teacher, the smallest towns and rivers, the number of inhabitants of unimportant cities; the French teacher, the six first books of "*Télémaque*;" or the Latin teacher, many pages of the "*Loci Memoriales*," to be committed to memory; when the mathematical teacher spurs them forward to the integral calculus, &c.; in such a case, the conscientious scholar must indeed succumb to the burden of "home-labor," or must quite give up conscientious work.*

* As an instance of the unreasonable conduct of many department-teachers, it may be mentioned that, in a certain well-known institution, the teacher of mathematics set as much home-work to the scholars to do as all the rest of the teachers together.

II. INURING TO ENDURANCE AND WANT.

What has already been said indicates clearly enough that nothing is usually done in this direction by parents; but quite the contrary. It is usual to enervate the children, to seek to satisfy all their desires. Nor should this astonish, in an age when the most fleshly epicureanism prevails. How could strong self-denial and self-command grow out of such an idle, pleasure-loving home-life? These virtues are to most persons bitterness and folly. Woe to humanity, when nothing is desired except mere undisturbed animal enjoyment, and when all nobler aspirations pass for folly!

It is difficult to proceed methodically in the more passive portion of bodily training. This must be lived rather than taught. Boys in the country, who run about out-doors, in the hottest as well as in the coldest weather, in rain and snow, become hardened against wind and weather, without their parents or teachers knowing any thing of it. But if a child grows up in a great city, where it is probably half an hour's walk and more to the nearest city-gate, especial pains must be taken to see that he goes into the fresh air every day. For this reason gymnastic establishments are an especial need of large cities.

It is important that the child should become inured to wind and weather during the first years of his life.

Journeys on foot afford the best opportunity for hardening and privations of all kinds. Bad weather, bad roads, miserable inns, and innumerable other inconveniences, annoy even the most fortunate traveler. But all this will be endured, especially in the company of companions, not only with patience but with superabundant delight. He who makes some sour faces at rain and bad food suffers double.

It is to be lamented that steamboats and railroads have made such a destruction of journeys on foot. Such a flitting across countries is entirely useless. It does not strengthen the body; one who goes in one day, by railroad, from Manheim to Basle, seems to himself afterward to have dreamed of an exhibition, where the Rhine and Neckar, the Black Forest and the Vosges, Heidelberg, Carlsruhe, Strasburg, &c., were all passed rapidly before his eyes—all is to him a transitory cloud-picture.

In war, young persons who have been hardened, who are easily satisfied, and not corrupted by luxury, are far superior to their opposites. The latter are quite without self-control, and as if without their senses or courage, upon being summoned to turn out a little early in the morning, especially after having a cold night in the open air.

III. TURNING.

It is well known how highly the Greeks valued gymnastics, and

how the Roman boys practiced bodily exercises as a preparation for war. We are equally well acquainted with the bold strength and activity of the ancient German nations, and their chivalric renown in the middle ages. As the cities became prominent, the citizens were not behind in this respect, and there grew up among them fencing-schools for the mechanics, privileged by the emperor.*

That bodily exercise is an important part of the training of the young was a truth recognized by Luther; but which, since the sixteenth century, has been made most prominent by those already mentioned as realists.

Luther says,† "It was right well thought of and ordered by the ancients, that the people should exercise themselves, and learn something useful and honorable, so that they might not fall into rioting, vice, gluttony, drunkenness, and gaming. Therefore these please me the best of all—these two exercises and amusements, to wit, music and tilting, with fencing, wrestling, &c.; whereof the first drives away care of heart and melancholy thought, and the second gives well-proportioned and active limbs to the body, and keeps it in good health, by jumping, &c. But the most weighty reason is that people may not fall into drunkenness, vice, and gaming, as we see them, sad to say, in court and in city, where there is nothing except 'Here's to you! Drink out!' And then they gamble away perhaps a hundred florins, or more. Thus it goes, when men despise and neglect such honorable exercises and tiltings."

Luther observes, very correctly, that an active, healthy man, skillful in his exercises, and who takes pleasure in them, will for that very reason energetically withstand the loose and vicious life of mere pleasure-seeking, while the sensual at once give up to it.

Montaigne, the realist forerunner of Rousseau, blames those weak parents who can not bring themselves to keep their children on simple food, to see them covered with sweat and dust from their exercises, riding a spirited horse, receiving a smart thrust in fencing, or a kick from the discharge of a gun. "He who desires," he says, "to see his son a strong man, must certainly not make him effeminate in his youth, and must often set aside the rules of the physician. It is not enough to make his mind firm; his muscles must be made firm too. I know well how my own mind is tormented by its companionship with so weak a body, which depends so much, and bears so heavily, upon it."‡

Rousseau says, "The body should be strong, that it may obey

* See Jahn's "Turning System," (*Turnkunst*), p. 278.

† Walch, XXII., 2280, 2281.

‡ Essays, I, 299—301.

the soul—a good servant should be strong. The weaker the body is, the more it commands; and the stronger, the more it obeys.* A weak body weakens the soul." "If you would develop the understanding of your pupil, develop the powers which his understanding is to govern; incessantly train his body. Make him strong and healthy, that you may make him wise and intelligent; make him work, run, cry out, always busied about something; let him be a man in strength, and then he will be one in reason."†

We have already seen how these counsels of Rousseau were followed in the Dessau Philanthropinum, where they practiced gymnastics, and took pedestrian journeys with the boys. Rector Vieth, of Dessau, a man of great skill in many bodily exercises, published an "*Encyclopedia of Bodily Exercises*," (*Encyklopädie der Leibesübungen*.)

But the greatest attainment was made at Salzmann's institution, under Guts Muths; who wrote a work on gymnastics, which gained a wide influence.‡ It was founded upon "*Emile*."

The chief principle of physical education is, according to Guts Muths, "Train all the powers of the physical man to the point of utmost possible beauty and usefulness of the body, as of the teacher and servant of the soul."§ Gymnastics is "a system of exercises for the body, intended to perfect it."||

Guts Muths, with great care and judgment, worked out this system of discipline in the fullest detail; and at Schnepfenthal there was serious earnestness in the department of physical training. The children played, not only for the sake of relaxation from the labor of the school, but their bodily exercises were made a necessary part of their intellectual training, and an indispensable department of instruction in the school.¶

Meierotto, the eminent Berlin rector, erected, in 1790, a roomy

* Just as Marcellus Palingenius had said:

"Corpus enim male si valeat, parere nequibit
Præceptis animi, magna et præclara jubentis."

† I have said more about gymnastics, and errors in "*Emile*," in my chapter on Rousseau, q. v.

‡ "*Gymnastics for the Young*," (*Gymnastik für Jugend*.) By Guts Muths. Second edition. Vienna, Dell, 1805. Prof. Klumpp issued a third edition, with many additions. The first edition was translated into Danish, English, and French.

§ *Gymn.*, p. 31.

|| *Ib.*, p. 13.

¶ I shall hereafter discuss Guts Muths' instructions for the cultivation of the senses. In 1817 he published a work on Turning, which set forth the relations between Turning and collective exercises. Turning has no more reference than school instruction has to any particular class; but seeks a general development, equally beneficial in any condition of life. Turning is to develop the bodily independence of individuals; exercising, to make them efficient members of a body. Games, in which a company of Turners put forth free, graceful, general exertions, are much preferable to a stiff exercise under direction of a subaltern. Skillful Turners can very quickly learn the infantry manual. It is very good to teach soldiers the Turners' exercises; but it requires instant attention when the Turners begin to play soldiers.

exercising-place, in connection with the Joachimsthal Gymnasium, including among other things a swinging-tree; and this may be considered a forerunner of the subsequent Turning organizations in Berlin. At the repeated request of Meierotto, King Friedrich Wilhelm II. gave 30,000 thalers (about \$22,500) toward the purchase of the ground.*

Fichte, in his orations to the German nation, strenuously recommended bodily exercise, and cited Pestalozzi. He says, "Nor must another subject, brought forward by Pestalozzi, be omitted; namely, the cultivation of the bodily activity of the pupil—which should go hand in hand with the mental. He requires an A B C of this department. His most important observations on the subject are as follows: 'Striking, carrying, throwing, pushing, drawing, whirling, wrestling, swinging, &c., are the simplest bodily exercises. There is a natural order of succession from the beginning of these exercises up to a complete knowledge of them; that is, to the highest degree of activity, which makes certain the hundred applications of striking, pushing, swinging, and throwing, and gives certainty of hand and foot.' According to these views all depends upon the natural order of study; and it will not suffice to begin blindly and arbitrarily with any exercise whatever, and then to assert that we have a physical education, as the ancient Greeks had. In this respect every thing is yet to be done; for Pestalozzi did not prepare an A B C of this department. But such a one must first be prepared; and, to do it properly, there is needed a man equally at home in the anatomy of the human body and in scientific mechanics; who unites with this knowledge a high grade of philosophical character, and who is thus fitted to bring to a condition of symmetrical perfection the machine which we may consider the human body as intended to be; and so to conduct every step in the only possible right course as to prepare and facilitate every subsequent one, and thus not only not to endanger the health and beauty of the body and the powers of the mind, but to strengthen and increase them, and thus to develop this machine from every healthy human body. The indispensableness of this department, in an education professing to train the entire man, and claiming to be especially appropriate for a nation seeking to recover and afterward to maintain its independence, needs no further mention to be perfectly clear."† Pestalozzi's institution did not accomplish what Fichte expected of it in respect to bodily exercise; but among his hearers there was one who was perhaps influenced by these very

* "Attempt at an Account of Meierotto's Life," (*Versuch einer Lebensbeschreibung Meierotto's.*) By Brunn. Berlin, 1802, p. 312, &c.

† "Oration," &c., pp. 171, 172. "Weekly for Human Development," (*Wochenschrift für Menschenbildung.*) Vol. 2, No. 11.

addresses to his distinguished labors for gymnastics; namely, Friedrich Friesen.*

Bodily exercises were commenced at Yverdun in 1807; and there is an account of the mode pursued, and of the views entertained on the subject, in the first volume of Pestalozzi's "*Weekly for Human Development.*"† This account contains much that is correct and well worth consideration, and also many errors. It is true that the body should not be developed in a partial manner, that is, not for fencing or jumping alone; but that the gymnastics pursued should aim at a harmonious total development of the whole. The bodily ill condition of manufacturing operatives is also well described.‡ "Manufacturing labor," it says, "is undermining the physical strength of our people still more than all this. 'Stand up there, boy, at the carding-table; girl, sit at the cotton machine, or the embroidering machine; spread your colors from morning to night, or turn your wheel, or sew, from morning to night; and I will pay you more than a farmer or his wife will earn with their hacking and grubbing.' Thus have our poor been addressed, for forty or fifty years; but they did not say, This one-sided sort of occupation will make you crippled and sickly. They did not say, When the cotton manufacture ceases to prosper, when power-looms are invented, when embroidery goes out of fashion, you will be left with your distorted hand, your weakened bones, and injured digestion, as unfit to learn any other manufacturing as to use the bill or the axe. You will live out your old age a worn-out and hungry beggar. You will know nothing except what you have learned, and you have sacrificed your general strength of body and its cultivation to a one-sided and crippling occupation, and to its deceptive profits. Examples of such destruction have long been before our eyes; but white bread, bacon, wine, brandy, and insinuating manners make a deeper impression than all these dangers. And every thing that was bad, on the part of the parents, drove the children, even down to the youngest, to these carding-tables and machines. Why did these wretched people make such sickly creatures of their children? It was because they shared with them the white bread, and bacon, and wine, and brandy that they earned. In many places the miserable school-rooms had already prepared the children for the miserable factory-rooms. The parents took them out of the former and drove them into the latter, where they would at least earn them something to eat. Thus the number of sickly people increased in the land to thousands. But now they no longer receive their wages,

* See the extracts below, from Jahn's preface to the "*Turning System.*"

† Nos. 3-6, from 3d June, 1807, onward, pp. 33-37.

‡ *Ib.*, pp. 49, 50.

or their white bread and bacon: but these miseries of the land have resulted in this; that our people and their physical condition, in many places, need, more than elsewhere in Europe, the assistance of a wise government, and of the power of the human heart, which is now reasserting itself, against the consequences of this manufacturing selfishness, and their depth of physical degradation and weakness."

But the higher classes had become hardened, and had lost all natural sensibility and sympathy.* "But it is not the only evil," the article continues, "that innumerable numbers of our poor are fallen into a condition in which they look more like ghosts than like men. The consequence of these errors, as to what we physically need and should be, have introduced, even into the minds of our wealthy and healthy people, an absurdity and weakness which is shown by singular peculiarities. In many places, if you would be reckoned among the honorable and respectable part of the community, you must not, even in the hottest weather, take off your coat and carry it on a stick or on your arm. And your children must, all summer, wear stockings, and have a cap on their heads; must not climb trees, nor jump over ditches, &c. And, in the same places, the most unreasonable stiffness of etiquette has arisen from these notions of maintaining respectability. You must not cut wood before your door, even if you might escape a fever by doing so. The physical degradation, which reached its height by means of the cotton and silk manufactures, had commenced before, in the age of universal perukes and small swords. This was the period which laid the real foundation of our physical troubles, in high and low ranks." And the discontinuance of the popular festivals is justly stated to have aided in producing this unhealthy physical condition. The article says,† "A new and arbitrary and un-intelligent police interferes with all the pleasures of the young. The national festivals, which expressed the powerful ancient popular spirit, began to be disused; they were gradually driven away from our plains, and forced back among the mountains. And even among those heights they became degraded. They are no longer an expression of the strength of the people, a means of elevating and distinguishing the strong men of the land, or objects of popular attention and confidence. They sank down to mere paid exhibitions for strangers looking for exhibitions of skill, and for the rich who paid largely for them. And if we should to day endeavor to renew them, without renewing our people themselves, they would still not have their ancient appearance. They would be unworthy of our ancestors; but for us, as we are, satisfying, entertaining, and misleading to our wish."

* *Ib.*, pp. 50, 51. † *Ib.*, p. 51.

* * * "It is such a bodily training as the children of our ancestors had and enjoyed that must be given to our children; and the spirit of their popular gymnastics must be raised up again. But this is no partial spirit; it submits to no influence from the popular festivals. On the contrary, these, if genuine, are only the expression of the prevalence of it. It must be just as universally active and visible in households, in schools, in the labor of the field, in Sunday sports, and in amusements, as on the Alps, and at the shepherd's festivals. It must appear in the opinions of the people respecting their corporeal necessities, and in their care for them. The attainment of this object is entirely impossible, unless there is awakened in the young, from childhood up, and made universal, a lofty, active, and independent sense of power; and this will inspire the child, of itself, to all which is desirable for the salvation of the fatherland."

Who would not subscribe to these views of Pestalozzi's? But who can approve of the method of teaching gymnastics in his institution? The same article goes on to say,* "The essence of elementary gymnastics consists in nothing else than a series of exercises for the joints, by which is learned, from step to step, all that the child can learn with respect to the structure and movements of his body, and its articulations." And again,† "He can acquire this knowledge in the quickest and easiest way by means of these questions, What motions can I make with each separate limb of my body, and with each separate joint of it? In what directions can these movements be made, and in what circumstances and positions? How can the movements of several limbs and several joints be combined together?"

Would it not be imagined that this was a system of gymnastics for jointed dolls? The objects of it have joints, and nothing but joints; and what is sought is, to find what their joints will do, not what their flexibility of body will do.

There now follow some methodical exercises; not of the body, but of the joints. A, movements of the joints of the head; B, of the body; C, of the arms; D, of the legs. Each separate joint is first to be exercised by itself, and then in connection with limbs whose joints have already been exercised. No joint is omitted; in the arms, for instance, are exercised the elbow-joint, the wrist, and the finger-joints. Of the last he says, "Here also the connection and separation of the movements must receive special attention."

In short, we find in the gymnastics of the Pestalozzian school, as in their other educational departments, an unreasonable share of elementarizing; in the present case even reaching an obvious degree of

* *Ib.*, p. 64. † *Ib.*, p. 69.

caricature, at which an indifferent spectator might laugh, but at which the weary, overdrilled children would probably cry.*

We now come to a man better fitted than any of his predecessors to lay out a new course for bodily exercises, and who did actually lay out such a course. This was Friedrich Ludwig Jahn.

In his work, "*The German Turning System*," (*Die Deutsche Turnkunst*),† he gives a history of his undertaking. This is so peculiar, and so characteristic of this remarkable man, and his useful labors, that I shall give the following extracts from it:—

"Like many other things in this world, the German Turning system had a small and insignificant beginning. In the end of the year 1809 I went to Berlin, to see the entry of the king. At that celebration a star of hope arose upon me; and, after many errors and wanderings, I became established here. Love to my fatherland, and my own inclinations, now made me a teacher of youth, as I had often been before. At about the same time I printed my '*German Nationality*,' (*Deutsches Volksthum*.)

"During the beautiful spring of 1810, a few of my pupils began to go out with me into the woods and fields on the holiday afternoons of Wednesday and Saturday, and the habit became confirmed. Their number increased, and we had various youthful sports and exercises. Thus we went on until the dog-days, when the number was very large, but very soon fell off again. But there was left a select number, a nucleus, who held together even during the winter, with whom the first Turning-ground was opened, in the spring of 1811, in the Hasenheide.

"At the present time, many exercises are practiced in company, in open air, and before the eyes of all, under the name of Turning. But then the names Turning system, Turning, Turner, Turning-ground, and the like, came up all at once, and gave occasion for much excitement, scandal, and authorship. The subject was discussed even in the French daily papers. And even here, in our own country, it was at first said, The ancient German ways have brought forth a new folly. But that was not all. Unfavorable opinions sprang up, from time to time, as numerous as the sands of the sea. They had never any reasonable ground, and it was laughable to see how they opposed with words that whose works were speaking so plainly.

"During the winter we studied whatever could be got on the subject. And we reflect with gratitude upon our predecessors, Vieth and

* This system of gymnastics teaches the exercising of every joint of the body, just as the "*Book for Mothers*" teaches the knowledge of them.

† Jahn published this work, in connection with Eiselen, at Berlin, in 1816. Its motto was,

'The arts are easily lost, but are only found again with difficulty, and after a long time.'—*Albrecht Dürer*.

Guts Muths. The stronger and more experienced of my pupils, among whom was my present assistant and fellow-laborer, Ernst Eisen, made a very skillful use of their writings; and were able, during the next summer, to labor as instructors in Turning. Among those who then devoted themselves especially to swinging exercises, and afterward assisted in the full and artistic development of them, and even became thorough masters in them, were Pischon and Zeuker, who fell, on the 13th of September, 1813, at the Göhrde.

“In the summer of 1812, both the Turning-ground and system of exercises were enlarged. They became more varied, from Turning-day to Turning-day; and were mutually developed by the pupils, in their friendly contests of youthful emulation. It is impossible to say in detail who first discovered, tried, investigated, proved, and completed one or another exercise. From the very beginning, the Turning system has shown great community of spirit, patriotic feeling, perseverance, and self-denial. Every extension or development of it was used for the common good. And such is still the case. Professional envy, the absurd vice of selfishness, meanness, and despair, can be charged to no Turner. August Thaer, the youngest brother of a Turning-group of three, at that time invented sixty exercises on the horizontal pole, which he afterward increased to a hundred and thirty-two. While Thaer was taking care of a sick brother in the field, during the war, the same epidemic carried him off, in 1814, of which his brother recovered. He had before that time assisted in the establishment of a Turning-ground at Wriezen, on the Oder. Toward the end of the summer exercises of 1812, a sort of association of Turners was formed, for the purpose of the scientific investigation and artistic organization of the Turning system in the most useful and generally-applicable manner. This lasted during the whole of that winter in which the French were frozen up, during their flight from Moscow. In this association, the place of manager was, according to my wish, filled by Friedrich Friesen, of Magdeburg, who had devoted himself especially to architecture, natural science, the fine arts, and education; who had studied industriously under Fichte, and in old German with Hagen; but also, above all, knew what the fatherland needed. He was then employed in the teachers' and educational institution of Dr. Plamann, which, though not of great reputation, has educated able teachers for the fatherland. Friesen was a handsome man, in the fullness of youth and beauty, perfect in soul and body, innocent and wise, and eloquent as a seer; a very Siegfried, full of gifts and grace, and beloved alike by old and young; a master of the broadsword—quick, bold, firm, sure, strong, and unwearied, after his hand had closed upon the hilt; a strong swimmer—for whom no

German river was too broad or angry; a skillful rider on any kind of saddle; and an ingenious practitioner in Turning, which owes much to him. He had no hesitation in advocating, in his free fatherland, whatever his soul believed. He fell by French treachery, in a dark winter night, on the Ardennes, by the shot of an assassin. No mortal blade would have conquered him in battle. There was none to love him and none to sorrow over him; but as Scharnhorst has remained among the old, so has Friesen among the young, the greatest of all.

“On the king’s proclamation of February 3d, 1813, all the Turners capable of bearing arms entered the field. After long persuasion, I succeeded, at Breslau, in inducing Ernst Eiselen, one of my oldest pupils, to take charge of the Turning institution during the war. Still, it was after a hard conflict with himself that he remained at home, although doctors and soldiers alike represented to him, and his own experience daily proved, that, in consequence of a long previous illness, and bad medical treatment, the hardships of the war must necessarily be too much for him. I myself accompanied Eiselen from Breslau to Berlin, at the time when the Prussian army commenced its march, and the capital was already freed from the French; and introduced him to the authorities and the principals of schools, who promised him all manner of co-operation, and who have ever since shown confidence in him. Since that time, Eiselen has been at the head of the Turning institution during the summers of 1813 and 1814, and the intervening winter, and has conducted the exercises of those who were too young to carry arms.

“At the end of July, 1814, I returned to Berlin, and passed the rest of the summer and the first part of the winter in laboring industriously for the improvement of the Turning-ground. During the autumn, I had erected a climbing-pole, sixty feet high; a useful and necessary apparatus for climbing, and, in a level country, indispensable for training the eye to long distances. In winter, when the volunteers returned, bringing many Turners with them, the associated discussions upon the Turning system were renewed. The exercises of all the summer were considered and discussed, and the subject elucidated by argument.

“On the escape and return of Napoleon, all the Turners able to bear arms volunteered again for the field; only two who had fought during the campaigns of 1813 and 1814 remaining at home, from the consequences of those campaigns. The younger ones, who remained behind, now took hold of the work again, with renewed zeal. During the spring and summer of 1815, the Turning-ground received still further improvements and enlargements.

“In the following autumn and early part of winter, the Turning sys-

tem was again made the subject of associated investigation. After the subject had been ripely considered and investigated in the Turning council, and opinions had been compared, experience cited, and views corrected, a beginning was made in collecting in one whole all the results of earlier and later labors on the subject, and all the separate fragments and contributions relative to it; a labor which has lastly been revised by my own pen.

“Although it was only one architect who at first drew the plan, yet master, associates, pupils, and workmen have all labored faithfully and honestly upon the structure, and have all contributed their shares to it. These shares can not now be separated again. Nor shall I be so unreasonable as to praise the living to their faces.

“This is a brief account of my work, my words, and my book. Neither of the three is perfect; but the book may serve to promote a recognition of its ideal. It is put forth only by way of rendering an account to the fatherland of what we have done and endeavored.

“This information will be welcome to many educators and teachers, friends of youth and respectable people, who know well what are the needs of the fatherland. And our former pupils, scattered throughout all ranks of civil life, will gladly hear an account of the present state of the system. From all sides have come repeated requests for a work on Turning. To this desire we have responded in writing as well as the circumstances and our own abilities would permit. We have held an active correspondence, even to the distance of beyond the Rhine and the Vistula. We have sent copies of portions of the third section to all who applied for them. The increasing diffusion of the system, and of improvements in it, are so rapid that it is impossible for the work to be perfectly complete in it. It was impossible for us to remain indifferent to the fact that the German Turning system, developed and brought out with so much labor, would receive injury from any half-knowledge, careless writing, or half-done work. From mere hearsay and looking on one can no more write on Turning than the blind on colors.”

With the Turning system came up a peculiar language. This must be understood by any one who intends to acquire a full knowledge of Jahn and his system. He says, in speaking of it:—

“In science or art, the German language will never leave those who know and admire it in difficulty. The proper words will never be found wanting in it to express all degrees and all results. It will keep step with the real course of development, will be found sufficient for every new phase of our people, for every occasion of life, and will keep up with every advance of our people in refinement. But it must avoid the affectation of cosmopolitan folly. No single language

has any thing to do with cosmopolitanism ; its soul is the characteristic life of that one people.

“Any one setting about a new enterprise is not so much inclined to ask, Has any one ever attempted this before, or begun or finished the like? The question is, Ought this thing to be done? And the same is true of one who makes words. If he has proper regard for the fundamental laws of language, he is not open to blame. No carping critic is entitled to ask, Did any one ever say that before? The question is, Ought this expression to be used? Can not a better one be found? For every living language advances, with an irresistible movement; and grammarians and dictionaries come along in its track behind, judging of it.

“The maker of technical words ought to be an interpreter of the spirit which permanently governs the whole language. For this reason he must look back to the primitive times of the language, and must follow in the true path of its course of development. If, in investigating these original sources, he discovers any early-forgotten word, he should bring this into public notice and use again. To reproduce an ancient word, apparently dead, is a real increase and strengthening of the language. No word should be considered dead, while the language is not dead; nor obsolete, as long as the language retains its youthful strength. Buried roots, which are still alive, and can throw out a vigorous growth of new stems, twigs, and leaves, bring blessing and prosperity. The shoots and sprouts of the old roots proclaim a new spring, after the long cold of winter. Thus the language will free itself from botching and patchwork, and will again become pure and strong. Without such protection of its original roots, the language will become overburdened, like a baggage-horse or beast of burthen, and must at last succumb under its heavy load of unsuitable additions. Every ancient word brought into use anew is an abundant fountain, which feeds the navigable rivers, digs deeper the mountain-valley, and indicates the coming of the floods. The word ‘*Turn*’ may serve as an example. From this word have been formed, and are now in use, *turnen*, *nittturnen*, *vorturnen*, *einturnen*, *wettturnen*; *Turner*, *Mittturner*, *Vorturner*, *turnerisch*; *turnlustig*, *turnfertig*, *turnmüde*, *turnfaul*, *turnreif*, *turnstark*; *Turnkunst*, *Turnkünstler*, *turnkünstlerisch*; *Turnkunde*, *Turnlehre*, *Turngeschichte*, *Turnanstalt*; and many others.”

This preface is followed by a valuable and clear description of the separate Turning exercises, and of the games practiced; and instructions on the establishment and organization of a Turning-ground.

After these come valuable general information and instruction on Turning institutions, teachers, &c. If the proverb is ever true, it is

true of Jahn, that the style is the man. Whoever would characterize him, must do it by giving matter from his works, in his own words. Accordingly, I give the following extracts from him :—

“The Turning system would re-establish the lost symmetry of human development; would connect a proper bodily training with mere exclusive intellectual cultivation; would supply the proper counteracting influence to the prevailing over-refinement; and would comprehend and influence the whole man, by means of a social mode of living for the young.

“As long as men here below have a body, and while a corporeal life is necessary to their earthly existence—which, if without strength and capacity, endurance and power of continued exertion, skill, and adaptability, becomes a mere inefficient shadow—so long must the Turning system be an important department of human education. It is incomprehensible how this art—so useful for health and life, a protection, a shield, and a preparation for war—should have been so long neglected. But these sins of an earlier rude and thoughtless time have now been more or less visited upon every man. And thus the Turning system is a subject of universal human interest, and is important every where, where mortal men live upon the earth. But still its special form and discipline must be peculiarly subject to the requirements of national and popular character. It must assume such a form as is given it by the time and the people; by the influences of climate, locality, country, and nation. It is intimately connected with people and fatherland; and must remain in the closest connection with them. Nor can it prosper except among an independent people; it is appropriate only to freemen. A slave’s body is a constraint and a prison to a human soul.

“Every Turning institution is a place for exercising the bodily powers, a school of industry in manly activity, a place of chivalrous contest, an aid to education, a protection to the health, and a public benefit. It is constantly and interchangeably a place of teaching and of learning. In an unbroken circle, follow constantly after each other direction, exemplification, instruction, independent investigation, practice, emulation, and further instruction. Thus the Turners learn their occupation, not from hearsay, nor from following after some transient expression. They have lived in and with their work; have investigated it, proved it, demonstrated it, experienced it, and perfected it. It awakens all the dormant powers, and secures a self-confidence and readiness which are never found at a loss. The powers grow only slowly; the strength increases gradually; activity is gained by little and little; a difficult feat is often attempted in vain, until it is at last attained by harder labor, greater effort, and unwearied industry.

Thus the will is brought past the wrong path of obstinacy, to the habit of perseverance, in which is based all success. We carry a divine consciousness in the breast, when we realize that we can do whatever we choose, if we only *will*. To see what others have at last found possible, arouses the pleasant hope of also accomplishing the same. In the Turning association, boldness is at home. Where others are exercising in emulation with us, all exertion is easy, all labor is pleasure. Each at the same time strengthens the others by his labor, and confirms his own powers, and encourages and elevates himself. Thus the example of each becomes a model for the rest, and accomplishes more than a thousand lessons. No real deed was ever without result.

“The director of a Turning institution undertakes a high duty; and should approve himself thoroughly whether he is competent to so important an office. He must cherish and protect the simplicity of the young, that it may not be injured by untimely precocity. The youthful heart will be more open to him than to any one else. He will see, without concealment, the thoughts and feelings of the young, their wishes and tendencies, their impulses and passions, all the morning-dreams of youthful life. He stands nearest to the young; and therefore should be their guardian and counselor, their protection and support, and their adviser for future life. Future men are intrusted to his care; future pillars of the state, lights of the church, ornaments of the fatherland. He must be subservient to no temporary spirit of the age, nor to the condition of the great world, so often plunged in error. He who is not thoroughly penetrated with a childlike spirit, and national feelings, should never take charge of a Turning institution. It is a holy work and life.

“His reward will consist merely in the consciousness of having performed his duty. Old age comes more slowly upon us among the sports of the young. Even in the worst of times we can keep our faith, love, and hope when we see the fatherland renewing itself in the growth of the young. The teacher of Turning must abstain from pretenses; for every juggler can better deceive the outer world than he can.

“Good morals must be more implicitly the rule of action in the Turning-ground than even wise laws elsewhere. The highest penalty inflicted must always be exclusion from the Turning association.

“It can not be too often nor too deeply impressed upon the mind of every Turner, who lives such a life as he ought and who shows himself an able man, that no one is under heavier obligations than he to live a noble life, both in body and in mind. Least of all should he claim to be free from any requirement of virtue, because he is

strong of body. Virtuous and accomplished, pure and active, chaste and bold, truthful and warlike, should be his rules of action.* Bold, free, joyous, and pious is the realm of the Turner. The universal code of the moral law is his rule of conduct. To dishonor another would disgrace him. To become a model, an example, is what he should strive after. His chief lessons are these: To seek the utmost symmetry in development and cultivation; to be industrious; to learn thoroughly; to intermeddle with nothing unmanly; to permit himself to be enticed by no seductions of pleasure, dissipation, or amusement, such as are unsuitable for the young. And such admonitions and warnings should be given in such terms as to insure a school of virtue from becoming one of vice.

“But, again, it should not be concealed, that the highest and holiest duty of a German boy or German youth is to become and to remain a German man; that he may be able to labor efficiently for his people and his fatherland, and with credit to his ancestors, the rescuers of the world. Secret youthful sins will thus best be avoided by setting before the young, as the object of attainment, growth into good men. The waste of the powers and years of youth in enervating amusements, animal riot, burning lust, and beastly debauchery, will cease as soon as the young recognize the idea of the feelings of manly life. But all education is useless and idle, which leaves the pupil to disappear, like a will-o'-the-wisp, in the waste folly of a fancied cosmopolitanism, and does not confirm him in patriotic feeling. And thus, even in the worst period of the French domination, love of king and fatherland were preached to, and impressed upon, the youths of the Turning association. Any one who does any thing foolish or insulting to the German manners or language, in words or actions, either privately or publicly, should first be admonished, then warned, and, if he does not then cease his un-German actions, he should be driven away from the Turning-ground, in the sight of all men. No one ought to enter a Turning association who is knowingly a perverter of German nationality, and praises, loves, promotes, or defends foreign manners.

“With such principles did the Turning societies strengthen, train, arm, encourage, and man themselves for the fatherland, in the gloomy, sultry times of the devil. Nor did faith, love, or hope desert them for a moment. ‘God deserts no German!’ has always been their motto. In war, none of them staid at home, except those too young and too weak—and they were not idle. The Turning institution, in those three years, offered up costly sacrifices; they lie upon the battle-fields, from the gates of Berlin even to the hostile capital.”

* These couples are alliterative in the original.—*Trans.*

It is difficult to select portions from Jahn's book for the purpose of describing him and his work, for all is characteristic; the book and author are cast in one mold.* Its work is, in the fullest sense of the words, what it purports to be—a German Turning system, in which a system of gymnastic exercises, complete within itself, is set forth with sound judgment, vivid style, and correct tact. It is not a wearisome, methodical, elementary joint-gymnastics for dolls; nor does it treat exclusively of bodily exercises, but discusses with great earnestness the moral atmosphere of the Turning organization.

The Turning system soon spread from Berlin throughout Northern Germany, and a large part of Southern Germany. Turning excursions had much influence in producing this result. Next to Berlin, Breslau had the largest number of Turners—some eight hundred. At that city, students, Catholic and Protestant seminary pupils, the pupils of four gymnasia, officers and professors, frequented the Turning-ground. At their head were Harnisch and Massmann; while Director Mönnich (of Hofwyl) and Wolfgang Menzel, then students, were among the assistant teachers. Singing flourished. On Wednesday and Saturday afternoons, after exercising from three to seven, the whole company returned singing to the city. The first half of the four hours, Turning exercises was there used in the drill, and the other half in the other exercises, especially games; an arrangement which is better than to begin with the more inspiring portion of the exercises, and to end with the more serious and laborious drill.

Jahn's judicious distinction between the Turning school and Turning exercises is one that might well be introduced in other subjects.

For instance, in teaching singing, the first half of the lesson might be occupied in singing the scale, &c., and the other half with singing songs, &c., which he had learned before.

We very often hear much said, at the present day, of the opposition between an artificial organization and a human development. On this subject the mistaken opinion often prevails that the intelligent, efficient human will is, as a matter of course, counteracted by the course of historical development. But this is not the case; the question is only, Whether that will was in harmony with the development and tendency of the people, or not. If not, it is true that its only result is a vain endeavor to effect something. This was the case, for instance, when Brutus endeavored to free Rome by the assassination of Cæsar. But what one of God's commissioned mes-

* Thus I have unwillingly left out Jahn's observations about national festivals, Turning schools, further exercises, costume, &c.

sengers can do, when in harmony with the age, is shown by Luther's Reformation.

It was one of the charges brought against the Turning system, that it was an affair artificially contrived, not a natural outgrowth. It is true that it grew quickly; fruits naturally ripen rapidly in hot weather. The period from 1810 to 1813, when Turning grew up, was certainly hot enough. Was the fire burning under the ashes all the time from 1806, which broke into a flame in 1813? Ever after the defeat of Jena, a deep grief was burning in the hearts of all German men and youth. The longing to free the beloved German fatherland, to renew its ancient glory, nourished among them a powerful mutual bond of the truest love. And the early Turners were among those included in this bond.

Their interested participation was nothing artificial, but merely the natural fruit of their earnest patriotism. This appears clearly enough from Jahn's account of the first beginning of the Turning system. It was this community of feeling and ideals which made the development of the art so rapid. There grew up, at the same time with it, a technical language, so appropriate that, instead of quickly going out of fashion, as artificial things do, it is at present, thirty-seven years after its appearance, entirely received and current.

Together with this first natural development of the Turning system, there came up also a reaction against many received and universal customs and manners. This necessarily aroused enemies, and the more because the Turners frequently overpassed the bounds of moderation, and made Turning identical with a warfare against all ancient errors. This was particularly the case after the war of freedom.

These errors did not escape the attention of the friends of the Turning system; and they endeavored to remedy them, whenever and however they could. This appears, for instance, from the following extract from an address to the students, delivered at the Wartburg festival, by a man whose liberal views are universally known; namely, Oken. He said: "Beware of the delusion that upon you depends the existence, and continuance, and honor of Germany. Germany depends only upon herself as a whole. Each class of men is only one member of the body called State, and contributes to its support only so much as its circumstances permit. You are yet young, and have no other duty than so to conduct yourselves that you may grow up aright; to train yourselves; not to injure yourselves by foolish practices; to apply yourselves, without permitting your attention to be diverted to any thing else, to this purpose which lies straight before you. The state is at present not concerned with

you; it has to do with you only in that you may hereafter become active members of it. You have no need of discussing what ought or ought not to happen in the state; it is only proper for you to consider how you shall yourselves in future act in it, and how you may worthily prepare yourselves to do so. In short, all that you do should be done only with reference to yourselves, to your life as students; and all else should be avoided, as foreign to your occupations and your life, in order that your setting out in life may not be ridiculous."

These words point out clearly the mistaken road by which the students afterward departed further and further from the right road. But they should not bear all the blame.

If a child has good and bad qualities, some people will look only at the former, and will foretell all manner of good of him; while others will see only the evil in him, and will prophesy an evil future for the child. But any one, who loves him truly, will consider how to cherish his good qualities, and to subdue his bad ones.

Such a child, with good qualities, but not without faults, was the Turning system. Passow, a man of honesty and benevolence, and of disinterested activity, looked almost altogether at its bright side, and in his "*Object of Turning*" (*Turnziel*) expressed hopes quite too great; it might almost be said that he spoke ill-luck to the child. Blame always follows excessive praise; praise must absolutely state the truth, must contain a just estimate of things.

My friend Steffens, on the other hand, saw only the dark side, the evils of the system; and he wrote his "*Caricatures*," (*Caricaturen*), and his "*Object of Turning*," (*Turnziel*), which was directed against Passow's "*Turnziel*." This talented man had lived all his life in the enthusiastic love of science and art; and this new system seemed to him to be cold and even inimical to every thing which he loved best. Jahn's rough, harsh, strong character was not agreeable to him; in the bitter censoriousness of many of the Turners, he naturally saw a hasty, presumptuous endeavor to improve the world; in their disrespect for many eminent men, unruly vulgarity; and in their German manners, only an affectation of them.

Thus there broke out in Breslau a violent contest between the friends and enemies of the Turners,* which called out many other

* This contest, in which I also took part, Steffens has described in his Memoirs. Steffens exercised a most profound and kindly influence upon my life; for which I shall forever be grateful to him. He was my instructor and my brother-in-law; and for eight years we lived as faithful colleagues together, in the same house at Breslau. And now suddenly we came into opposition to each other. Our lasting, and mutual, and heartfelt love was such that it can not be described how much we both suffered from this truly tragic relation. My friends at Breslau even advised me to leave the place. When Steffens visited me, eighteen years afterward, at Erlangen, we there quietly reviewed the evil days at Breslau. This, our last

publications besides Passow's and Steffens', only part of which would now have any historical interest. A work of permanent value on the subject is that of Captain von Schmeling, on Turning and the Landwehr; in which he showed how Turning was a valuable preparatory school for the training of the militia men.* Harnisch wrote "*Turning in its Universal Relations*," (*Das Turnen in Seinen Allseitigen Verhältnissen*.)

In a dialogue entitled "*Turning and the State*,"† I defended Jahn and the Turning system from the charge of being Jacobinical, and of hate toward France; and, in some others, against those who charged it with being anti-Christian. But this controversy was warmly carried on in other places besides Silesia. Arndt wrote powerfully in favor of Turning.‡ The physician Könen, in Berlin, wrote upon its medical importance; § not to mention many other publications.

During this controversy, the Prussian government showed great and deep interest in the Turning system. A plan had even been prepared for the establishment of Turning-grounds throughout the whole kingdom. But on the very day when this was to have been laid before the king for his approval the news of Sand's murder of Kotzebue reached Berlin, and the approval was withheld. This was the first fruit of that unhappy deed.

Many years passed before Turning was again freely practiced in Prussia. In Wurtemberg alone|| it has been uninterruptedly maintained down to the present day. In Bavaria the present monarch, as soon as he came to the throne, took the system under his protection, and employed Massmann to have a Turning institution erected at Munich.

IV. TRAINING OF THE SENSES.

Rousseau, in "*Emile*," discussed the education of the senses.¶

earthly meeting, seemed to me to join immediately on to the early youthful intercourse of thirty-three years before; and I felt myself drawn to him by a love which had lasted through good and evil times, and which will outlive death, because it is stronger than death.

* At a later period, in 1843, Dr. Münnich wrote "*Turning and Military Service*," (*Das Turnen und der Kriegsdienst*), in which he clearly stated the important relation between the two. W. Menzel, in his treatise, "*Bodily Training from the Point of View of National Economy*," (*Die Körperübung aus dem Gesichtspunkt der Nationalökonomie*), has earnestly recommended Turning, as a means of educating defenders of the fatherland.

† See my "*Miscellaneous Writings*," (*Vermischte Schriften*.) First printed in the Silésian "*Provincial Gazette*," (*Provinzialblättern*.)

‡ "*Spirit of the Age*," (*Geist der Zeit*), vol. 4, 1818. Reprinted with the title "*Turning; with an Appendix*," (*Das Turnwesen nebst einem Anhang*.) By E. M. Arndt. Leipzig, 1842. A most valuable work.

§ "*Life and Turning, Turning and Life*," (*Leben und Turnen, Turnen und Leben*) By von Könen. Berlin, 1817.

|| A man of noble character and full of love for Germany and the German youth, Professor Klumpp, established the Stuttgart Turning Institution, and conducted it for many years. In 1842 he wrote his valuable treatise, "*Turning; a Movement for German National Development*," (*Das Turnen; ein Deutsch-Nationales Entwicklungs-Moment*.)

¶ I have gone more into detail on this point in my chapter on *Emile*, which see.

According to him, all the senses should be cultivated; the eye, in estimating magnitudes and distances, and in drawing geometrical figures; the touch, in judging by means of feeling, which the blind learn to do remarkably; &c.

In this department of gymnastics, Guts Muths substantially followed Rousseau. He assigned to the senses a remarkable office; namely, to "awaken, from the slumber of non-existence, the child, at first asleep in its quiet bosom." The emptiness and impossibility of Locke's opinion, that man is at first a mere sheet of white paper, is made very clear and evident by Guts Muths' expression.

"The soul of the young citizen of the world," says Guts Muths, in another place, "yet lies in the profound slumber which comes with it out of its condition of non-existence." The mind becomes at first susceptible of powerful impressions on the feelings; and then becomes more and more awakened, and capable of more and more delicate impressions. "But, as the gradations of impressions on the senses, from the most violent to the most delicate of which we can conceive, are immeasurable, so is the refinement of our susceptibility to such impressions also possible to an immeasurable degree." All the life long, the mind is becoming constantly susceptible to fainter and fainter impressions; that is, more awake."

Guts Muths' idea of training the senses is thus the sharpening of them; as also appears from the examples of it which he gives. The boys are made to shut their eyes and feel of letters, figures, the devices on coins, &c. Seeing must be trained by cultivating the vision of small things and distant things. The children are "to follow Nature even to her minutest objects, even those scarcely visible to the eye." "The pupil," he says, "should observe not only the coarser parts of flowers, but his eye should pierce even their minutest portions. He should study the absorbent vessels, the structure of the skin, the bark and leaves of trees, many kinds of seeds; the reproductive organs of plants, the pollen, anthers, &c." He should be able to recognize a flower or a stone at thirty paces, and a tree at from a hundred to a thousand paces. His ear should be trained not only by music, but "he should observe the sound of laden and empty vehicles, of the squeaking of doors," &c. If the keenness of the senses, their susceptibility, were the measure of their improvement, those who are disordered in their nerves would surpass the most practiced senses of the healthy. They are annoyed by the least and most distant noise; and distinguish its exact nature only too well. If the pupils of Guts Muths could distinguish by the touch, with their eyes closed, between gold and silver coins, this was far outdone by a sick person, who

became uneasy when any one, even without his knowledge, brought a silver spoon near him.

The American Indians, as is well known, whose mode of life is little better than that of animals, surpass most Europeans in the keenness of their senses; and thus, according to Rousseau and Guts Muths, the Caribs and Iroquois should be valued as our models. They might equally as well have proposed the eyes of a lynx, the nose of a hound, &c., as ideals. I have expressed my views already upon such doctrines as to bodily training, particularly that of the senses, in the following aphorisms, in which I have described an ideal of the cultivation of the senses.

The ancient legends clearly expressed the difference between mere animal strength of body and the human intellectual strength of body, by making their giants—huge, stupid, uncouth masses of flesh—be conquered by knights, smaller in body, but of keener intellects. Are then tigers models for springing, apes for climbing, and birds for flying? are they inaccessible ideals, to which the gymnast should look up with resignation and longing? We might like very well to fly, but not in the form of a crow or a stork; we would be angels. We would prefer to live imperfect, in a higher grade of existence, with the sense of capacity for development, than to fall back into a more complete but lower grade, behind us and below us. Cæsar despised being the first man in a small village, because he felt himself capable of being the first man in Rome. In like manner, the Turning system contemns a lower animal development, because a higher human one is accessible to it.

If the eye were only a corporeal mirror of the visible world, it would represent equally well or equally ill the most different things, according to the bodily health and strength, or sickness and weakness, of its condition. But it is an organ of intellectual susceptibility; of not only a bodily but also an intellectual union with things. And accordingly it is a well-grounded usage in language by which we say "to have keen eyes;" and "to have an eye for" particular things, such as plants, animals, &c. The former indicates bodily health and strength; the latter points to an original spiritual relation between the eye and certain things, trained by close study.

The same is more or less true of the other senses. The art of cultivating the senses has only to a very small extent any thing to do with what increases their corporeal strength—as, for instance, with medical rules for taking care of and strengthening the eyes.

It has much more to do with the cultivation of the intellectual susceptibility of each of the senses. Therefore it begins not with

the arbitrary, one-sided cultivation of one sense, which tends to diminish the susceptibility of the others; and still less does it direct one sense arbitrarily to one single class of objects, as the eyes to plants or animals exclusively. For this would cripple the intellectual application of the senses to things of other kinds. But if the teacher has begun, as the universal microcosmic character of every well-organized child requires, with as general a cultivation of all his senses as is possible, and then observes a prominent and stronger activity in one sense, or an especial applicability of it to some one department of the visible world, as of the eye to minerals, &c., then only may he undertake the cultivation of that one sense or susceptibility, as a peculiar talent.

If now the intellectual senses are supplied by the external senses with an abundance of intuitions of all kinds, the impressions thus received gradually ripen, and desire to be brought to the light of day. Thus a little child speaks words which it has often heard its mother use, then sings what it has often heard sung, and tries to draw what it has often seen.

With every receptive organ nature has coupled a producing or representing one, or even more; in order that man may not be solitary in the midst of his inward wealth, but may communicate with others. He can, in many ways, represent a known object, whose picture is visible to his mind; he can describe it in writing, act it, &c.

The development of the susceptibility to impressions must naturally precede that of the power of representing. Hearing must precede speaking and singing; seeing, painting, &c. There exists a sympathy, as is well known, between the susceptible organs and the corresponding representing ones; of the organs of hearing with those of speech, of those of vision with the hand, &c. The use of the receiving organs seems to produce a secret, quiet growth of the representing organs, though these latter be not directly practiced.

In many trades, the apprentice is made to look on for a whole year, before putting his hand to the work. When his eye thus becomes intelligent, the hand follows it sympathetically. It is to be wished that the example might be followed in all the cultivation of the senses.

The teacher who tries to cultivate receptivity and power of representing together, who requires the pupil to furnish an expression immediately after the impression is made, mistakes Nature, who requires a quiet, undisturbed condition of the senses for their receptive office, and usually a slow development of the power of representing.

It is said of some of the North American Indians that the development of their senses furnishes, for those who would combine them

with bodily exercises, a model which never can be equaled. It is true that, according to the accounts of travelers, they surpass Europeans in keenness of sight, hearing, and smell. But are they therefore models of the cultivation of the senses?

This is confusing the idea of a human cultivation of the senses with an animal one; corporeal perfection of the senses with intellectual. The preceding observations have shown how different these are; examples will make the difference still more evident.

There are many men who have hearing so keen as to distinguish faint sounds at a very great distance, but who have no feeling at all for pure or beautiful music. There are most accurate piano-tuners and music-masters, who can distinguish every fault in any instrument amongst a full orchestra; but who, notwithstanding this fineness of ear, are so destitute of an intellectual ear for music as to prefer the most vulgar sort of it.

There are, again, others who can not tune any instrument accurately, and still less guide an orchestra; who are inspired by good music, and show distinct dislike to bad. Contrast with these keen and delicate hearers, Beethoven, who was almost deaf; and, again, there was another great harmonist, who said that perusing the score of a composition gave him more pleasure than the execution of the music, because the latter never equaled his ideal. He was thus capable of intellectual musical pleasure, even had he been completely deaf.

The case is similar with the eyes. Among my mineralogical pupils, I found some with very healthy bodily organs, who could perceive the smallest objects, and still were incapable of comprehending forms, of distinguishing like from unlike; in short, they had eyes, but did not see. On the other hand, there were others, whose eyes were weak, and who were as it were blind to small crystals, but who felt all the beauty of the larger ones, and closely followed all their varieties of color. So, I have known exceedingly short-sighted young men, who still had the greatest taste for pictures. And, again, there are many very keen-sighted persons, who gaze without emotion on the most magnificent pictures, sculptures, and churches.

The great distinction between the bodily and the intellectual senses might be illustrated by many other examples.

Surely these animal sharp eyes and ears of the Indian are not our models. It is the spiritually-illuminated eyes of a Raphael, a van Eyck, an Erwin von Stein, the divinely-consecrated ears of Handel and Leo, which are the noblest specimens of the cultivation of the human senses, which are the divine models for men.

Regard was had in the schools to the cultivation of the senses quite a long time ago; or at least so it would appear. So-called "Intuitional Exercises" were introduced; Pestalozzi giving them an impulse, especially in his "*Book for Mothers.*" "The child," says Pestalozzi, "and indeed man universally, must be first made acquainted with what lies next him, before he can attend to the acquiring a knowledge of what is further off. The nearest visible object to the child is his own body, and this he should first of all observe, under the direction of the mother. She must, with him, follow the '*Book for Mothers,*' step by step, going through every division and subdivision of it, step by step, to the furthest details."

Thus, for instance, we find in that work:

"The first joint of the middle toe of the right foot. The middle joint of the middle toe of the right foot. The last joint of the middle toe of the right foot. The first joint of the middle toe of the left foot. The second joint of the middle toe of the left foot. The last joint of the middle toe of the left foot.

"My body has two limbs above and two below.

"My two upper limbs have two shoulders, two shoulder-joints, two upper-arms, two elbows, two elbow-joints, two fore-arms, two wrists, and two hands.

"Each of my two upper limbs has one shoulder, one shoulder-joint, one upper-arm, one elbow, one elbow-joint, one fore-arm, one wrist, and one hand.

"My two hands have two wrists, two palms, two thumbs, two fore-fingers, two middle-fingers, two ring-fingers, and two little-fingers.

"Each of my two hands has one wrist, one palm, one thumb, one fore-finger, one middle-finger, one ring-finger, and one little-finger.

"My two palms have two balls of the thumbs; each of my two palms has one ball of the thumb."

"My two great toes have four joints, two front and two back; four knuckles, two front and two back; and four joint-lengths, two front and two back.

"Each of my two great toes has two joints, one front and one back; two knuckles, one front and one back; and two joint-lengths, one front and one back.

"The ten fingers of my two hands have twenty-eight joints, ten first, eight middle, and ten last; twenty-eight joint-lengths, ten first, eight middle, and ten last; and twenty-eight knuckles, ten first, eight middle, and two last.

"The five fingers of one hand," &c., &c.

It is evident how infinitely wearisome and unnatural such a mode of observing and naming over all the parts of the body must be, both

to young and old. And it is an error to take his own body as the first object which comes under the notice of the child. Without some natural or artificial mirror, man would not see his face, and some other portions of his body, all his life long. A child is much more attracted by objects which stimulate his senses by color, brightness, smell, or taste. He would very much prefer cherries or apples to "the middle joint of the little toe of the right foot."

Several detected Pestalozzi's error. But, taking his principle as true, that it is necessary to begin with what is nearest at hand, they took subjects from the school-room; and the doors, windows, walls, seats, and desks were observed, described, and named, down to their smallest parts. I give an example.*

"The school-room and what it contains.

a. Enumeration of objects contained in and about the school-room.

1. Without detailed definition.

2. With detailed definition; as, immovable, movable, simple, compound, how compound? within reach; necessary; accidentally pertaining to the room.

b. Use of articles in and about the room.

c. Description of individual things, by their color, their form, their parts, the connection of their parts.

d. Materials of which the separate things and their parts are made."

The description of the windows alone fills two closely-printed pages.

It says, among other things:

"The teacher should now have each of the separate parts of the window given in their order; as, the panes, the sash, the putty, the pulley, the button, the catch, the sash-bolt; lastly, the whole window, the window-frame, the molding. * * * Thus the whole window has been analyzed, and its parts considered. It only now remains to reconstruct it."

It would be much better, instead of all this wearisome, pedantic enumeration and hyper-pedantic reconstruction, to say, "The windows in the school-room are long and four-sided."

That such a methodical and wearisome method of instruction would throw active children either into despair or sleep, is clear. They had better jump about over the desks and seats in sport, than to describe them in this insufferably-affected way; they had better analyze perhaps not a whole window, but now and then a pane, in their play, and let the glazier "reconstruct" it, than to analyze and reconstruct it in words.

It is a pity that something can not be found to use as a subject of instruction in the school besides what the boys naturally learn in

* From Deibel's "System of Education," (*Erziehungslehre.*) 3. 32.

their own experience. They know the windows, and seats, and desks, without any teaching; and will never call a desk a seat, or the contrary. For what purpose should he consider separately, and name, all the parts of the window; the pulley, the catch, the sash-bolt? What interest have they in these? Such details and names may be left to the glazier, the carpenter, and the locksmith. Every trade is a little separate people, with a peculiar language; but all these separate people understand each other, not in their trade-language, but in the language of their country. The trade-language belongs to the peculiar employment of each trade; each one has to do with many things which have no concern with the others, and can not concern them, unless they neglect their own business. And fellow-tradesmen discuss the matters of their trade, in their peculiar trade-language.

Justus Möser, who had an eminently sound understanding, says,* "My miller played me yesterday a comical trick. He came to my window and said that 'there must be four iron nuts on the standards and standard-pieces, opposite the crank; and all the frames, boxes, bolting-cloths, and springs wanted fixing; one of the iron post-belts will not work any longer with the shifting-piece, and ——.' He spoke German, my friend, and I understood well enough that he was talking about a windmill; but I am no windmill-builder, to understand the thousand details of a mill, and their names. But at that point the knave began to laugh, and said, with a queer gesture, that the pastor did the same thing on Sundays; that he spoke nothing but learned words, that took the very hearing and seeing away from the poor people; and that he would do better, he thought, to do as he (the miller) did, and furnish good meal to the parish, and keep his terms of art for architects."

The application to this sort of "intuitional instruction" is clear; and is doubly forcible because the teachers are not architects, and only affect a knowledge of these technical matters.

A remark of Herr Roth is very true, and very applicable to the present object. He says, "There are many things which, when rapidly discussed, on a proper occasion, are interesting to children; when, if studied by the hour, and methodically taught and reviewed, they would be most wearisome to them. To ask, cursorily, What is the difference between this table and that one? is very well; but to be staring at tables and desks, year in and year out, and describing them, is quite another thing."

The word "stare" is precisely appropriate; the exercise is a lifeless and forced one. The window and its parts are reflected in the staring eyes of the stupefied and wearied child; and his lifeless

* "*Patriotic Fantasies*," (*Patriotische Phantasieen*), 3, 243.

repetition of what the teacher says over to him corresponds with the lifeless reflection in his eyes.

Close consideration will show that this sort of instruction is much more an exercise in language than of the senses, although one of the most unintellectual kind. The intuition in the case is only to give the teacher an opportunity to talk; and accordingly it makes little difference what the object exhibited is, whether a picture by Raphael or a tavern-sign, the Strasburg cathedral or a wretched stable. Words can be made about any thing and every thing. The inquiry is scarcely made, Whether any knowledge is gained by the intuition; and not at all, Whether a permanent remembrance is insured of the thing shown. Very few seem to have an idea how quiet, undisturbed, and often-repeated the bodily intuition must be, in order to the obtaining of such a recollection, for the mental assimilation of the thing shown; and how the pupil's words should be only the product of this assimilation. No one seems to consider this process of real generation of words. A piece of gypsum is shown to a boy; he is made to repeat three times, "That is gypsum;" and then the specimen is put aside, and it is fancied that the boy has an actual knowledge of gypsum.

It will now be asked, Should intuitional exercises be quite omitted in school? I reply, Such wooden, methodical exercises on desks and seats may be omitted, as may all drilling merely for the sake of the drill; and, further, so may all drilling that is to give practice in nothing except the mere use of words.* The hunter, the painter, the stone-cutter, &c., do not train their eyes, nor does the musician his ear, for the sake of training it. Children, properly instructed in natural knowledge and in drawing, will be sure to use their eyes; and, as they penetrate further and further into their subject, they will, in the most natural manner, arrive at an increased accuracy of expression for the objects which they perceive by their senses.

* Children are frequently found, especially in the common schools, who are as if dumb. How shall they be made to speak? I would recommend that they should be spoken to, not in a stiff school-fashion and school-tone, which would make them stupider than ever, but, as far as possible, in an entirely usual manner and tone, and on some common subject, which they understand, and on which questions may be put to them. Tables and desks may be used for this purpose, but not methodically analyzed.

PROGRESS OF EDUCATIONAL DEVELOPMENT.

[Translated from Raumer's "*History of Pedagogy*," for the American Journal of Education.]

I. PEDAGOGY.

HISTORY has made us acquainted with the very different eminent educators of the last century. We have seen that each of them had an ideal which he sought to attain; a more or less clear conception of a normal man, who was to be produced from each child, by his method of education.

Bacon defined art, "Man, added to things." A man, that is, who prints upon things the impress of his mind. Does the art of education come under this definition? Certainly not; for we should have to consider the children to be educated as mere material, upon which the educator is to impress his ideal, as the stone-cutter does on a block of marble. But we might define the art of education, very generally, in analogy to Bacon's definition, thus: "Man added to man."

In order to a correct understanding of this last definition, we must see clearly how it is related to the various ideals or normal men of the educators. Did not each of them, either consciously or unconsciously, seek to determine an ideal of the human race; a generic ideal, including all individuals; and would he not educate every child according to his generic character and ideal?

God is the educator of the human race. Man is created by him, and for him; the beginning, progress, and perfection of humanity are his work. And if the teacher would have his work endure, he must look to God's system of "education of the human race." But it will not suffice for the educator to look to the generic character and the destiny of humanity only; he must regard another point. Every child is born with bodily and mental peculiarities, which sharply distinguish it from all other children, although they all have the generic character. No two children were ever entirely alike; each one is an entirely peculiar, personified organism of natural endowments; a completely individual and personified vocation. An invisible and mysterious master forms each of them according to a separate ideal: a master who does not, as human artists do, first fashion his work and then neglect it, as something entirely separate from himself; but who continues to work within man, even until his death, to the end that he may become like his prototype, and may fulfill his vocation.

God cares for each individual with the same paternal love as for the whole human race.

The vocation of the educator is to become a conscientious and obedient fellow-laborer with the divine Master; to endeavor to know and to help forward the perfection of that ideal for whose realization the master has already planted the seed, the *potentia*, in the child. I repeat: The educator must look to His work, if his own work is to stand; that is, not to the scarcely-comprehensible work of God upon the whole human race, but to his work within every individual child to be educated.

God formed man after his own image; but, after the fall, it is said that Adam "begat a son in his own likeness, after his image;" not after the divine; flesh born of flesh, a human child, perverted from God. During all the thousands of years which have passed since Adam, only one child has lived who was sprung immediately from on high, and who, of his own power, grew in knowledge, in stature, and in favor with God and man; and who needed no education, but only care. All other men are invariably sinners from their youth up; and in all the image of God is removed away.

The purpose of all education is, a restoration of the image of God, with which the new birth begins. "This is the work of the regenerating, creating power of God, (ἡ θεοῦ γεννηθῆναι;) and, although a mystery both in its origin and in its aims, (John iii., 8,) works upon the earth in a visible and unmistakable manner—a new creation, a new man."* The mystery of its origin is the mystery of the sacrament of baptism, "the bath of regeneration." After that period there are two powers within the child, who commence the strife between the spirit and the flesh, the old and the new man; a strife of regeneration, which endures even to the end of life.† Parents and teachers are the auxiliaries of the child in this contest. The problem of Christian pedagogy is, lovingly and wisely to watch, pray, and labor, that in the child the new man shall grow and be strengthened, and that the old man shall die.

Thus it is that we understand the term "man added to man."

But the church theory of baptism has been attacked; and, in our own times, anabaptist views have become widely disseminated. Many see, in baptism, only a symbolical act, by which the baptized

* Harless, "Ethics," 77.

† Larger Catechism. "The power and work of baptism are: the mortification of the old Adam, and afterward the resurrection of the new man. Which two are in progress throughout all the life; insomuch that the Christian life is nothing else than a daily baptism, begun once, but always in progress."

And J. Gerhart says, "Infants, in baptism, receive the first fruits of the spirit and the faith."

is preliminarily received among the members of the Christian church, without becoming one truly and actively, because he is yet inexperienced in faith. It is by confirmation that he becomes consciously an acting member of the church. To admit a grace of baptism, it is said, is to admit a magical operation of the sacraments.

On this subject I refer to the dogmatic theologians, especially to Luther; and shall here only observe as follows.

The difference respecting baptismal grace seems to proceed chiefly from the opinion that, if grace passes from God to man, the latter can not be entirely passive; but that God can not confer a spiritual gift, unless the recipient shall receive it with intelligent consciousness.

Let us turn for a moment from spiritual to natural endowments. Is it not a proverb that "Poets are born?" Must it not be confessed that, in the new-born infant Shakspeare, the *potentia*, the seed, of the greatest creative talents the world ever saw was slumbering, quiet and unobserved, just as there was once slumbering, in a small acorn, the *potentia* of the mighty oak of a thousand years, which now stands before us? And might we not reply to the masters in Israel, who doubt the existence of this *potentia*, "Ye do err, not knowing the power of God?" For to whom belongs the glory? Was the poet the intentional production of his parents? And could not God, who in so profoundly-mysterious and incomprehensible a manner blessed their union, confer an equally wonderful power upon the sacrament which he ordained?*

Although I refer to dogmatic writers for the details of this theory, yet I may here observe that it is of the utmost importance to theologians. If Christian parents believe in the actual beginning of a new and sanctified life in their child, if they see in him a child of God, in whom the Holy Ghost works, they will educate him as a sanctified child of God, will teach him early to pray, and will make him acquainted with God's Word. But if they do not believe that the seed of a new life is in the child, if they consider him a "natural man, who receives nothing from the spirit of God," and as incapable of faith, they will proceed according to whether they are Christians or not. If not, they will bring up their child as a natural child of Rousseau's kind; a heathen child, in a heathen manner. But if they are, as is the case with baptists and anabaptists, they will still see in the child a heathen, but one who can early be brought to Christianity, by the Word, and by awakening addresses. In this manner they think of themselves to bring about the new birth, instead of considering,

* The unworthy manner in which the sacrament is often administered causes many to err. But if the king should send us a magnificent present by a foolish servant, incompetent to estimate it, would that diminish the value of the present?

as do the believers in the church's theory, that the care of the seed of a new life, planted in the child by baptism, is the office of education.

II. PELAGIAN PEDAGOGY.

I have mentioned Rousseau. We have learned to consider him the true representative of that system of pedagogy which I shall, for brevity, call Pelagian—or even hyper-Pelagian. "Every thing is good," begins "*Emile*," "as it comes from the hands of the Creator; every thing degenerates, in the hands of men." These words he uses, not of Adam before the fall, but of every new-born son of Adam, born of sinful seed. And he says, in another place, "The fundamental principle of all morals, upon which I have proceeded in all my writings, and have developed in *Emile* as clearly as I could, is, that man is by nature good, a lover of justice and order; that no inborn perverseness exists in the human heart, and that the first impulses of nature are always right."

Thus he distinctly denies original sin, and would disprove the words, "That which is born of the flesh is flesh; flesh and blood can not inherit the kingdom of heaven." While the Christian teacher seeks for reformation, for the destruction of the old man, and the quickening and growth of the new, Rousseau recognizes only one, the old man, whom he himself calls the "natural man." Him he would develop and watch over; and would dress him out for baptism with borrowed Christian adornments, although he ignores Christianity, and congratulates himself on the fact that his child of nature belongs to no religion and no church.

We have seen to what absurd conclusions Rousseau was pushed by this unchristian premiss; to what unnatural views, by his constant reference to nature; to what sophistries, by his attempt to show that all wickedness is first implanted in the child, originally as pure as an angel, by adult persons. Luther's sound and healthy pedagogy is precisely the opposite of Rousseau's. The comparison of the two must convince any one that the division of educators into Pelagian and anti-Pelagian is a fundamental one, and of the greatest practical importance.

III. RE-ESTABLISHMENT OF THE IMAGE OF GOD. HUMAN TRAINING.

Christ said, "Be ye perfect, even as your Father in heaven is perfect." Thus he places before us the very highest ideal; and reminds us of that lost paradise where man retained the uninjured image of his prototype. And thus we take courage to "press toward the mark for the prize of the high calling of God in Christ Jesus."

Christian training seeks the re-establishment of the image of God,

by raising up and faithfully guarding the new man, and by the death of the old. The process of the re-establishment is one both of building up and of destroying; positive and negative; and this in relation to

- a. Holiness and love.
- b. Wisdom.
- c. Power and creative energy.

IV. EVIL TRAINING.

While a right training, such as is pleasing to God, seeks such a re-establishment of the image of God in man, that the new and heavenly man shall become a power within him, and the old man shall die, there is still, on the other hand, a false and devilish training,* a miseducation, a caricature of education, which is not satisfied with our inborn sins, but which also proceeds to destroy the young by naturalizing bad instincts in them, or even by a methodical course of corruption. The ideal objects of this miseducation are to destroy the seed of grace in the new man, in the child, and, on the other hand, to encourage and protect the old man, the man of sin, until he shall rule, alone and uncontrolled.

Fearful evils grow out of such a state of things. All manner of warnings away from this destructive path should be given; and to this end we should give diligent attention to discipline in the Lord, to delay, to education, and to miseducation.

V. (a.) RE-ESTABLISHMENT OF HOLINESS AND LOVE. CHRISTIAN ETHICAL TRAINING.

Man fell, from pride; because he would be not merely like his Maker, but equal to him, instead of obeying him in childlike love. In the place of love of God, there thenceforth prevailed in him a delusive self-conceit and self-love; and, in order that he might not thus go entirely to ruin, God reserved for himself a place in him, by a conscience, powerfully corroborated by the death of the wicked. This was man's dowry, when he was driven out of Paradise; his protecting angel, powerful against his original sinfulness, who ever, against his own will, kept him humble in the fear of God, which is the beginning of wisdom; and was his inward taskmaster, to drive him to Christ. Afterward, the law was put over him, as a severer taskmaster; to awaken his sleeping conscience, and to direct him when going astray.†

In the fullness of time appeared Christ, to reconcile fallen man to

* "We are justly given over to that ancient wicked one, the master of death, because he has persuaded our will into the similitude of his will, which is not established in thy truth."—Augustine's *Confessions*, vii., 21.

† Romans, ii., 14—17.

God, and to re-establish the kingdom of childlike obedience and love.

The explanation of each of the ten commandments, in the smaller Lutheran catechism, begins with the words, "We must fear and love God." This is to awaken the conscience of the child, and to impress upon him the fear of God; but love is joined with fear. In these two words are contained the law and the gospel, the Old and New Testament presentations of the commandments. Conscience and the law continually remind sinful man of God's holiness and justice, and drive him to repentance. But the most anguished conscience will find peace in looking to the forgiving love of Christ; in faith in him who beareth the sins of the world.

The Holy Scriptures repeatedly point us to the holiness, justice, and love of God as our model. "Be ye holy, saith the Lord, as I am holy." "Be merciful, as your Father in heaven is merciful." "Beloved, if God so loved us, we ought also to love one another." But Christ includes all in the words "Be ye perfect, even as your Father in heaven is perfect."

Thus, we repeat, He admonishes men to return to God; to re-establish their original likeness to him; and He, who is "the brightness of his Father's glory, and the express image of his person," the beginner of our faith, as he will be the finisher of it, will not neglect the work of his hands. The hour of his death was the hour of the birth of a new world, victorious over sin and death, loving and well-pleasing to God. After His return to his Father, he sent us the Holy Ghost, to complete the work which he had begun in the hearts of men, and to extend the kingdom of God over the whole earth. He, the educator of the human race, is the master of all teachers; he must guide them in all truth, must bless their labors, and teach them to pray. Only under his guidance can a Christian ethical training prosper, the image of God be renewed in the child, holiness and love planted in his heart, and wickedness and unlovingness rooted out.

VI. ANTI-CHRISTIAN AND IMMORAL MISEDUCATION.

But who can enumerate the manifold offences of parents and teachers, against the rules of a Christian ethical training?

The conscience of children is laid asleep instead of being awakened, and sins are treated as pardonable weaknesses.

In the place of a godly conscience is even planted a lying spirit; a devil's voice is placed in the hearts of the children. Thus, there is held up before them, as the highest object of attainment, not acceptance with God, but the false and deceiving glitter of honor among men; notwithstanding the warning voice of the Lord, "How can ye

believe, which receive honor one of another, and seek not the honor which cometh from God only?" How often must we hear it said, "What will people say? Foolish parents refer their children to "people" as the highest tribunal; to the customs of the multitude who are walking on the broad road which leadeth to destruction; instead of early impressing upon them the bold expression of the apostle, "For what have I to do to judge them also that are without?"

A similar practice is that of teaching children to put on a hypocritical behavior before people, to assume rootless and lifeless pharisaic virtues, such as will pass current with those who do not look for any ethical basis of action, and with whom the show will pass for the substance.

If we follow the life of the fleshly minded, back to their youth, we shall very often discover many serious faults in their parents. The first seeds of the dominion of the flesh in them were often planted either by the unjustifiable neglect of their parents or by actual positive misleading. Who can describe the influence upon a child's soul of vile loose dances, of vulgar plays, of reading bad romances? How often have cards and lotto during childhood originated the subsequent fury for gaming; and how often have deluded parents taught these dangerous games to their children!

Many things might be said of the bad examples set before children by the thoughtless and even wicked remarks which they hear grown persons make.* But enough has been said to explain the meaning of the term "anti-Christian, immoral miseducation."

VII. RE-ESTABLISHMENT OF WISDOM. INTELLECTUAL TRAINING. WRONG WAYS.

With sin is closely allied error; deviation from true ways. Adam's naming of the beasts in Paradise indicates the profound and godlike power of mental penetration which he possessed before the fall. For it is said that, as the man named them, "that was the name thereof." This divine approbation of Adam's nomenclature showed that the names were competent to express the natures of the various animals; and would certainly not have been bestowed upon the names which modern science has arbitrarily invented and bestowed on them.

But the restoration of this primitive innocent wisdom is an object to be sought after. It is the object of all intellectual training; and is intended to destroy error, and lead to the real truth; just as it is the office of Christian ethical training to destroy sin, and to lead to virtue by faith.

As conscience may be considered a correlative of original sin, so

* "The utmost reverence is due to the young; if you are meditating any thing vile, disregard not their tender age." How many Christians does Juvenal put to shame!

the reason may be considered a correlative of original error; as an intellectual conscience; an organ of intellectual self-knowledge.

Defenders of Christianity have said much against the reason; and quite as much might be said against the conscience. We have seen that in men, instead of the true conscience, the voice of God, there may enter a false conscience, the voice of the devil, betraying into all evil. In like manner the reason may become false, especially through pride. When not thus distorted, it represents God's truth in man, as the conscience does God's holiness and justice.

"The reason," says Hamann, "is holy, right, and good; but it can produce nothing except a conviction of the universality of sinful ignorance." Thus, the right reason will make us humble; and points sinful, ignorant man to a holy and all-wise God. Through an unholy, wrong, and wicked reason, on the contrary, comes, on one hand, the boundless presumptuousness of pretending to know absolutely, to recognize truth as God does; or, on the other hand, a doubt of all recognition of truth, a proud and cold acataleptic condition. The good and holy reason of a Christian applies itself, under the Holy Ghost, to that learning which guides into all truth. In this school—the school of humility—it learns to know its intellectual limits; and the boundaries between the regions of faith and of sight. It recognizes the fact that, since the fall, man has been in the "region of dissimilitude," and distinguishes between that which is given him to know and that which is the subject of faith; those incomprehensible mysteries whose essence God alone understands, because he is that essence.

Absolute truth, as it is in God, is just as inaccessible to man, as long as he is imprisoned within his earthly tabernacle, as is absolute holiness. He who asserts that he possesses the absolute truth must also mean that he is absolutely and completely holy; and armed with divine power.* "Knowledge, and power, and holiness are identical."

A strife for wisdom, analogous with the strife for holiness, lasts every man his lifetime, in the pursuit after truth.

There is also an intellectual miseducation, analogous to the ethical one, in men perverted and turned away from God. Puffed up with a conceit of wisdom, they are deceived as to the limits of it. They also mistake the giver of all knowledge; do not ask him for wisdom; do not thank him for the intellect which he has given them; for they think all knowledge the fruit of the powers of their own minds. But their labor, which is not performed in God, which seeks not the

* Not that every truth is merely apparent, and is uncertain; but that every truth contains something entirely comprehensible, and at the same time something entirely incomprehensible. This is true even of the profoundest essence of mathematical truth—of its ultimate base. See the chapter entitled "*Mysteriously Revealed.*"

glory of God, but of themselves, is a servile labor, without a blessing and without peace. This is unfortunately the character of the usual scientific labors of the present day; and this perverted belief in so many learned men has a most powerful and most evil influence on the instruction of the young." Vanity impels the learned men; they impel the young by vanity, and lead them to make a show before people with what they have learned. Thus it happens that all pleasure in what they learn, and the mode of learning it, is entirely driven away, and replaced by an idle pleasure in the praise of men; and all which is cursed by such vanity must of necessity wither away. While both old and young, teachers and scholars, are, like Narcissus, foolishly burying themselves in a vain self-admiration and self-respect, still others fall into the same snare, by devoting to ungodly scientific labors their whole lives, words, and actions. Students of nature, wholly absorbed in the creature, ask not after the Creator; but live in a modern heathenism; and philologists, neglecting every thing that is Christian, worship false gods with the ancient classics. Such errors as these have a destructive influence on youth.

I have elsewhere discussed various other errors, both of teachers and of the lawgivers of pedagogy.

VIII. RESTORATION OF THE HUMAN POWERS.

Man is to "have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth." This dominion was that of the image of God, in the name of God; peacefully recognized by all creatures. Thus the painters place Adam and Eve in Paradise, at peace with the lions and tigers around them. But when man became disobedient to God, the creatures became disobedient to him; for they had revered him only as the viceroy of God.

There, however, remained to man a species of dominion, even after the fall. "And the fear of you," said God to Noah, "and the dread of you shall be upon every beast of the earth, and upon every fowl of the air, upon all that moveth upon the earth, and upon all the fishes of the sea; into your hand are they delivered."

But this was not the original peaceful dominion; it was a dominion of fear and terror. And a commandment of fear came also from the Lord. As he had before the fall given man all manner of herbs, and the fruit of trees, for food, so he said, after the flood, "Every moving thing that liveth shall be meat for you; even as the green herb have I given you all things."

Therefore, even to the present time, the dominion of fallen man is such over the beasts, that they fear him, as rebels do the power of

their ruler; and his weapons, still more than his divine image. But the prophecies in Isaiah of a future time, when a young child shall lead a lion and a lamb together, and when the sucking-child shall play upon the cockatrice's den, point to a restoration of this human dominion over the beasts. Daniel in the lions' den, and Paul, whom, according to the Word of the Lord, the viper did not injure, are the forerunners of that dominion which man shall again possess, not by the power of his weapons, but by faith.

The passage of the Israelites through Jordan and through the Red Sea, the powerful prayers of Elisha for and against the rain, Christ's stilling of the storm by the words "Peace; be still," and his walking upon the sea—all these point to a future dominion of man over inorganic nature also; a moral dominion, in the power of faith, in the power of God.

The various healings of the sick point to a similar future power.

But, it may be said, all that we are saying relative to the restoration of human powers is simply arguing from a miraculous past to a miraculous future.

It is true that at present we have only the shadow of that past and future time; and it is only with that shadow that we have at present to do.

Thus thought the most judicious of philosophers, Bacon, when he said, "Knowledge and power are the same" (*Scientia et potentia hominis coincidunt in idem.*) In proportion as man knows nature, he rules it. Bacon every where requires, not merely a theoretical knowledge, but a practical, efficient power. With all theoretical knowledge of nature there goes also a practical art; an art of operating upon nature, mostly based upon scientific knowledge.

Thus we do in fact rule the creation, not by the mental magic of words, strengthened by faith; but we make it serviceable to us by searching into the nature and powers of different creatures, bringing them under our power, and setting one to work upon another.

We tame and improve animals, we improve plants, guide the lightning, constrain steam to serve us, fly by the aid of gas, cure by all kinds of medicine, and light is made to serve us in the place of artists.

In this realm man rules, and he seeks in all ways to extend his dominion. The present time boasts especially of this extension. But this is no gain, if all nobility of feeling, all sense for higher things, are to be choked and destroyed; if all intellectual power is to become slavishly subservient to the earthly; and if man, utterly blinded with his convulsive efforts, is to seek material objects only.

We are bound to strive against such ungodly and unworthy impulses. We may not be indifferent in whose name it is that we work; whether it is Moses who acts, or Jannes and Jambres. Both theoretical and practical natural science must be taught, in a right and pious manner; both must be sanctified, as well in principle as in purpose.

IX. THE CREATIVE POWER OF MAN.

When man, as the image of God, was placed as his representative in the dominion over the creatures, he was also himself shaped in the image of God.

It would seem that the Creator desired that his creatures should themselves partake of his creative power; for he conferred upon plants, beasts, and men the power of reproducing their kind, to all time; instead of himself forming one generation after another.

But to man he granted more; he granted him the gift of various creative powers, and an intelligent will for the free development of those powers. The bees build dodecahedric cells, not by a free and improvable art, but by instinct; they *must* make dodecahedra, just as the inorganic elements of a garnet crystal *must* gather into the same shape.

Of what kind, it might be asked, were these gifts in Adam, before the fall? Only one is mentioned in Genesis, that of speech. It was already observed that the Creator approved of the names which Adam gave to the beasts; and that these must therefore have expressed the real character of the beasts. In these names, humanly given, God's creation was mirrored, they were actual names; really *substantives*; arising out of the appearance of the creatures themselves. We, fallen men of the present day, can not make such names.*

We may consider this giving of the names by Adam as the first entirely complete expression of human speech; a completeness which later men have sought to equal in many ways, in prose and in poetry.

The very name of poet reminds us that he is an image of his Creator—a "maker." The greatest of poets has, in the Midsummer Night's Dream, thus described the poet:—

"The poet's eye, in a fine frenzy rolling,
Doth glance from heaven to earth, from earth to heaven;
And as imagination bodies forth
The forms of things unknown, the poet's pen
Turns them to shapes, and gives to airy nothing
A local habitation and a name."

Are not the forms born from Shakspeare's wondrously teeming

* We make great efforts to describe in as perfect a way as possible, and search out many words, mostly adjectives, so as to stick together a sort of mosaic picture in words, as perfect and similar as may be, of minerals, &c.

fancy—Macbeth, Hotspur, Desdemona, Shylock—indeed most of the persons in his dramas—so entirely individualized, independent men, that we might almost be tempted to assert that they have a more individual existence than do numberless actual human beings?*

Thus the poet creatively, by his words, reveals a rich interior world. And his poems even stimulate sensitive hearers to become poets themselves; to repeat his creative act.

The historian and the orator are related to the poet.

But above all the human arts of language, and different from them, stands in holy solitude the revealed Word of God, which through his efficient power causes the regeneration of the world. From its fullness, preachers, and singers of divine songs, draw their power over the hearts of their hearers.† In this holy realm, man finds a foretaste of the powers of the future world; of his return into his father's house.

As in the arts of language, so does the creative power of man express itself in fine arts. Raphael does not only give us true representations of localities and of men; he paints a new earth, a new heaven, and glorified saints like angels.

Thus we can trace this creative power in every art; in the sculptor, the architect, the musician; sometimes imitating, and sometimes idealizing, in a divine aspiration.

Every artistic gift implanted by God in the soul of a child must be faithfully cherished and trained. To this end the first requisite is, that his senses shall be trained: his eye to a true, clear, vivid apprehension of the visible world; his ear to true and keen hearing, &c. And with this development of the susceptibilities must sooner or later be connected that of the power of representation: of speaking, singing, writing, painting, &c.; that is, the development of the creating power. But, above all, his feelings must be purified and sanctified, that he may have no pleasure in impure artistic labors, in external beauty without internal moral goodness.

I can not utter a sufficiently emphatic warning against the usual abuses of these powers. The apostle James refers to the abuse of speech. "The tongue," he says, (and we may add, the pen and the press,) "is an unruly evil. Therewith bless we God, even the Father; and therewith curse we men, which are made after the similitude of God. * * * Doth a fountain send forth at the same place sweet water and bitter?" And it is said, in earnest warning, "For by thy words thou shalt be justified, and by thy words thou shalt be condemned."

* God did not make men and then depart, but they are of him and in him. Remain in him who made you. It is upon this truth that the real energy and actual existence of a human being depend.

† "The Word, added to the element, makes it a sacrament."

These warnings are applicable both to speakers and writers; and to hearers and readers too.

The fine arts, especially, have variously and deeply sinned against purity; let us guard our children against impure pictures. Unholy and delusive passions characterize the modern music; let us return to the chaste and pure music of the ancient masters.

I pray the reader to receive with indulgence this attempt to base pedagogy upon principles; to set forth, though only in outline, its purpose and object. It is an endeavor to show that all human training must seek the restoration of the image of God; and that a Christian, ethical, intellectual, and artistic training, in particular, should contemplate the renewal of our similarity to God in holiness, wisdom, power, and creative energy. Such a training leads to holiness, which has the promise of this world and the next.

CLASSICAL INSTRUCTION.

[Translated from Raumer's "*History of Pedagogy*," for the American Journal of Education.]

I. THE LATIN LANGUAGE SINCE THE CHRISTIAN ERA.—SPEAKING AND WRITING LATIN IN GERMAN SCHOOLS.

ON comparing several school-programmes, in order to determine the number of hours per week devoted to the studies of Latin and Greek, I find at Stendhal there are forty-five hours to Latin, twenty-three to Greek; at Erfurt, forty-two hours to Latin, twenty-one to Greek; at Koesfeld, sixty-eight hours to Latin, twenty-eight to Greek; and in other gymnasiums in like manner. Why is the Greek so far behind the Latin in this respect? Are the Latin classics in so great a proportion superior to the Greek—Cicero to Demosthenes and Plato, Virgil to Homer, Livy to Herodotus and Thucydides? This is nowhere pretended. Or is Greek so much easier than Latin, and therefore to be learned with less effort and less time? No intelligent person will maintain this; the opposite is rather the case. How many more difficulties await the beginner, from the very beginning, from the more complicated nature of the Greek forms and inflection, as compared with the simpler Latin! And do not the different dialects perplex the learner, very much as a Frenchman would be perplexed who should undertake to acquire at the same time the High and Low German and the other German dialects? And, if Greek is more difficult than Latin, if the Greek literature—setting aside the New Testament—is superior to the Latin, we ask again, Why is the instruction in Greek so much less than that in Latin in our schools, when evidently, on the foregoing grounds, more effort and time are requisite to the mastery of it?

The answer to this question is this: that in the study of Latin a very different, higher, and more difficult object is contemplated; namely, the mastery of the Latin as of a second mother-tongue, and the power of writing and speaking it with ease.

But why is not the same command of Greek now sought; the command which Cicero and the Romans thought requisite to education? History answers this question. Let us briefly state the answer.

The reason why, at Koesfeld, sixty-one hours of Latin instruction are given, is ultimately based upon the former universal dominion of Rome, whose influence reaches down even to our own times.

A Roman of the fifteenth century, Laurentius Valla, writes :—"We have lost Rome, we have lost our empire ; not by our own fault, but by the fault of time. Yet in the strength of that magnificent empire we yet rule over great part of the earth. Ours is Italy ; ours are Spain ; Germany, Pannonia, Dalmatia, Illyricum, and many other peoples. For, wherever the Roman language prevails, there is the Roman empire."

The dominion of the Roman tongue, since the overthrow of the Roman empire, has extended itself in two ways ; as the language of the Roman Catholic church, and as that of the Roman-German empire. Later, German was the official language in Germany, and French the diplomatic language. Since the Reformation, Latin has been the biblical, religious, and legal language only for the Catholic nations ; it has also been that of literature.

Latin is a speech of traditions more than a thousand years old ; to disuse Latin would seem to be a radical abandonment of traditions. Therefore it is that the Romish church holds so fast to Latin. By using one and the same language it proposes to maintain its unity in all time and in all countries. To worship God in a variety of tongues it regards as Babelish, and as tending to schism ; and accordingly it adheres to the vulgate as the received text.

Luther's translation of the Bible made the greatest breach in this traditional church Latinism ; and the most active opposition to Romish tendencies has resulted from the efforts of Bible societies, whose object is to translate the Bible into all languages.

At the revival of classical studies Latin remained the speech of the literary world. I say remained ; for it is erroneous to suppose that it was then that it first became a literary language. From the time of the Romans, a current of traditionary Latin learning, never entirely interrupted, flowed even into the sixteenth century. Latin was the medium for philosophers, jurists, physicians, mathematicians, &c. Whoever undertook to study the sciences passed into a strange world, not only of facts, but of speech. The necessary books were Latin, the teachers taught in Latin, the technology of every art was Latin. Here his mother-tongue quite failed the aspirant after a higher culture ; he found himself obliged to work into this literary conventional Latin, and to live in it, as he had been obliged to in his childhood into his native language. The operation was a sort of new birth, often symbolized by the adoption of a new Latin or Greek name. Scientific writers could not overstep the charmed circle ; indeed it would be impracticable, without the construction of a new terminology in German. Only individuals of the highest authority, like Luther and Kepler, dared lead the way in making any such

use of German, or could bring the literary men to read their books.*

During the long period between the fall of the Roman empire and our own times the European Latin underwent many changes. During the first thousand years it had the character of a language still alive, though dying and degenerating. It was arbitrarily or unconsciously varied to meet the wants or the spirit of every period. The ancient classics were altogether neglected; and, being restrained by no accepted models, most Latinists of the period wrote what was in fact any thing rather than Latin.

The influence of Christianity upon this language† having acquired its strength in the midst of the heathen Latin, it was obliged to substitute Christian significations for the heathen ones of existing words; to give them a new nature, to breathe into them a new soul. Of the divine power exercised in this process a wonderful example is furnished by the mighty, deep-feeling, and mysterious Latin church-hymns; which truly sounded "with organ-tone and bell-like sound." Affairs of state were transacted in official Latin, and the scholastic philosophy prosecuted in literary Latin.

As classical studies revived Cicero became the ideal of all the Latinists; his style was the model, by reference to which they judged all the writers of the Middle Ages, especially the scholastic ones. They could scarcely find words to describe the depth of the barbarism of these last. Many of them fell themselves into an erroneous habit; outwardly quite brilliant, but in truth a mere lifeless and mannered imitation and aping of the ancient classic style. A few intellectual men of the fifteenth century, who had a real feeling for the beauties of the old classics, passed impartial judgments upon this new phase of degeneracy, and the general philological researches and efforts of the age. Such were Picus of Mirandola, Politian, and Erasmus. Picus defended the profound old schoolmen against the unmeasured attacks of his friend Hermolaus Barbarus. The schoolmen, he said, had wisdom without eloquence; these later men have eloquence without wisdom: they are heartless—all tongue. Politian wrote to a Ciceronian:—"On the subject of style I do not entirely agree with you; since, as I hear, you approve no style except such as bears the impress of Cicero. For my part, I prefer the countenance of an ox or a lion to that of an ape, notwithstanding the latter is more like a man's. Those who write only imitations are parrots and magpies;

* I have exemplified Keppler's translations of Latin technics into German, for the sake of being understood by the German literati.—"Pedagogy," Vol. I., p. 269.

† See Rudolf von Raumer, "Influence of Christianity upon the Ancient High German," (*Die Einwirkung des Christenthums auf die Althochdeutsche Sprache.*) p. 153, &c.

they merely say over words which they do not understand. What they write has neither force nor life; it is truthless, without substance or efficiency." Erasmus severely lashes the mimics of Cicero, in his "*Ciceronianus*." These people, he says, who always have Cicero in their mouths, are a disgrace to his name. "It is wonderful," he adds, "with what assurance this sort of persons revile the barbarism of Thomas, Scotus, Durandus, and others. Yet these last, who never claimed that they were eloquent, nor Ciceronians, will appear on careful examination to be much more entitled to the name than the former, who would pass not only for Ciceronians but for Ciceros."*

Such was the relation between the Latin of the Middle Ages and the Latin which came into extensive use in the time of the revival of classical literature. Since the philology of those times, and the schools of learning which then arose, exerted an influence which is operative even in our own times, they need a somewhat closer observation.

There prevailed an unmeasured and senseless deification of classical authors, studies, and Latin. A few examples will show the extent of this worship. A certain Barrius wrote in Latin a book upon Italy, and called God to witness the curse which he invoked upon any one who should dare to translate it into Italian. "For," said he, "I do not choose that this work should become a prey to the stupid judgment of a malevolent, filthy, and ignorant rabble in Italy alone, and should shortly be forgotten; but that it should come into the hands of learned men of all nations, and be immortal." The Roman domination, he continued, and the Roman language, will extend over all the earth; but books written in the vulgar tongue will soon perish. In like manner did the dead and forgotten countrymen of the immortal Dante treat him.

Camerarius tells of a young man who assured him that he would willingly permit himself to be beheaded, could he on that condition leave behind him one epigram equal to the best of Martial's.

No less characteristic are the following expressions, which were used by Aesticampianus,† in 1511, at Leipzig, in a farewell lecture. "It was necessary," he said, "that the word of Latinity should first have been spoken to you;‡ but, seeing ye put it from you, and judge yourselves unworthy of Roman eloquence, lo! I turn to the Gentiles. For whom of the great poets have your forefathers not persecuted, and whom of those have you not scoffed at who were sent by Heav-

* For Bacon's opinions of the schoolmen, and their relations to the age of the Reformation, see "*Pedagogy*," Vol. I., p. 314.

† His real name was Rak. He was born in 1460, at Sommerfeld, and named himself after his birthplace.

‡ See Acts, xiii., 46.

en to teach you? May you therefore live rude and empty-minded, savage and inglorious, and die and go to damnation, unless you do penance."

We can scarcely believe our eyes in reading this. This unbounded deification of so-called classical training was the occasion of infinite efforts to speak and write classical Latin; since by this means most especially could men hope to become classically educated and to become members of the literary class.

This then was the idea of the schoolmen of the sixteenth century. We have already seen with what iron perseverance Johannes Sturm, among others, pursued the design of training his scholars into the mastery of speaking and writing Latin, and familiarity with the Roman eloquence; and how, for the sake of doing this, he neglected almost every other study, and discouraged his native language as much as possible.

The object was, however, not only to speak and write with ease, but with good Latinity; that is, to use no word nor phrase which could not be found in some author of the golden or at furthest of the silver age. Analogy, in the opinion of most Latinists, was no rule for making Latin. "*Nil analogiæ tribuimus si auctoritas absit*" said Cellarius, even later.

In order to write good Latin, these men were restricted entirely to imitation. "Whoever maintains that the orator can dispense with imitation," said Bishop Julius Pflug, "must be out of his wits; and whoever shall deprive oratory of imitation will destroy it utterly." Of the way in which the children were taught this imitation, Sturm's school is an instance; his method was to teach his scholars so to deck themselves with borrowed feathers that, wherever it was possible, no hearer or reader should trace the literary theft. Into what caricature this imitation grew the "*Ciceronianus*" of Erasmus shows very clearly.

This practice of imitating the ancients has even continued to our own day. In this connection the preface of Ernesti's "*Initiæ doctrinæ solidioris*" is of much interest; where he gives an enumeration of the methods which he pursued, in preparing the very various parts of his book, to guard himself against violations of pure Latinity. "It was my first care," he said, "to secure purity of language. For this purpose, before I began writing, I sought earnestly and industriously not only to make myself acquainted with what the old models of Latinity—Cicero, Seneca, Pliny, &c.—have here and there said of the subject of arithmetic and geometry, but with the writings of those devoted expressly to mathematical subjects—as Frontinus, Vitruvius, &c.

"For philosophy, Cicero alone was sufficient. I am in hopes that

this industry of mine has prevented any word from creeping into my book which was unheard in ancient Latium; except, in a few cases, when no ancient word could be found fit for my purpose, or when there was some other equally good reason.

“After my care for purity in speech, my next effort—and still more important one—was to give my whole style such a form and such a clothing as completely to resemble that which the ancients would have used in philosophizing. After determining to write this book, I read often and industriously the philosophical and rhetorical writings of Cicero, taking the utmost pains not only to clearly understand his definitions and conclusions, his refutation of errors and his suggestions and solutions of doubts, but also thoroughly to acquire a power of imitating his acute and tasteful method of expression. How far I have succeeded others must judge.”

Despite of his care to write *Nihil veteri Latio inauditum*, Ernesti found himself under the necessity of using some unclassical philosophical and mathematical expressions; as, for instance, the word “quotient.” “This word,” he says, “is well suited to the thing, had its use only been known to the ancients.”

Le Clerc advises, for the purpose of avoiding violation of Latinity, and to enter fully into the spirit of it, in the first place, only to write on such subjects as are agreeable to the genius of the Latin language; and he says that such people as pay more attention to the language than to the matter of their books usually write better Latin.

Suppose, however, the advice of Le Clerc and others to be followed—that the best imitation of the old classics is the highest literary attainment—that no word or sentence is to be written which Cicero or Livy would not have written just so—what is to be said for the originality of the latter writers of Latin? In the opinion of the writers themselves, very much. The theory of imitation of Johannes Sturm and others, as we have seen, taught so to imitate that the reader should not observe it, and should think himself reading an original. But who, even moderately acquainted with Cicero, could fail easily to trace the origin of this pseudo-original writing.

Exceedingly naïve, and in agreement with Sturm and the “*Ciceronianus*” of Erasmus, is what Julius Pogianus says on this point. “There is no doubt that the best should always be imitated:” Cicero is by far the best of the ancient classics; and thus he, Pogianus, readily disposes of the rest of the ancients. There are also hyper-Ciceronians, who, in the most lamentable manner, write nothing original, but are only clumsy and unlucky mimics. From such he separates himself; making a distinction as follows: when he meets with a good phrase in Cicero, he transfers it to another subject. For instance, he

reads *Rutilii adolescentiam ad opinionem et innocentiam et jurisprudentiam, P. Scævola commendavit domus*. Nobody can find fault with him for changing this into *Hannibalis adolescentiam ad opinionem et eloquentiam et philosophiam Nobilii consuetudo commendavit*. There are also prominent phrases: such as *Nequid nimis*, *Late patet invidia*, and the like. When the imitator, instead of these, writes *Tenendum est omnium rerum modus*, and *Nihil non occupat invidia*, who shall assert that the phrase is not his?

In this manner the thoughts of others pass as those of the writer. He even sometimes dares to vie with Cicero in antithetical points. Instead of Cicero's *In latitia doleo*, he says *In dolore lætor*; and, instead of *Tardius faceres, hoc est, ut ego interpretor, diligentius*, he says *Celerius, id est negligentius*. And, in conclusion, he recommends to learn many portions of Cicero by heart, in order to have a good stock of materials on hand for altering and varying. Is it not almost incomprehensible, to any man of common sense, how any one could frankly and seriously propose such apish exercises as an ideal of training in classical literature?

In spite of all this dishonest struggle to do as the Romans did, there were already great complaints of the degeneracy of Latinity. "Scarcely one in a hundred," says Ferrarius, "writes purely and without errors; and scarce one in a thousand has any critical judgment upon Latinity." And Vavassor says: "Very seldom is there one who knows what it is to write and speak good Latin; and almost nobody who can do either both or one of them." In like manner complain Caselius, Schelhamer, and others; and indeed, from the sixteenth century down to our own times, there has been a constant lamentation over the neglect and degeneracy of Latinity.* Even Sturm, who made every exertion to train his scholars to virtuosoship in the Roman eloquence, complains that nearly all shrank back from the necessary drill, and only a few accomplished any thing. He mourns over the barbarity of the age; and says men use barbarian words instead of those strictly Latin, and that all elegance is utterly extinct. Caspar Scioppius even wrote a book upon the barbarisms and solecisms of Joseph Scaliger, Casaubon, and Lipsius. Scaliger, in particular, in his celebrated work "*De emendatione temporum*," was guilty of so many faults that Morus occupied a great part of the preface of the second edition of the work with apologies for the concealment of them. Vavassor wonders not so much that the passionate Salmasius should have committed so many solecisms as that Milton, in reproaching Salmasius with them, should himself have permitted to be printed

* Many of these complaints of modern date are given by Director Schmidt, in his "*Programme of the Gymnasium at Wittenberg*," 1844, p. 6; and in those of Petrenoz, Meiring Lauff, &c.

such an error as *Salmasius vapulandum se præbuit*. Notwithstanding all the pains which Ernesti took to write faultless Latin, Fr. Aug. Wolf calls attention to them.

Such was the ideal of the imitators; so great their efforts to reach it, and so unsatisfactory their success.

We must, however, allow that these efforts had some result so long as Latin was the current language of learning. But it is historically true that the ancient languages, after the time of the Reformation, and particularly after Luther's unsurpassed translation of the Bible, were gradually driven back by the German.

Latin books grew fewer, and German books grew more frequent; and German academical lectures took the place of the Latin ones. At last, during the latter part of the eighteenth century, German literature attained so much of classical character, the notion that virtuosship in writing Latin was necessary to a good education quite disappeared. That accomplishment was not possessed by those whom, at that time, Germany honored as its greatest minds. At present, even philologists and educators admit that no reason for the attainment of skill in writing or speaking fine Latin is to be found in the present condition of church or state affairs, nor from that of literature. Shall our scholars therefore continue in their old and almost helpless efforts to imitate classic writers of the golden age, merely to distinguish themselves by a Latin composition at a graduating examination, or at Latin examinations or disputations? and, when these are discontinued, which may happen at any moment, shall every reason for exertion disappear?

Every external reason, I hear it said in reply, but not the inner and intellectual reason; the speaking and writing of Latin, as a means for the formal purposes of the schools, ought never to be discontinued. To this a philologist and educator (Prof. Wurm, of Hof,) answers as follows: "This formal training seems to be nothing but an expedient to conform the Latin language, as far as possible, to the requirements of the age, and at least to save it as a means, after it has ceased to be a principal end, of instruction."

I am very much mistaken if Herr Professor Wurm did not intend to allude exclusively to those who maintain that each and every scholar should be made competent to write fine Latin. For it is asked, Shall there be no Latin written in the schools? No practical person would answer in the affirmative.

Latin should be written just as much as it is necessary to write any language, in order to master it thoroughly. Writing for this purpose is, so to speak, the productive exercise of grammar, which should go parallel with the receptive exercises of reading and memo-

rizing from the classics. "The writing of Latin" says Hector Blume, "may as well be given up, except as a means to an end; that is, for fixing the knowledge of grammar, and for directing the attention more thoroughly to the characteristics of foreign idioms. And Madwig says: "Writing Latin can now only be regarded as a means of improvement, not of instruction; as the means for securing an acquaintance with the language which shall be complete, sure, vivid, and appreciative of the characteristics of its expressions; in short, a receptive knowledge of the Latin in its parts and its whole, and of its differences from our own language."

"We wholly agree with these views," I hear some learned philologists say. "Let it be agreed that the writing of Latin in our gymnasia is merely an exemplification of grammar. Now, however, grammar includes all the language, from the first declension up to the completest syntax; it rejects as well the least barbarism as the grossest solecism. How and where will you set the limits of this exemplification?" We reply, Can not these limits be fixed where a distinction has already been long established—where the specific distinction is recognized between mere Latin school grammar and the grammar of learned philologists? Has not the distinction been long recognized between *grammaticæ scribere* and *Latine scribere*; the former being the business of scholars and the latter of the trained philologist? That thoroughness of training and complete living amongst the ancient classics, which alone can fit for the *Latine scribere*, neither can nor should any more be cultivated by the wretched scraping together and memorizing of Latin phrases; nor will there be any more education to a mere show of facility in *Latine scribere*.

To this the advocates of an elaborate Latin style reply, "We are not in favor of virtuosship in writing Latin; but only of a thorough understanding by the learner of the idioms of that language, and of its specific differences from German. Nothing is so efficient for this purpose as the practice of intelligent translation from strictly German composition into a strictly Latin style; and nothing can be a more intellectually useful practice than that of such a comparison of two languages."

We are far from denying that such a practice is useful; but we can not admit the expediency of subjecting mere school-pupils to an exercise which is properly only the business of philologists by profession. Such professional studies, in language as well as in other departments, belong only to the universities. The complaint has been often and with good reason made by educators, that the instruction in our schools is often adjusted as if either all the scholars were to be phil

ologists or were philologists already. "But," it may be asked, "are scholars then not to enjoy the benefit of so useful a study?" Of course they are, but only in a different way; namely, by means of the corrected and most thorough kind of translation, from Latin into German. This may very properly be a study for the higher classes of our gymnasia; but translation from German into Latin belongs only to philologists, and thus both the one and the other will receive their appropriate benefit from a continued and thorough parallel study of the languages, authenticated by translating.

That it is easier to translate into the mother-tongue than from it into a foreign one all will agree, with the exception of those very few to whom foreign languages become a second nature. The reason can not here be fully investigated; we can say only a few words about it, as follows:—When the pupil sets himself to translate a passage from Cicero, for instance, he seeks first the meaning, and then the correct German expression. The meaning, however, comes to him of course in German words; and the better his understanding of the passage, the more suitable will be the words. The seeking and the finding of the right meaning and the right expression are naturally one and the same mental operation. But, in translating from German into Latin, his task is wholly different. He already understands the German expression; and his question is, How would a Roman—Cicero above all—have said this in Latin? He then proceeds to search amongst the Latin phrases in his memory, for some one which may serve his turn—always under the rule *Nihil veteri Latio inauditum scribere*. This, which would be a pleasant occupation to a philologist, working with a full mind, is to the school-boy a disagreeable and unprofitable exertion. It is also the more unpleasant because he must usually commit to memory, in order to it, much material wholly without interest to him; and, in his reading, leads him off into a useless phrase-hunt, which entirely diverts his attention from the real meaning of the author.

I may now repeat, without any apprehension of misunderstanding, that scholars should write Latin for the exemplification of their school grammar studies, they should write it in the same sense and to the same extent as Friedrich August Wolf advises to write Greek. "I have always found," he says, "in my own experience, that those make themselves most thoroughly masters of any language who write much in it—both its forms and its syntactical combinations; and in that respect I perceive no difference between the ancient and the modern languages. For mastering either, the exemplification of its grammar, by his own exercises, must be the immediate aim of the scholar; and in the third and second forms (*Tertia und Secunda*),

such themes may be composed as shall require some finish in style; but for the most part such as are composed of short sentences, and none others."

With this design school-books have been prepared for translating the German into Greek; to exemplify its grammar, and thus to facilitate the thorough comprehension of the Greek classics. In doing this there has been no idea of carrying the scholars so far as to enable them to write classical Greek as good as Zenophon's, after the usual fashion of fixing a level of attainment in writing Latin by the persistent imitation of some normal stylist. At least, such was Wolf's idea. "The writing of Greek," he says, "is not learned at the present day, as Gesner, Ernesti, Dawes, and other connoisseurs who tried it, found out." "No drill in German style!" he says in another place.

If it is argued that no study of Latin can be thorough which does not include the attainment of virtuosity in speaking and writing, then it must be admitted that the same is requisite in the acquirement of any other language, and of the Greek as well. But this would imply that only those can thoroughly understand Homer, Sophocles, and Plato who are connoisseurs in writing Greek; and therefore that our greatest philologists, even Wolf himself, have not understood Homer.

Many eminent men of learning, and able philologists among them, have declared against this confessedly fruitless endeavor to qualify school-boys to write and speak classical Latin. Let us hear some of their opinions.

Locke says: "If a boy is set to learn Latin in a school, he writes Latin exercises and makes compositions and verses, with no further object than to be able to understand a Latin author; not to become himself a Latin speaker and poet."

The well-known Johann Matthias Gesner relates that Christian Thomasius was the first who delivered German lectures at a German university—all those of previous date having been in Latin; and he adds that this was not so much because Latin was becoming disused, as from the exceedingly bad Latin that the lecturers used. "Therefore it happened," he continues, "that educated men, who understood Latin, declared for German, and in favor of teaching in German, while the half-barbarians on the other hand defended the Latin. Even royal commands failed to put a stop to the practice of teaching in German." If this distinguished philologist had to allow that speaking Latin could no longer be required even of the representatives of German learning, and even that requiring instruction to be given in Latin necessarily caused the destruction of Latinity, from

whom then would he require connoisseurs in speaking it? From among the scholars in gymnasia?

A Prussian ordinance of the year 1811, it is true, required Latin orations from graduates. "Latin speaking, truly!" remarks Friedrich August Wolf, the most competent judge. "Not three learned men in each of our renowned universities can do it; often not even the very *professor eloquentiæ*; and not six *per cent.* of the teachers in schools."

As ironically Wolf disposes of the requirement to write Latin. "To write in a language," he says, "does not belong within the sphere of the study of it. A man can be well acquainted with antiquity and not be able to write well in its language. The great scholars in Latin usually write it badly." "Few will attain real facility in writing Latin," he says elsewhere; "since the very great practice, and that contrary to Nature, who has indicated one language for men as she has one native land, is requisite for this purpose: and only those venture to make a great outcry for this object who are themselves unable to attain it."*

With this opinion of Wolf's Jacob Grimm coincides, although on very different grounds. "Language," he says, "is an unconscious and unperceived mystery, which is found implanted within the hearts of the young, and which fits our organs of speech for the native accent, declensions, inflections, and hard or soft characteristics. From this inborn sense arises the ineradicable longing feeling that comes upon a man when he hears his native language amongst strangers. Hence, also, the *unlearnableness* of a foreign tongue—that is, of the radical and thorough acquisition of it for speaking and writing. According to Tzetzes, the "double nature" of Cecrops was his knowledge of two languages (Greek and Egyptian.) It is really true that he who acquires two languages has two bodies and two souls.†

Wolf and Grimm have thus taken a position upon the German side of the question. So also has Herr Rector Hartung, in Schleusingen. "The usual practice of writing Latin," he remarks, "is in fact nothing but a mechanical botching up together of parts from a scanty store of words, phrases, and forms, with the help of lexicons and grammars." Professor Wurm says the same. "Every one, who has half-way arrived at a mastery of writing and speaking Latin, whether is he not as it were about to appear as a ghost of himself; to really give up his German nature, in order to become a Latinist?" This may remind

* Wolf, when he requires facility in writing Latin, in his "*Museum of Ancient Learning*," requires it by no means of any and every scholar, but only of philologists by profession.

† Beneke's "*Erziehungs- und Unterrichtslehre*," II., 237. His principles of instruction in foreign languages are based, in instruction in Latin especially, in the writing of it.

the reader of Ennius, who boasted that he had three souls, because he understood Greek, Oscan, and Latin. And do boys attain the degree of objectivity which is indispensable for learning a dead language? They leave off studying, in fact, just as they begin to attain it. I even maintain that to attempt to teach a boy Latin to the extent of writing it presupposes the most thorough ignorance of the language in the teachers.

Most of what Herr Wurm says about writing Latin, in his work above quoted, bears the impression of having originated in a desperate experience as a teacher. Latin writing, he complains, is even to this day the basis of the gymnasial instruction; every thing is referred to a Latin style—a Latin production is the chief condition of successful graduation. Pupils are only to learn Latin so far as to be able to read it and understand it, and they will find the Latin grammar a universal grammar for all languages to be learned afterward, and the Latin a preparation for all the Romanic languages. "For all these objects," concludes Prof. Wurm, "a gymnasium course, restricted to reading, and without writing,* would be sufficient."

What he says about writing Latin has a double force as applied to Latin speaking, where the scholar, improvising thoughts which came to him in German, must on the spot unclot them of their words and reclothe them with Latin ones.† If he can not perform this operation with great quickness, he falls into a most painful stammering of Latin, unless he should instead, as is usual, entirely forego thinking, and merely bring together a set of memorized phrases, which may be used any where, and mean nothing.

Goethe has some valuable remarks upon the speaking of foreign languages. "Shall I speak French?" he says, "a foreign tongue, which always makes the speaker seem silly; in which one may take what position he chooses, and can only express himself about common affairs—only coarse distinctions. But what distinguishes the blockhead from the man of intellect, except that the latter quickly, vividly, and accurately comprehends delicate distinctions and whatever is most appropriate for the present moment, and expresses them with liveliness; while the latter, as every body must in a foreign tongue, has to help himself under all circumstances from the same lot of veteran stereotyped phrases."‡ Few will attain to facility in writing

* In this exclusion of writing, Prof. Wurm no doubt does not comprehend writing for the exemplification of the school grammar.

† We need scarcely state here that this Latin speaking does not include the oral translation of short sentences, usual in the lower classes, in exemplifying school grammar.

‡ In connection with this remark of Goethe's we may say that the spread of the French language in Europe should not be taken as an indication of the extent of actual preference for it. The French language offers an especial abundance of "veteran stereotyped phrases" for all kinds of occasions; and thus equalizes "intellectual men and blockheads." It is on

Latin, says Wolf. Another distinguished philologist inquires, How many of our living men of learning can write original Latin with independence and freedom? and he answers, There are perhaps three. Wolf was speaking of philologists; what would he have said of scholars? To train them to a real facility in writing Latin is out of the question; they can at most be forced into an unsound and mimicking method. The truth is that, for this facility, it is not only requisite to have "two souls" but to get rid of the German soul. Soullessness is requisite.

This method of disciplining our German youth in writing Latin leads to the unfortunate consequence of a mischievous degeneracy in writing German itself; for the pupils learn to write the latter as they have done the former. That is, instead of developing mental habits and powers that will enable them to select words, to form correct expressions, and write them well, by practice in writing their thoughts in their native language, and in their natural order and simplicity, they become entirely disused to this natural process, by means of their Latin school-exercises, and only hitch together German phrases, as they have Latin ones. If Cicero will not serve them for a model of German style and a purveyor of phrases, they immediately look up some German author to put in his place, and from him they gather words, style, and phraseology.

Thus they become trained up as mannerists in their own language—to intellectual pharisaism—to a lifeless and ghostlike style. Numberless scholars, thus miseducated, hold fast all their lives to this school ideal, make school exercises all their lives, and remain all their lives in the illusion that their facility in putting together crude borrowed phrases is classical attainment. Of Latin-German phraseologists, so educated, Goethe says :—

" If you feel it not, you can never hunt it up :
 If it does not burst out of your soul,
 And with deep-seated pleasure
 Seize upon the heart of every hearer,
 Sit still there! stick together
 And brew hashes from other men's meat ;
 And blow at the scanty flame
 That comes out of your little heaps of ashes,
 The astonishment of children and of apes,
 Because you can open your mouths so wide.
 But you can never wield the hearts of others,
 Because the words do not come from your own.
 Even those very orations of yours, which are so splendid,
 In which you chop up manhood into shreds,
 Are unrefreshing as the misty wind
 That in the autumn rustles through the dry leaves."

this account that it has gained so much favor; as an arbitrary substitute for thought and education. How many court ladies probably valued themselves over Goethe, because they could chatter French!

The poet can mean nothing by his "Sit still there! stick together and brew hashes of other men's meat," unless he refers to the lifeless labor of gathering together Latin phrases; of brewing hashes out of Cicero and Livy, and then of doing the same over again in German? How many of our preachers weary themselves in efforts of the same kind after excellence of style; and how entirely are their discourses destitute of the freshness and liveliness of an extempore address! Might one not very naturally, in desperation at their elaborate nothings, go so far as to wish that they had had no training at all in language; and that their only rhetorical rule had been, Speak and write plainly the words that naturally come into your mouth.

"Not only of dry homilists," says Herder, "but even of able speakers, must it often be complained that, even from their earliest youth, their style has been formed upon the Latin, and that the periodic ceremonious tone which spread in the schools from the Latin to the German classes, shows itself even amongst their best thoughts. I shall only attack the immense error of the belief that Cicero is a model of style, perfect and without blemish, and that to imitate him is originality! that a dozen bombastic expressions, such as they use in the schools, will make young Ciceros; and that a clear and lucid style in their native language is consistent with the Latin periodic structure."

Entirely opposed to the untoward influence of such exercises is the influence of an intelligent reading of the classics upon German style. Wieland said: "I learned to write German from Cicero's letters." He had gained a clearer style, and a more adequate manner of expressing his thoughts, from that master. For this purpose translation from Latin and Greek classics is very much to be recommended. It obliges the student to enter into the meaning of the author and into the spirit of the language; proves his understanding or not understanding it; and is the best practice in the technics of writing German. This practice makes but little demand upon the productive power of the pupil, but trains his susceptibility. The more fully he enters into the meaning of his author the better will be his German translation.

In conclusion, we have three remarks* to make:—

1. The opinion has been expressed that only in the department of speaking and writing Latin does the realist system of education admit of being introduced, as opposed to the humanist system. The realists scoffingly inquire how it is that, after ten years of labor, Latin students show so little facility in writing and speaking it? It is only by the attainment of connoisseurship in those studies, by exhibiting

some such tangible result from the gymnasium studies, that the mouths of these adversaries can be stopped.

But it would be a great mistake to suppose that the realists would be contented with that attainment; or even that they would suffer it to be required. They would demand, still more vehemently, To what end this so great expenditure of time and strength for a useless accomplishment? With whom can a man converse intelligibly in Latin? He will not do it for his own pleasure, nor ever, unless absolutely obliged to. We have very clear reasons for writing and speaking English and French; but, for doing it in Latin, none is visible—unless you aim at realizing Comenius' dream of making Latin a universal language for the human race.

The realists would have no such efforts made. And there is no cause for the apprehensions that many feel that the doing away with writing and speaking Latin would open the door to a realist barbarism. And to this barbarism is the barbarous Latin which we hear in disputations, in dissertations, and examinations to be opposed? is one barbarism to be set up against another? By no means.

2. Even if the gymnasium should undertake to satisfy the extremes of these demands for speaking and writing Latin—which, as is well known, they can not do—the result would be the greatest injury to the whole method of Latin instruction. At present all the labor and time are saved which were bestowed upon collecting and memorizing of Ciceronian phrases, that they might be always at hand for writing and speaking. Many grammatical minutiae are also got rid of which were learned by anticipation, for future use in the same way; being now omitted until found in the course of reading. How many peculiarities of the rarest kind, nay, even strange and monstrous, which the beginner has been, and even still is, obliged to commit to memory, would never occur, even to a diligent reader of classics, in his life!

3. The time thus gained should be used especially in acquiring Greek; and the two classical languages should be learned as nearly in the same manner as possible.* At present, as we have seen, there is on an average twice as much time given to Latin, in the two gymnasia, as to Greek.

How very few are there who leave school able to read even the easier Greek classics with facility, or even without the constant use of

* Beneke and Dr. Schmid express the same opinion. The latter says: "Latin has now lost the place of a living language in our gymnasia, and the Latin literature its pre-eminence over the Greek." As far as that youth may learn Latin before Greek, and therefore come to the latter at a riper and better prepared age, so far should more time be devoted to the former; and it is another good reason for learning it more thoroughly than Greek that it is much more useful in all manner of study. This is evident upon the merest glance at the history of European civilization.

a dictionary! But who that desires real education, and not a mere vain show, would not in his manhood gladly exchange the usual blundering knowledge of writing and speaking Latin for facility in comprehending the Greek classics?

II. CARDINAL WOLSEY'S PLAN OF INSTRUCTION FOR THE GRAMMAR SCHOOL AT IPSWICH, 1528.

The celebrated Letter of Cardinal Wolsey,* addressed to the masters of the grammar school at Ipswich, prescribes, with almost professional minuteness, the precise method of classical instruction which was afterward confirmed by the ordinances and practices of the leading public seminaries of learning throughout the kingdom. Although Cardinal Wolsey was a schoolmaster before he was either churchman or statesman, he was probably indebted to Erasmus not only for the general scheme but for the language—whole sentences being taken, word for word, from the writings of that eminent scholar.

† THOMAS CARDINAL OF YORK, &C., TO THE MASTERS OF IPSWICH SCHOOL, GREETING.

We suppose no one to be ignorant with what mental effort, zeal, and industry we have always directed our labors to this point; not with a view to our own private advantage, but as far as possible to consult the welfare of our country, and of all our fellow-subjects. In which one object we consider we shall reap the richest fruit of patriotism, if with divine blessing we should adorn by cultivation the minds of our countrymen. Influenced therefore by a warmth of affection incredibly great toward our birth-place, which claims our exertions by its own right, we have dedicated a school, not wholly without elegance as a building, as the clearest testimony of our perfect love. But since there seemed but little done in having built a school, however magnificent the structure, unless there should be added skillful masters, we have endeavored by all means to appoint as its presidents two masters duly selected and approved: under whose tuition the youth of

* Cardinal Wolsey was a munificent patron of learning, as his foundation of Christ College at Oxford, and of the grammar school at his native town of Ipswich, witnesseth. His plan for the latter, as preparatory for the former, contemplated ample endowments out of the lands and tenements belonging to the monastery of St. Peter, and other suppressed priories in that town and neighborhood, intending, as he himself said, in a letter addressed to Court de Beaumont, grand marshal of France, that "Many scholars should be brought up and maintained therein, and always trained in virtue, to the end that a perpetual memory of God shall be kept and honored." The building, for which he arranged with the French Count to bring over stone from a new quarry at Caen, was never finished, and the revenues appropriated for its endowment were seized by his enemies, after his fall from power. The school itself went into operation, and a new charter was granted by Henry VIII., which was renewed and enlarged by Elizabeth, in 1565. Under this charter the school is still administered.

† *Thomas Cardinalis Eboracensis, &c., Gypsuichianæ scholæ præceptoribus, S. D.*

Neminem latere putamus, quanto animi conatu, studio, industria, huc semper labores nostros destinaverimus, non ut nostris privatim commodis, sed ut patriæ civibusque nostris omnibus, quam plurimum consuleremus. Qua una in re, amplissimum pietatis fructum nos assecuturos esse arbitramur, si divino aliquo munere popularium nostrorum animos exornaremus. Proinde, maximo incredibilique pietatis ardore erga patriam affecti, quæ nos veluti jure quodam sibi vindicatur, ludum literarium non omnino inelegantem, velut amoris summi erga eandem nostri clarissimum testimonium, dedicavimus. Verum quoniam parum visum est ludum quantumvis magnificentum extruxisse, nisi etiam accesserit præceptorum peritia, modis omnibus dedimus operam, ut nos quos præceptores electos probatosque huic præficeremus: sub quibus Britannica pæbes, statim a primis annis et mores et literas imbiberet; nimirum intelligentes in hac ætate, velut herba, spem reipublicæ positam esse. Id quod feliciter maturiusque consequeretur, libello puerilis instructionis methodumque ac rationem docendi, apprime huic publi necessariam, omni nostra cura, studio, diligentia, ut haberetis, curavimus. Vestræ partes erunt nunc vicissim, qui huic novæ scholæ nostræ præceptores

Britain, from their earliest years, might imbibe morality and learning; naturally considering that the hope of the whole state rests on this stage of life, as that of the harvest on the blade of corn. And that this might succeed more happily and early, we have provided, with all care, zeal, and diligence, that, in a little treatise on the instruction of boys, you should have the method and plan of teaching principally necessary for this tender age. It will now in turn be your part, who are masters in our new school, here to exercise the boys with diligence in the rudiments of education; that, as well in elegance of literature as in purity of morals, they may advance in due order to higher views. And, if you strive after this object as carefully as we shall exhibit the plan before your eyes, you will not only now, while we earnestly favor your pursuits, lay us under obligation to yourselves, but you will absolutely make us survive on happy terms with all posterity.

From our own palace, Sept. 1, A. D. 1528.

In what order boys, admitted into our academy, should be taught, and what authors should be lessoned to them.

METHOD FOR THE FIRST CLASS.

In the first place, it has been not improperly resolved that our school be divided into eight classes. The first of these to contain the less forward boys, who should be diligently exercised in the eight parts of speech; and whose now flexible accent it should be your chief concern to form—making them repeat the elements assigned them, with the most distinct and delicate pronunciation—since raw material may be wrought to any shape whatever; and, according to Horace,

“The odors of the wine that first shall stain
The virgin vessel, it will long retain;”

on which account it were least proper to deprive this time of life of due care.

FOR THE SECOND CLASS.

Next in order, after pupils of this age have made satisfactory progress in the first rudiments, we should wish them to be called into the second form, to practice speaking Latin, and to render into Latin some English proposition; which should not be without point or pertinence, but should contain some piquant or beautiful sentiment, sufficiently suitable to the capacity of boys. As soon as this is rendered, it should be set down in Roman characters; and you will daily pay attention that each of the whole party have this note-book perfectly correct, and written as fairly as possible with his own hand.

Should you think proper that, besides the rudiments, some author should be given at this tender age, it may be either Lily's *Carmen Monitorium* or Cato's *Precepts*; that is, with a view of forming the accent.

FOR THE THIRD CLASS.

Of authors who mainly conduce to form a familiar style—pure, terse, and polished—who is more humorous than Æsop? Who more useful than Terence?

estis, hic rudimentis ac docendi ratione diligenter exercere hos pueros: deinceps cum elegantissima literatura, tum optimis moribus ad majora profecturos. Ad quod si pari cura enitimini, atque nos ad oculum vobis commonstraturi sumus, nos non tam vobis vestro studio impense faventes jam demerebimini, quam plane apud posteros felices reddideritis. Bene valete
Ex ædibus nostris, Anno Domini millesimo quingentesimo vigesimo octavo, calend. Septembris.

Quo ordine pueri, in nostrum gymnasium admissi, docendi sint; quique autores iisdem prælegendi.

PRIME CLASSIS METHODUS.

Principio, scholam hanc nostram in classes octo partiendam esse non incongruè placuit. Quarum prima pueros rudiores in octo orationis partibus diligenter exercendos contineat. Quorum os tenerum formare præcipua cura vobis sit; utpote qui et aptissima et elegantissima vocis pronuntiatione, tradita elementa proferant: siquidem rudem matrem licet ad quodvis effingere; et Horatio monete, *Quo semel est imbuta recens servabit odorem testa diu*. Quamobrem hanc ætatem justa vestra cura defraudare minime par est.

SECUNDÆ CLASSIS.

Deindè, postquam ætas hæc satis feliciter illis primis rudimentis adulta profecerit, eam in secundum ordinem vocari velimus, ad usum loquendi Latinè, et ad vertendum in Latinum aliquod propositum vulgare; non insulsum neque ineptum; sed quod argutam aliquam aut venustam habeat sententiam, quæ ab ingenio puerili non nimium abhorreat. Quod simul ac versum fuerit, quam mox characteribus Romanis mandari oportebit: dabitisque operam

Both of whom, from the very nature of their subjects, are not without attraction to the age of youth.

Furthermore, we should not disapprove of your subjoining, for this form, the little book composed by Lily on the genders of nouns.

FOR THE FOURTH CLASS.

Again, when you exercise the soldiery of the fourth class, what general would you rather have than Virgil himself, the prince of all poets? Whose majesty of verse, it were worth while, should be pronounced with due intonation of voice.

As well adapted to this form, Lily will furnish the past tenses and supines of verbs. But although I confess such things are necessary, yet, as far as possible, we could wish them so appointed as not to occupy the more valuable part of the day.

FOR THE FIFTH CLASS.

And now, at length, you wish to know what plan of teaching we would here prescribe. Your wish shall be indulged. One point that we think proper to be noticed, as of first importance, is, that the tender age of youth be never urged with severe blows, or harsh threats, or indeed with any sort of tyranny. For by this injurious treatment all sprightliness of genius either is destroyed or is at any rate considerably damped.

With regard to what this form should be taught, your principal concern will be to lesson them in some select epistles of Cicero; as none other seem to us more easy in their style, or more productive of rich copiousness of language.

FOR THE SIXTH CLASS.

Moreover, the sixth form seems to require some history, either that of Sallust or Cæsar's Commentaries. To these might not improperly be added Lily's Syntax; verbs defective and irregular; in short, any you may notice, in the course of reading, as departing from the usual form of declination.

FOR THE SEVENTH CLASS.

The party in the seventh form should regularly have in hand either Horace's Epistles, or Ovid's Metamorphoses, or Fasti; occasionally composing verse or an epistle of their own. It will also be of very great importance that they sometime turn verse into prose, or reduce prose into meter. In order that what is learnt by hearing may not be forgotten, the boy should re-peruse it with you, or with others. Just before retiring to rest he should study something choice, or worthy of remembrance, to repeat to the master the next morning.

At intervals attention should be relaxed, and recreation introduced: but recreation of an elegant nature, worthy of polite literature. Indeed, even with his stud-

quotidie, ut libellos quam emendatissimos, quamque elegantissimè sua quisque manu scriptos habeat universus grex.

Si auctorem aliquem præter rudimenta, adhibendum tenellæ pûbi consueritis, id erit vel Liliæ Carmen Monitorium; vel præcepta Catonis; nimirum formandi oris gratia.

TERTIÆ CLASSIS.

Ex authoribus, qui ad quotidianum sermonem purum, tersum, elimatum, magnoperè conducunt, quis facietior, quam Æsopus? aut quam Ter. utilior? Uterque vel ipso argumenti genere adolescentiæ non injucundus.

Rursum, huic ordini de nominum generibus libellum quem Lilius conscripserat, si adjunxeritis, non improbaverimus.

QUARTÆ CLASSIS.

Præterea, cum quartæ classis militiam exercebitis, quem ducem malitis, quam ipsum Virgilium, omnium poetarum principem, vobis dari? Cujus majestatem carminis, voce bene sonora, efferendam esse operæ pretium fuerit.

Verborum præterita et supina huic ordini convenientia commodabit Lilius. Verum ut hujusmodi fateor necessaria, ita velimus tamen tradi, quoad fieri possit, ut potioem diei partem non occupent.

QUINTÆ CLASSIS.

Nunc demum video vos cupere, quam docendi rationem hic præcipiamus. Agite, mos geratur vobis. In primis hoc unum admonendum censuerimus, ut neque plagis severioribus, neque voltuosis minis, aut ulla tyrannidis specie, tenera pubes afficiatur. Hac enim injuria ingenii alacritas aut extingui, aut magna ex parte obtundi solet.

SEXTÆ CLASSIS.

Porro, sextus ordo historiam aliquam, vel Sallustii, aut Commentarorum Cæsaris, postulare

ies pleasure should be so intimately blended that a boy may think it rather a *game at learning* than a task. And caution must be used, lest by immoderate exertion the faculties of learners be overwhelmed, or be fatigued by reading very far prolonged: for either way alike there is a fault.

FOR THE EIGHTH CLASS.

Lastly, when by exercise of this kind the party has attained to some proficiency in conversation-style, they should be recalled to the higher precepts of grammar; as, for instance, to the figures prescribed by Donatus, to the elegance of Valla, and to any ancient authors whatever in the Latin tongue. In lessening from these, we would remind you to endeavor to inform yourselves at least on the points it may be proper should be illustrated on each present occasion. For example, when intending to expound at length a comedy of Terence, you may first discuss in few words the author's rank in life, his peculiar talent, and elegance of style. You may then remark how great the pleasure and utility involved in reading comedies; of which word you should explain the signification and derivation. Next, you may briefly but perspicuously unravel the substance of the plot; and carefully point out the particular kind of verse. You may afterward arrange the words in more simple order: and wherever there may appear any remarkable elegance; any antiquated, new-modeled, or Grecian phrase; any obscurity of expression; any point of etymology, whether derivation or composition; any order of construction rather harsh and confused; any point of orthography; any figure of speech, uncommon beauty of style, rhetorical ornament, or proverbial expression; in short, any thing proper or improper for imitation; it should be scrupulously noticed to the young party.

Moreover, you will pay attention that in play-time the party speak with all possible correctness; sometimes commending the speaker when a phrase is rather apposite, or improving his expression when erroneous. Occasionally some pithy subject for a short epistle in their native tongue should be proposed. And, to conclude, you may exhibit, if you please, some formulæ, which, serving as a guide, a given theme may conveniently be treated.

Furnished with these rudiments in our school, boys will easily display the paramount importance of beginning from the best. Do you but now proceed, and enlighten with most honorable studies your well-deserving country.

videtur. Quibus syntaxim Lili non incongruè addiderimus, verba defectiva, anomala, et quæcunque heteroclyta, obiter legentes, admovebitis.

SEPTIME CLASSIS.

Septimi ordinis grex, aut Horatii Epistolas, aut Ovidii Metamorphosin, aut Pastorum libros assidue volvat; inierim vel carmen, vel epistolam aliquam componens. Illud quoque permagni referet, si aliquoties aut carmen solverint, aut solum orationem pedibus alligatam reddiderint. Audita nò effluant, aut apud vos, aut cum aliis puer retractet. Sub somnum exquisiti quippiam, aut dignum memoria meditetur, quod proxima aurora præceptoris reddat.

Interdum laxandus est animus, intermiscendus lusus, ac liberalis tamen, et literis dignus. In ipsis studiis sic voluptas est intermiscenda, ut puer ludum potius discendi, quam laborem existimat. Cavendum erit, ne immodica contentione ingenia discipulorum obruantur, aut lectione prælonga defatigentur. Utraque enim juxta offenditur.

OCTAVÆ CLASSIS.

Denique hoc exercitio ad aliquam sermonis peritiam provecus grex, ad majora grammatices præcepta revocetur: velut ad figuras a Donato præscriptas, ad Vallæ elegantiam, et ad linguæ Latine quoslibet veteres auctores. In quibus prælegendis vos admonitos velimus, ut ea duntaxat quæ explicanda præsentis loco sint idonea, conemini discere. Veluti Comædiam Terentianam enarraturi, imprimis auctoris fortunam, ingenium, sermonis elegantiam, paucis disseratis. Deinde, quantum habeat et voluptatis et utilitatis comediarum lectio. Deinde, quid significet ea vox, et unde ducta. Deinde, dilucidè et breviter summam argumenti explicites, carminis genus diligenter indicetis. Postea, ordinis simplicius: deinde, si qua insignis elegantia, si quid prisce dictum, si quid novatum, si quid Græcicum, si quid obscurius, si qua etymologia, si qua derivatio et compositio, si quis ordo durior, et perturbator, si qua orthographia, si qua figura, si quid egregium orationis decus, si qua exornatio rhetorica, si quid proverbium, si quid imitandum, si quid non imitandum, diligenter gregem admoveatis.

Præterea, in ludo dabitur operam, ut grex quam emendatissimè loquatur, loquentem aliquoties collaudetis, si quid dictum erit aptius, aut emendetis, cum errabit. Interdum epistolæ brevis argumentum, sed argutum, lingua vulgari proponi debet. Postremò, si libet, ostendatis formulas aliquot, quibus traditum thema commodè tractari poterit.

His rudimentis pueri in schola nostra imbuti, facile declarabunt quantopere referat, ab optimis auspicatum fuisse. Vos modo pergite, ac patriam benè merentem honestissimis studiis illustrate.

To be continued.

METHODS OF TEACHING LATIN.

[Translated, for the American Journal of Education, from the German of Karl von Raumer.]

I. CHANGES WITHIN THE LAST THREE HUNDRED YEARS.

THE purpose of learning Latin having itself become very different in the course of time, the methods naturally change accordingly; as new roads are taken to new destinations.

After the revival of classical learning, there was an effort to denationalize the young, and to train them into complete Romans. How this was sought to be done in the schools, is shown by the course of Sturm's Gymnasium, at Strasburg. After the peace of Westphalia, this ideal of education was very much altered by the introduction of new elements. It was the knowledge and understanding of the Roman classics which gradually came to be sought, instead of the facility of the ancient Roman in writing and speaking Latin. How the methods of teaching Latin changed in a corresponding manner, we have already stated under the definition of the term grammar. Melancthon's definition was, "*Grammatica est certa loquendi et scribendi ratio.*" With this agreed the authors of the "*Grammatica Marchica*," which appeared in 1728. They say "*Grammatica* is the art of speaking and writing correctly." Almost one hundred years later, Otto Schulz gave the following definition: "Latin grammar is an introduction to the knowledge of the Latin language. It shows how the laws of speech are developed in one special language, the Latin." Kühner says, "Grammar is an introduction to the correct knowledge of a language, as forms of words, and of speaking." These definitions, I think, show how there has been a progress from the practical study of Latin, as an art of speaking and writing, to the theoretical, aiming at a real knowledge and understanding of it.

II. THE OPPONENTS OF THE OLD GRAMMATICAL METHODS.

In Sturm's school, speaking, reading, and writing of Latin went hand in hand, even from the lowest classes. Most teachers in the sixteenth century, and later, must have used an exceedingly hard and unintelligible mode of teaching the grammatical portions of Latin; as the complaints of distinguished men in relation to the schools testify. We give a few of them.

The theologian Lubinus, in 1614, published a New Testament in

several languages; and in his preface contended strenuously against the usual method of teaching languages.

"It seems," he says, "as if a method had been worked out with all imaginable pains, by which teachers and scholars, alike, were to teach and to acquire the knowledge of the Latin language, only by immense labor, great weariness, infinite misery, and by the expenditure of a very long time." Some one of a low order of intellect, he continues, may have introduced this method in the time of monkery; and he sketches the consequences as follows:—"Nothing is taught except Germanisms, solecisms, barbarisms, disgrace. * * What is this sort of grammatical instruction in schools, but the delay of learning; the destruction of the years of childhood and of youth; a butchery of liberal minds; and the best portion of youth spent, even to the twentieth year." He speaks further of the useless and abominable grammatical rules (*Regelchen*), which after a short time became altogether impracticable. The unnatural method of beating the grammar into the pupils, had the effect of making them hate both parents and teachers, and of making the teachers cruel. School instruction by rules and precepts is always contrary to nature.*

In like manner, the eminent Gerhard Vossius opposed the usual grammatical instruction. He says, "I see with pleasure that a method of learning Latin has been found, different from the common one. I consider the great mass of rules and exceptions, with which the minds of boys are at present overwhelmed, not only unnecessary, but excessively injurious. And I wish that this were its only fault. For those who set to work to learn every thing thoroughly, accumulate a great mass of false rules, and, in spite of the vast piles of comments and commentaries, never touch many of the first importance." In his work "*De studiorum ratione*," Vossius writes, "The boy should soon learn the rules of grammar; which are so few that they may be included in twenty pages. Many rules of a plainly philosophical character are commonly stuffed into grammars, quite unintelligible to the young. This is absolute butchery. Not that these things are not at some time to be learned; but they should be deferred until the nature and causes of language itself can be understood."†

Justus Lipsius complains that, from his eighth to his thirteenth year, his progress in learning was delayed by "grammatical trifles."

* "There are," says Lubinus, "in the compendiums of grammar in common use among us, one hundred and eighty technics and more; and, in syntax, seventy and more rules, with so many exceptions, mostly very obscure, that they could scarcely be learned by a man of adult age, advanced in judgment and learning."

† "The writings of Vossius," says F. A. Wolf, "are very valuable; in comparison with them, all those of the later grammarians are insignificant."

No less earnest is Johann Matthias Gesner, in his preface to the Grammar of Cellarius, against the unreasonable method of studying grammar. "There are a thousand miserable examples," he says, "of the unfortunate fact that the unintelligent study of grammar has had no result whatever, except to kindle an inextinguishable hatred to all study, hopelessly to perplex the mind, and to make it unfit for other business." It would be inexcusable to permit such a state of things to continue.

Let us now listen to one of the most distinguished complainers of modern times, in the same direction; to a very eminent educator, Meierotto :*—"Let any one imagine himself a boy, forced to learn ten or twenty paradigms of declensions, and as many of verbs; who must make himself master of the rules for their formation and inflection, of their analogies and anomalies, and of so many exceptions to rules themselves scarcely understood; in short, of all the peculiarities and contradictions of the whole language. This is little pleasure for him; to be obliged at once to learn what is wearisome by its uniformity, and what is scarcely endurable for its contradictions. And he must learn it all by himself, and in silence; which incredibly increases the difficulties of the undertaking. Let me not be answered, this has always been done; that so many boys every year are not only doing it, but emulating each other in it.

"I know very well that a great fear of punishment, or steady application, will accomplish much with the common run of people; that a better stimulus is exerted by the teacher, who has the rare faculty of making even this method enlivening; or even by emulation; in short, that one or another external influence may force boys to apply themselves steadily and diligently to the business. I also know that the boys do not perceive the fact, and of course do not feel distressed about it, that, except the memory of forms, they must give up all other intellectual activity. And how seldom can the schools show a boy, after half a year's study, who shows as much pleasure in his learning as boys naturally show. How commonly has it been observed, on the contrary, that, even for the smartest boys, the Latin recitations are hours of martyrdom!"†

Many more complaints might be quoted against the caricaturist methods by which grammar has been taught, but we have given

* Joh. Heinrich Meierotto, "*Latin Grammar in Examples, (Lateinische Grammatik in Beispielen;)*" Berlin, Fr. Nicolai, 1785; second part, p. 10, &c. We shall see, further on, how Meierotto would cure the evil of which he complains.

† Let not these opinions of Meierotto, Gesner, &c., be misunderstood; they are directed, not against the use, but the abuse of grammar. For Melancthon's very forcible expressions against those who undervalue grammar, see "*History of Pedagogy,*" Vol., I. p. 193.

enough of them. We proceed to the methods which are recommended in their stead.

III. NEW METHODS.

A. *To learn Latin as the native language is learned.*

Some have set out to pursue the same method by which they have learned their native language ; that is, the practice of speaking. The example of Montaigne has been appealed to, whose father gave him a private teacher, who was to speak Latin and nothing else, even from his very earliest years. Such arrangements were also made, that all those with whom the boy came into contact should speak only Latin. "Without art and without a book," says Montaigne, "without grammar or rule, without whip or tears, I learned to understand Latin as well as my teacher understood it." In his seventh year he read nothing with more pleasure than Ovid's "*Metamorphoses* ;" in fact, Latin was his native language.

Locke prescribed the same way of learning French. But he adds, it is practicable to employ a French woman for one's children, but not an ancient Roman woman ; and he therefore recommended another method for learning Latin.

The strange experiment which was tried with the boy Montaigne might succeed with a few fathers, but would hardly bear repetition. It has been proposed for masses of children. Lubinus suggested a plan of a *cœnobium*, where all the teachers, masters, servants, and assistants, and even the cooks and butlers, should use no language but pure Roman Latin. In this institution the youths who were staying there were to learn the language as they formerly did at Rome, only by habit, conversation, and use.

Maupertuis afterward proposed to found a Latin colony. It is hardly necessary to waste a word upon the impracticableness of such a proposal. Gerhard Vossius wished for a nation that spoke Latin. Then we should have, he says, the very best way of learning Latin. But, he continues, since people at present give one very little credit for being able to write good Latin, and still less for being able to speak it well, and, as usually, only those who are somewhat advanced can give any assistance about it, and beginners are rather troublesome, there seems to be no other way to improve our Latin, than to read the ancients and to imitate them.

J. M. Gesner, like Vossius, prefers speaking Latin to all other ways of teaching its grammar. Speech, he says, (preface to Cellarius' Grammar,) is earlier than grammar ; and therefore it is easier to learn a language by use and practice, without grammar, than by grammar

alone, without use and practice. This last is impossible. But, like Vossius, and for the same reason, namely, necessity, Gesner declines advising to teach Latin practically in that manner. He says that all the instruction in higher and lower schools should be given in German.* We have already seen that, in his zeal for pure Latinity, he declares himself strongly against barbaric Latin, and in favor of German lectures.

"It is a fact," he says, "that polished men, who know Latin, are indifferent to the German language, and recommend it to be taught afterward. The semi-barbarians, on the other hand, contend for the Latin only."†

Although Wölke and Trapp, the teachers of the Philanthropinum, were in favor of teaching Latin by speaking, their opinion is not worth much attention.‡

If F. A. Wolf is right in saying that of one hundred gymnasium teachers scarcely six can speak Latin, his opinion is clear upon the method by speaking. "*Ultra posse nemo obligatur.*"

B. *Latin and real studies taught together. Comenius.*

Comenius was in favor of teaching Latin and real studies together. His "*Janua*" and "*Orbis Pictus*" are composed upon this principle. Both school-books are much praised by some, and much dispraised by others. Among those who approve of them is one high authority, J. M. Gesner. He says: "At the beginning, scholars should learn from books which, at the same time, will increase their knowledge of things, such as are those of Comenius for younger scholars. For this reason, I very much like his books, especially the '*Orbis Pictus*;' not because they are the best possible, but because they are the best we have."

In the "*Orbis Pictus*" the boys easily learn many words by the pictures attached to each. For instance, at the words *torrens*, *stagnum*, *mare*, there are pictures of a waterfall, of a pond, and of the sea.

Only, the "*Orbis Pictus*" should not contain so many things of late date, and pertaining to modern arts and sciences, as, for instance, to printing. Comenius included all manner of things; the world of speech, according to him, being equal in extent to the world of things, and desiring to leave as few omissions as possible.

* Gesner's opinion that boys should learn short sentences in Latin, is, of course, not inconsistent with this.

† Semi-barbarians; the Jesuits, for example.

‡ At least not that of the realist Wölke. For if he said, at an examination, as Schummel says he did, "*Imitate sartorem*," this is enough against his method by speaking. See "*History of Pedagogy*," 2, 280, where, however, supposing an error in writing or of the press, I have substituted *Imitamini*.

If this motive had not prevailed with Comenius, if he had confined himself to the world of the Latin classics, and had omitted every thing of which the Romans did not know, his "*Orbis Pictus*" would have been, at least, twice as small and twice as useful. In the seventeenth century several gymnasiums adopted the "*Orbis Pictus*" as a school-book, but its use did not last long. In private instruction, it may perhaps be more valuable, especially if the boys should find pleasure in taking it up themselves. Else, it must be considered only an auxiliary, and not as an efficient elementary school-book.

C. *Combination of methods A and B.*

Some have advised to combine, as far as possible, the two methods above described.

Thus, the native language is sometimes taught by showing the pupil distinct things, and at the same time naming them to him; as by showing him, for instance, a watch, and pronouncing the word watch. Instead of reading the "*Orbis Pictus*," Latin names of things are to be given orally, and perhaps a few phrases made at the same time.

D. *Ratich's and similar methods.*

(a. Ratich.)

Ratich and his school of teachers approach the teaching of Latin from a different point of view. Instruction, says Ratich, should not begin with grammar, but with the reading of some author, from whom grammar must gradually be developed. Ratich's model author was Terence, who was to be gone through with nine times, and more; the teacher first making an interlinear translation, the scholar translating it back again. Afterward came the instruction in grammar from the author chosen, then imitation, &c.

(b. Locke.)

Locke advises to begin in the same way. He directs to commence with the fables of Æsop, to use an interlinear version, to read repeatedly one fable after another, and to cause it to be written, until the scholar understands it thoroughly. Since the rules of grammar are derived from those of speech, and not the latter from the former, those rules are not to be taught until the scholar has attained a certain degree of facility in the understanding of the language.

(c. Hamilton.)

At a later period an Englishman, Hamilton,* invented a method similar to that of Ratich, which had much success. The means

* Hamilton can not have known Ratich's works - can he Locke's?

by which he fell upon this method are too characteristic to be here omitted. Hamilton was a merchant. In 1798 he went from England to Hamburg, and there learned German from a French emigrant, named Angely, under the condition that his teacher should not trouble him with the grammar, as his head was too full of other things. Angely began by translating a German anecdote into English, word for word, and making Hamilton translate it back again. After twelve lessons he found himself able to read in an easy German book; and afterward, at Leipzig, he proceeded further in the language by reading and speaking. "This," says Hamilton himself, "is the origin of the Hamiltonian system; but I had as little idea of ever teaching it, as I now have of flying."

He was afterward unfortunate in business, and went to North America. In 1815 he went to New York, and began to give lessons in French, after Angely's method, at a high rate—\$24 for twenty-four lessons. He taught with increasing reputation in Philadelphia, Baltimore, and other American cities. In 1823 he returned to England, and, rather quackishly, advertised "to teach Greek, Latin, French, Italian, and German, in a few weeks, to those entirely ignorant of them." In eighteen months he had six hundred scholars, and taught in several English, Scotch, and Irish cities. He died at Dublin, in 1831.

These few points in Hamilton's life, and the way which he made his appearance as teacher, and even inventor of a new method, can not make a very favorable impression regarding it, upon men of solid learning and thorough educators. He seems to have undertaken only to give his scholars, in the shortest time possible, a superficial knowledge and tolerable facility in speaking and reading a language. To grammar, and to the value of instruction in language as a means of intellectual training, he appears to have paid but little attention. His method seems to be well adapted to instruct traveling agents, rich people who travel for pleasure, and such persons, for roving about in foreign lands.

Still we must not be in haste to condemn. Let us first examine Hamilton's own method of teaching, and then observe how it was modified by others, especially Germans. Hamilton began his instruction in Latin with a Latin book, usually the Latin version of the gospel of St. John, with an interlinear translation. This translation must agree with the original in gender, number, and case, of nouns and adjectives; in mode, tense, and person, of verbs; and in idiom; peculiarities of the German or any other native language being entirely neglected.

In translating each single word of the original, he came upon the question whether this interlinear version is to give the meaning of the word in that connection, or the radical meaning, as far as it could be ascertained. The German Hamiltonians, says Pfau, give the first etymological, or primary meaning; for example, *προσωπείον*, fore-face instead of mask; for *γεωργός*, earth-worker instead of farmer. Hamilton himself says, "In Philadelphia I first advocated the doctrine that words in all languages, with few exceptions, have only one meaning, (the proper or radical meaning,) and should always be translated by that equivalent which will come nearest to supplying its place at all times and in all circumstances." In another place he says, "Translations must be analytical, that is, word for word; and must give, not a derived and remote meaning, but the radical and proper meaning of each word."

Ratich and his followers had already declared themselves in favor of translating words by their principal etymological meaning.* "The translation," says a Ratichian, "must be most strictly conformed to the letter of the radical meaning, as far as possible; although it may not correspond to the sense in that place."

In the beginning of the *Andria* of Terence, for instance, where he says "*Poeta cum primum animum ad scribendum adpulit*," the interlinear version gives, for *adpulit*, "had impelled toward." And still, in agreement with Hamilton, he says, further, "Nor must this translation vary; but each word, as often as it occurs in the whole book, must be translated by the same equivalent."

As an example of the interlinear version, we give the following, from John.

Initio	omnium rerum fuit	Verbum,	Verbum
(In the)	beginning of all things was (the)	Word,	(the) Word
apud Deum fuit;	Deus fuit	Verbum.	Illud igitur verbum
with God was	God was (the)	Word.	That therefore word
initio	fuit apud Deum.	Omnia	ejus
(in the)	beginning was with God.	All (things) of him	(by the)
ope	creata sunt.	In ipso erat	vita, quæ vita hominibus
help	created were.	In him was	life, which life (for) men (of)
lucis fons	exstitit.	Lucebat	lux inter tenebras, quæ
light fountain	existed.	Shone (the) light	in (the) darkness, which
eam non	comprehenderunt.		
it	not	comprehended.	

From French he translates as follows:—

* Pfau observes that Hamilton's translations did not entirely carry out his principle.

C'était en elle qu' était la vie, et la vie était la lumière des hommes. Et la lumière luit dans les ténèbres, et les ténèbres ne l' ont point reçue.
It was in it that was the life, and the life was the light of men. And this light shone in the darkness, and the darkness not it have point received.

We add a specimen of Tafel's interlinear version of John, 18: 25, 27.

Pierre était là et se chauffait ; et ils lui disent : n' es-tu pas aussi de ses disciples ? Il le nia et dit : Je n' en suis point. Et l'un des serviteurs du pontife, parent de celui à qui Pierre avait coupé l' oreille, lui dit : Ne t' ai-je pas vu en le jardin avec lui ? Pierre le nia encore une fois ; et aussitôt le coq chanta.
Peter was there and himself was warming ; and they to him said : not art thou step also of his disciples ? He it denied and said : I not of it am point. And the one of the servants of the high-priest, relative of that one to whom Peter had cut off the ear, to him said : Not thee have I step seen in the garden with him ? Peter it denied again one time ; and immediately the cock crew.

Before proceeding to the controversy to which the school-books of Hamilton and the Hamiltonians gave rise, we will examine the methods which were practiced, along with these books, by the master and his scholars.

Hamilton himself first translated, word for word, from the gospel of John in French into English, for his scholars, and made them translate back again. This was the turning of the first course ; in the two following courses he used other books, in the same way. In the third course he introduced grammar, and commonly made them recite the regular rules, and a dozen or so of the irregular ones, in rhyme. Afterward they translated the gospel of John, orally and by writing, into correct French. After six or eight such exercises, they were commonly to make no more mistakes. "Thus," says Hamilton, "the pupil is to proceed to translate the whole New Testament, until he can do it without the aid of the teacher. Then comes a daily exercise in French ; a friendly or business letter, or a narrative, until the style is free from Anglicisms ; whose avoidance is very difficult, and which must be gradually cured by industrious practice." He states

thus the object at which his French scholars aimed: "They read French as easily as English; can write, correctly and easily, a letter of business or friendship in French; and can speak correctly, if not with facility."

This statement of the object of the Hamiltonian instruction in French shows that his whole aim was to train his scholars, by the shortest and easiest way, to a point of ability to speak and write French, which very many wish to reach and to go no further. He taught only adults, probably mostly merchants; who found Hamilton, a practical merchant, precisely the man for them. But how was it with his instruction in Latin, for which language there is no practical use? He read and translated the gospel of John in Latin, in the same way, giving three lessons to the first chapter. At the fourth lesson, from fifty to seventy verses had been translated. "At the tenth lesson," says Hamilton, "it will be found that the class can, without trouble, translate the whole of the gospel of John. For the next two steps, which also occupied ten lessons, they read an *Epitome Historiæ Sacræ*. With this, some of the forms of the language were taught; a grammar which he had had printed being put into the hands of the scholars; not, however, for learning by rote, which he entirely forbid. In this respect he fully agreed with the principle of Ratich, "nothing is to be learned by rote."*

At the third step comes syntax, and the reading of Nepos; at the fourth, Cæsar; and, at the fifth and sixth, Virgil and Horace: all these others, except the last, being read with an interlinear translation.

"Five or six months," says Hamilton, "of continued attention by the scholar and the teacher, will be found sufficient to secure the former a knowledge of Latin which would heretofore seldom have been attained in as many years. Having come so far," he continued, "the scholar may now practice writing Latin, in a course of ten lessons, from which he will now derive more advantage than by writing over whole reams of paper on the old plan in our schools."

Hamilton printed, with interlinear translations, the gospel of John, *Epitome Historiæ Sacræ*, Æsop's Fables, Eutropius, Aurelianus Victor, Phædrus, Nepos, Cæsar, two volumes of selections from profane authors, Sallust, Ovid's "*Metamorphoses*," and six books of the *Æneid*. After an examination of some of his scholars of from ten to thirteen years old, he writes, "Had I then been supplied with translations, as at a

* In the *Praxis Ratichianorum* it is said. "Prove your pupils, whether they are ready in the conjugations and declensions; but let it all be done from the book, and not by the memory; nor let the scholar be permitted to recite the inflections from memory." Basedow also writes "with us there is very little memorizing."

later period," (with interlinear ones, that is,) "they must, during the six months over which their course extended," (in Latin,) "have gone through the whole thirteen volumes" (those above named) "which I afterward published."

How many remarkable things are there here, aside from the silly bragging, which show ignorance of language and bungling in teaching! Of the gospel of John, which he selected for a first book, with its interlinear translations, we shall speak, further on. After this follows the Epitome, then Nepos, Cæsar, Virgil, Horace: John the beginning, and Horace the end, of his course! In six months the scholars shall learn as much in this way as usually in six years on the common plan. If then he will buy ten lessons more, this will carry him to as great facility in reading Latin, as years would do "on the old plan in our schools." He even engages to carry children of from ten to thirteen years old, in six months, through thirteen volumes of Latin authors, so that they shall understand them. This reminds one of Basedow's bragging. Indeed Hamilton exceeds Basedow; perhaps because he had not, like him, studied, and therefore did not know what he was doing. The German Hamiltonians were mostly educated men; and it was therefore to be expected that, like practical and prudent men, they would avoid the follies of their master and predecessor. A few made some improvements; others, on the other hand, have increased the evil.

Tafel,* like Hamilton, makes an interlinear translation of the gospel of St. John the basis of all his instruction. This contradicts that maxim of the natural philosophers—*Fiat experimentum in re vili*. Strict men, like Klumpp, Schmid, Strebel, &c., saw in this a disrespect to the gospel, on account of the distorted interlinear versions, of which I gave a specimen. This was liable to make too deep an impression upon scholars, and to become a serious hindrance to their future devout perusal of the books. It is not very clear, however, why pious men, and even these very ones, advocate the use of the Greek Testament as a school-book.

The fundamental idea of the Hamiltonian system, according to Schmid,† is this: "The teacher of the foreign language must first, as to the material, introduce the scholar to the language as to a living one, and one containing thoughts; and must likewise give him complete expressions and sentences. Second, as to the form or method of

* The methods of Hamilton and Jacotot, (*Die Sprachmethoden Hamilton's und Jacotot's*), by Dr. L. Tafel. German quarterly, (*Deutschen Vierteljahrsschrift*.) 1838, 3d part, p. 179.

† Jahn's Annual (*Jahrbuch*.) 1839, XXV., p. 406, Klumpp's edition. Strebel; "The Educational Institution at Stetten" (*Die Erziehungsanstalt zu Stetten*.) p. 48.

his instruction, he must furnish him, as far as possible, with an independent knowledge of the laws of the foreign language."

We shall first consider the material—the complete expressions and sentences which are laid before the beginner in a foreign language. The "Mene, Mene, Tekel, Upharsin," which was written on the wall, was a sentence which Belshazzar did not understand; Daniel was obliged to translate the unknown and enigmatic words. To the German beginner, Latin words are precisely as unintelligible as those words; and it is therefore quite indifferent to him whether the sentences are connected together or separate.

Herr Director Meiring expresses himself very forcibly on this point against the Hamiltonians.* "If words have character and meaning only in sentences, so have sentences character and meaning only in parts of the organization of a whole work, chapter, &c.; and, therefore, neither should they be taught separately to the scholar. But, besides this," continues Meiring, "it is only in the case of the native language that instruction can proceed analytically, from the whole to the parts. It is not so with Latin. In the case of Latin we have, instead of immediateness, continual indirectness; instead of the analytical proceeding, from the whole to the parts, a synthetical one, from the most separate parts to the whole. The scholar finds himself in the presence of a language entirely strange to him. How is he to get at the meaning even of the simplest sentence—to reproduce in his own mind the thoughts expressed in it? Had he within his own sphere of thought the suitable forms for the foreign sentence, the use of them would be tolerably simple; he would exchange the one for the other, and arrive at a whole. But he has no such forms, or he has them very rarely; and even Hamiltonism itself, which seeks to supply them by means of distorting the native tongue, fails of its object. The beginner must also obtain an understanding of the characteristics of the sentence; he must have the lexicographic meaning of the words, and their grammatical form. Word for word must be explained, before the scholar is ready to put the single words into a sentence, and then make them intelligible in his own language. What similarity is there here," continues Meiring, "with the organized and animated delivery of a native language? Whatever may be the dreams of the inventors of certain modern methods for language, immediateness and life of expression in Latin can only be aimed at in a higher grade of instruction."

Thus far this intelligent educationist. He here suggests a subject

* On the learning of vocables in Latin instruction (*Über das Vokabellernen im Lateinischen Unterricht.*) 1842. In the programme of the Gymnasium in Düren.

which has been ably discussed by Professor Schwarz, of Ulm. The question is, can the foreign text in this manner be truly rendered into the native language? Is the text a formless mass, upon which any stamp will make a correct impression? By no means. German has a form of its own, as well as Latin; and, therefore, the German interlinear version, instead of being a true representation of the Latin original, is much more like the impression of one seal stamped over another, where the two are confounded in one distorted image. Schwarz says that this is attempting to teach the scholars a foreign language by means of one made foreign; an unknown one by means of one made unintelligible; Latin by Latinized—or barbarized—German; in short, the unknown by the unknown.

Tafel explains that "one of the chief advantages of the new method is, that it teaches the meanings of words, not isolatedly, but in connection—in whole sentences and periods." In another place he says, "The Hamiltonian method has an advantage by its use of the laws of the association of ideas, so little regarded in the usual teaching; and produces the good result that on the one hand it furnishes the scholar with a store of words in complete sentences, and on the other it gives him the radical meanings of words; that it presents the language taught, not only as to its words, their inflections, relations, and places in sentences and periods, but exhibits them thoroughly, with all their idiomatic peculiarities in the mother tongue; so that the scholar obtains a complete picture of the foreign idiom. This principle of translating words by their radical meanings is of the utmost importance in the study of language, and has until lately never been sufficiently regarded. It is by means of this principle that the first real progress is to be made in the actual thorough knowledge of foreign tongues."

We have seen that a Latin sentence is first presented to the beginner wholly unintelligible; and that it becomes gradually understood by him, only by the lexicographic and grammatical explanation of single words; and also that the interlinear version neither does nor can give a true picture—a fac-simile—of the Latin or other original.

Upon a close examination of the above quotation from Tafel, it will be seen to contain a flat contradiction in terms. He praises the method because (with the help of the interlinear version) it gives the scholar, not the significations of isolated words, but their meaning in their connection—in whole sentences; and at the same time because its translation furnishes only the radical meanings of words. It claims on the one hand to explain to the pupil the meaning of each word as to its situation and force within the period or sentence, instead of giving it isolatedly; and on the other hand that, notwithstanding this,

each Latin word, let it occur in what sentence it will, is always translated by one and the same radical meaning. But how seldom is the radical meaning of the majority of words used; in how many is it modified or entirely out of sight; in how many is there a long history of the developments between its radical meaning and that used in the sentence under consideration! Examine now the interlinear translation above given from Tafel. Where he translates *Ne t'ai-je pas vu*, by *Not thee have I STEP seen*, and *Je n'en suis point*, by *I not of it am POINT*, the scholar will make no sentence whatever out of that translation, because a sentence must have some meaning, whether it has any thing else or not. This not existing in the case quoted, the scholar can not from the meaning of the sentence learn the meaning of the words *pas* and *point*. It is only by means of really advanced and learned study, such as he is not at this point capable of, that he could get at the relations of the particles *pas* and *point* with the words *passus* and *punctum*; he would not find it at all in the usual dictionaries and grammars. The truth is, that the radical meaning should only be given in the interlinear version, when that meaning belongs to the word in the particular place where it stands.

There is an antique statue which represents Achilles naked, and with his helmeted head thoughtfully inclined. What would be said of an artist who should set about covering the pedestal of the statue with bas-reliefs which should represent the hero in the most various situations—among the women, mourning in his tent, in combat with Hector—and every where should hold fast to the expression and costume of the statue? Would this not be preposterous and impossible? Precisely as preposterous is it, and as absurd, for a reasonable man to adhere to the radical meaning of words throughout the variations of different sentences.

A word, in conclusion, upon the manner in which the Hamiltonians deduce their knowledge of forms and of syntax from their elementary author. I exceedingly doubt whether, from the gospel of John, for example, a single complete paradigm could be made out, even of the most common words, and of those used themselves in constructing paradigms. What then is left to be done, except to supply the deficiencies by the help of some grammar? This is what happens in the Institute at Stetten, even within the first half-year; the paradigms are there very sufficiently practiced by the scholars. If the grammar is to be deduced exclusively from the author, it will be impossible to have it come in any scientific and methodical order. The most uncommon cases may appear immediately; and the most common ones may be slow in occurring. For example: Marx published, in 1822, an "Intro-

duction to Greek, with the beginning of the *Odyssey*," and in it he printed the first book of the *Odyssey*, with an interlinear translation. The third word of the book is *ἔννεπε*, of which Buttman says, in his grammar, that it is "very anomalous," and therefore he refers, for a fuller examination of it, to his "*Lexilogus*." In that work the beginner will find additional information about the third Greek word he set eyes on. *Sapienti sat!*

(d. Jacotot.)

Born at Dijon; educated in the polytechnic school at Paris. First an advocate, he was successively professor of humanities, captain of artillery, secretary to the ministry at war, substitute-director of the polytechnic school, professor of languages and mathematics at Paris, and finally, in 1818, professor of French language and literature at Louvain.

Here he wrote his work entitled "*Universal Instruction*," (*Enseignement Universel*.)^{*} Institutions were soon established at Brussels, Antwerp, Louvain, and other cities, where instruction was given on his plan. Controversies arose about it;† and Englishmen, Frenchmen, and Americans came to Louvain, to make themselves acquainted with it.

Jacotot died at Paris in 1840. He established two fundamental principles, which have been much attacked. The first is, "All men have a like degree of intelligence. There are no geniuses!" he asserted; "no blockheads; no such things as inborn knowledge or learning. Men differ only in will. A reasoning man can accomplish any thing for which he has sufficient will; and only the indolence of a man is to blame for his lack of acquirement."

It is needless to explain the falsity of this proposition. It is sufficiently clear that a teacher, who believes that his less capable scholars only lack good will to make them equal in efficiency to his best, will manage the former wrongly.

The second principle is, "Every thing is contained in each thing." Accordingly, the scholars can and must learn something or other, and refer every thing else to it. Agreeably to this principle, Jacotot required that in each department of study some basis should be laid of matter fixed in the memory, to which the scholar could trace back

^{*} "*Universal Instruction; or Learning and Teaching after the Natural Method of Joseph Jacotot: translated by Krieger.*" ("*Universal Unterricht, oder Lernen und Lehren nach der Naturmethode von Joseph Jacotot, übersetzt von Krieger.*") Deux-Ponts, 1833. I am following principally "*J. Jacotot's Universal Instruction, presented from his own Writings and Exposition*," (*J. Jacotot's Universal Unterricht, nach dessen Schriften und nach eigener Anschauung dargestellt.*) by Dr. Hoffman, Professor at Jena. Jena, 1835.

† Among his opponents were the "*Journal de Paris*," the "*Gazette de France*," and the "*Quotidienne*."

every thing which he should acquire, at least in that especial study. This basis was to be continually gone over, continually treated anew, continually discussed over again with new comments, in order to its exhibition in all its relations and phases. And further, every thing newly learned was to be compared with what was learned before, so that it should appear how the old is comprehended in the new, and the new in the old.

Jacotot further lays it down, that "Every man is endowed by God with the power of instructing himself, and has no need of a teacher to explain things to him." This principle, according to which all teachers are useless, is even pushed further. An explaining teacher, says Jacotot, does harm, because he hinders the free development, in its own way, of the mind of the learner. It follows of course that he is the best teacher who does no explaining; in fact, who knows nothing whatever. Jacotot actually says, "No one understands the '*Universal Instruction*,' who does not consider himself fit to instruct his son in things which he does not understand himself." He cites his own experience in illustration: he taught Dutch and Russian before he understood them; and he taught music, which he did not then understand.

This reminds one of the old rhyme—

"Hans Vess heisst er,
Schelmstuck weiss er,
Was er nicht weiss, das will er lehren."

"Hans Fox his name is,
Roguary his game is;
And every game he don't know, he still will be teaching."

The inventive method is pushed by Jacotot to the extremest caricature. For instance: he sets before the beginner, who does not even know his letters, the printed sentence, "In the beginning God created the heaven and the earth, and the earth was without form and void." He reads these words to him, and then requires him to consider them carefully, and reflect upon them; that is, to see what like or similar things he sees amongst them. The pupil, he says, "will soon say that he recognizes as similar the n in 'In' and those in 'beginning'; the e in 'the,' 'beginning,' 'created,' &c. By suitable questions he will be brought to observe that these letters are every where sounded alike;* and by this sort of comparison, in this and other sentences, he will himself discover all the sounds, and then their names may gradually be taught him."

We pass to Jacotot's method of teaching a foreign language. In French, he adopts Telemachus as his elementary author; and in Latin,

* This is spoken of the European continental languages.—*Trans.*

an *Epitome Historiæ Sacræ*—apparently the same which Hamilton used—followed by Nepos, and then by Horace. These text-books contain, not an interlinear translation, like Hamilton's, but a marginal translation; so that the Jacotian scholar compares the translation, not word for word, but period for period. According to Hamilton's method, he learned the signification of single words, which must have appeared to him marvelously confused in arrangement, and often so altogether senseless that, even with the help of the teacher, he could not put them together into good German. Jacotot's scholars were set a task the reverse of this. Each period of the marginal translation is in good German; and the problem is, to select the Latin period which corresponds to it, and then to discover the Latin word corresponding to each German word within that period. This is called the "Heuristic," or "Inventive" method (*heuristische methode!*) Jacotot proceeds to explain that when the pupil can sufficiently well pick out the translated periods corresponding to those in the foreign language, then the teacher is to set him at work on the words; to select those that occur more than once within the same sentence, and then to get their meaning. For example: the teacher asks "What words are alike in the first sentence of Telemachus?" The scholar answers, *pouvait* and *pouvait*; and in "my own language the word *could* appears twice; so that *pouvait* must mean *could*." In a similar manner the scholar is gradually to guess out his knowledge of the forms of the language, from what he reads.

"Here, for example, are the words *creavit* and *vocavit*. The scholar observes that past time is expressed by the vernacular translation of each; upon comparison, he will perceive that this is indicated in each by the syllable *av*; and thus he has guessed the meaning of the syllable *av*."

How is the scholar, however, to get at these meanings, if no word or syllable is repeated? Is not this guessing a miserable and insufficient contrivance—a clumsy and childish game at blind-man's buff?

In French, as we said, Jacotot uses the *Telemaque* as an elementary text-book. "Those pupils who have committed to memory not more than the first three books, are to recite all that they have learned every day. Those who have finished the first course, or who know the first six books, are daily to repeat such a portion of them as that those six books shall all be repeated at least twice a week." In a closely printed octavo edition of Telemachus, the first three books occupy sixty-three pages; the first six, a hundred and nineteen.

In learning Latin, "The memorizing of the elementary text-book

is to proceed parallel with the translation of it, until the pupil has committed a quantity equal to the first six books of Telemachus."

What a frightfully mind-destroying martyrdom of memorizing! some reader exclaims. Not at all, answers Jacotot's adherent. "When a few pieces have been committed to memory in a foreign language," says Hoffman, "such is scarcely the case with the words, and not at all with the meaning, if the proper reflections have been made from time to time." But such reflections! Let us give an example (from Hoffman.) The teacher requires from the scholar the true meaning of the two words Wisdom and Virtue. "Both," answers the scholar, "signify the love of goodness, and abhorrence of vice." *Teacher*.—"Why is this?" *Scholar*.—"It seems so to me." *Teacher*.—"Bad. Why abhorrence of vice?" *Scholar*.—"Because he who does not abhor vice can not be virtuous." *Teacher*.—"You do not adhere to the method. What I am asking for is, what in your text-book—in the normal book, the Telemachus—has occasioned to you these observations? Where in that book have you found the words 'Wisdom' and 'Virtue' used with the meaning you are giving them? You are finding out and writing from memory, from inspiration, from genius. This will not do in the method. Take care; you are only dealing in a lottery, in that way. Where now have you read that nature is 'The victory over those passions which agitate the human mind?'" *Scholar*.—"Telemachus underwent the development of passion in the island of Cyprus." *Teacher*.—"Good. Why; which agitate?" *Scholar*.—"He was agitated, because Fenelon compares him to a hind which carries the arrow every where about with her." *Teacher*.—"Very well. But why the human mind?" *Scholar*.—"That is a common expression." *Teacher*.—"Prove it." *Scholar*; shows him the words so used in some place in the book. *Teacher*.—"Very well, indeed."

Thus what the scholar reads is repeated, imitated, varied; there is a continual practice of these reflections; of the most superficial and wearisome so-called drilling of the understanding, (*verstandes-ubungen*.) On Jacotot's principle that every thing is contained in each thing, every thing possible could be found in the Telemachus—or rather dragged into it.

Let us, however, leave the subject of these reflections, and turn our attention to the peculiarities of the system in its instruction in language. Jacotot's scholars, as we saw, learned great part of the *Epitome Historiæ Sacræ* by rote. "But," says Jacotot, "he not only knows it by heart, but also understands it, by the help of the translation which is put into his hands. One who knows the *Epitome* can speak Latin, whether well or ill, and has studied only two months.

He can not only speak it, but can understand what is said to him in it. Probably the *Epitome* contains the whole Latin language; and with the words found in it every thing can be said which can be thought. If one has mastered the *Epitome*, he knows Latin!!” It may be so, on the principle that “All is in each!”

We have seen that Jacotot’s scholars were made, at the beginning, to guess the meanings and forms of words. These are further on to be required, in order that they may, as Hoffmann says, “*verify* the grammar; that is, investigate and determine the correctness of the rules given in the grammar. For this purpose,” Hoffmann proceeds, “any grammar may be taken which contains the rules in sufficient detail. These are to be read through. The scholar already knows the actual cases to which they refer, and has now only to learn the grammarian’s technology, in order to be master of such a clear and vivid view of the rules of grammar, as probably scarcely any good grammarian even at present has, unless his theory of language be under his special consideration. Still more, the scholar thus instructed, who has been accustomed and trained in separating the words into their syllables, and in comparing these according to their composition, will himself originate many shrewd remarks on the subject, and enforce them by reference to facts; and, what is most remarkable of all, he will sufficiently obey and follow these rules.” Goethe says, somewhere, “May our posterity be enabled to complete what their predecessors have begun; or, to use the uncourteous phrase of some, to correct it.” He did not like the use of the word “correct,” even of posterity. What would he have thought of teachers who undertake, by their silly method, to render boys capable of correcting Buttman, and Lachmann, of “*verifying*” their grammars, in short of surpassing them? Such instruction of boys in conceit is worse than silly; it is wicked.

Jacotot’s commencing to teach Latin with the *Epitome Historiæ Sacræ*, and following that with Nepos, and then with Horace, and indeed his whole method of instruction in language, show that he was consistently true to his maxim, that one must be able to teach things which he does not himself understand.

The greatest wonder is, that any man, in view of this maxim, should have even begun to study Jacotot’s system.*

* Hoffmann’s book shows how with what monstrous ignorance and presumption Jacotot spoke of instruction at other times. He assures the scholar, for instance, that he can, by persevering industry, enable himself to compose a drama which shall be successful, and equal even to the very best. According to him, it is only the will that is wanting to become equal to Shakespeare. In history, says Jacotot, nothing new can be learned; nothing which can not be gathered from common life or the elementary text-book. In teaching arithmetic, he directs a short abridgement of arithmetic to be committed to memory, &c.

(e. Ruthardt.)

J. C. RUTHARDT, a private teacher in Breslau, first published, in 1839, a "Proposal and plan for the outer and inner completion of a grammatical method for teaching the classical languages," (*Vorschlag und plan einer äussern und innern vervollständigung der grammatikalischen methode die klassischen sprachen zu lernen.*) In 1841, he published his larger work, "Proposal and plan for the outer and inner completion of a grammatical method of teaching more particularly Latin prose," (*Vorschlag und Plan einer äussern und innern vervollständigung der grammatikalischen lehrmethode, zunächst für die Lateinische prosa.*)

Upon Ruthardt's method there has appeared an "opinion," apparently by some Saxon educator. According to this "Ruthardt's method is Jacotot's, become sober; or come back to its senses."*

Pfau says, "How nearly related Ruthardt and Jacotot are, any one will observe upon reading the latter's preface to his book on '*Universal Instruction*;' where he says, among other things, 'Let your pupil learn one book; read it often yourself; and examine whether he understands what he learns. Make yourself certain that he can not forget it; and, lastly, instruct him how to refer every thing which he learns subsequently, to this book. That is universal instruction.'"

Ruthardt himself quotes Jacotot's saying, "Teach one book well, and derive every thing else from it." "I depart," he continues, "from the same point. But my road is very different from his."

Let us examine more closely the points of difference and agreement between Ruthardt and Jacotot. The former agrees with the latter in this, that he adopts an elementary text-book—the "*Loci Memoriales*"—and uses this in many respects, but not in all, as Jacotot uses his "*Telemachus*," and other elementary books.

Prose matter, for teaching and learning, becomes, according to Ruthardt, "the mental property of the teacher and scholar, by continued attentive repetition, variation, separation, reconnection, &c.; and by 'applied use in connected lessons,' (*Verwendung bei verwandten Lectionen.*) It is to serve as the central point, to which are to be referred grammar, comprehensive reading, writing, and speaking." The chief value of Ruthardt's method, he himself ascribes to his "strict reference of all the departments of his instruction in language to a fixed and common central point." This sounds very much like Jacotot's "Learn one book well, and refer every thing to it."

Still, there is a fundamental distinction between him and Ruthardt, in that the former uses his normal book as the text-book, even for

* "*Votum in Sachen der Ruthardtschen methode . . . mit Rücksicht auf deren Einführung in die sächsischen Gymnasien.*" Leipzig: Barth. 1841.

beginners, and Ruthardt not. Jacotot, like Ratich and Hamilton, believes that the first instruction in grammar should not be given to the beginner abstractedly from speech and writing; but that a book should be put into his hands, and he should be taught himself to abstract the grammar from it.

Not so Ruthardt. He disposes very briefly of the instructions of beginners, (the sixth class in the gymnasiums;) merely requiring that they should learn by rote the paradigms of declensions and conjugations, the rules of gender and case, except some which may be omitted, the more usual irregular verbs, and lastly some words in an etymological order. He gives no details as to the way in which this is to be done. But it is this very beginning which makes teachers the most trouble; and which has lately occasioned the publication of so many "proposals" and "methods." I agree with the opinion expressed by the author of the "*Votum*," on this point. He says, "The first and most difficult task in instruction in an ancient language is to give the scholar facility in the forms, and a knowledge of some few words; since all further progress depends on these attainments, and deficiency in the forms will bring its own punishment—late, perhaps, but certainly. Precisely in this most difficult part of instruction, where we would gladly have directions, and where a masterpiece of pedagogical art might well have been displayed, Ruthardt leaves us uninformed."

The same author finds further fault with Ruthardt, for giving too little attention to the lowest classes; two printed pages being what he esteems sufficient to bring out the most simplified relations of speech.

And what is required by Ruthardt, would not, he says, occupy so much time as one year. "The acquirement of the forms," continues the anonymous author, "and their exemplification in short sentences intelligible to children, must proceed together; and that is a remarkable school in which this could be sufficiently practiced in two years."

Ruthardt's normal book, the "*Loci Memoriales*," is first introduced in the fifth class, as a text-book for such scholars as have gained some knowledge of forms, and some acquaintance with words. All the extracts in the "*Loci*" are, with a few exceptions, taken from Cicero. "An arrangement according to grammatical categories," says Ruthardt, "is unnecessary, as the principles of grammar have already been taught in the lowest class." The "*Loci*" are to be committed to memory in the methodical order, the easiest for the lowest classes, and gradually increasing in extent and difficulty; and are to be explained, translated, and generally made use of more thoroughly and elaborately, in proportion to the progress of the scholar. The teachers, especially of the classes from the fifth to the first, are also themselves

to memorize the extracts, and to use them in reading as well as in oral and written drill.

Ruthardt's method, as is well known, has a great reputation in Prussia and Bavaria. This appears to be the consequence of the beginning of a reaction. Of late years, grammar has frequently been taught, even to beginners, in a most subtle and abstruse manner; the memory, on the other hand, being neglected. Ruthardt would oppose this tendency, and would reinstate the memory in its rights. He appears just as many teachers are becoming weary of the old super-fine and barren grammar, and many of the school authorities of the increasing complaints about the small results of the study of language in the schools. He offers them assistance, and thus meets with great success. His "*Loci Memoriales*" are intended for the most various use, and to become an entirely new element in teaching language; a most important one, since they are to constitute a central point for them all; grammar, reading, speaking, and writing.

Various teachers have announced that passages from the classics were to be committed to memory in their schools; but Ruthardt rejects the matter and the manner of these former memorizings. His objection to the manner is, that it is not methodical. The custom has been, once for all to have the memorized matter recited, without coming back to it and impressing it indelibly on the memory by repetition. Still less has it been thought of to explain what has been so learned from all possible points of view, and to vary it in all ways. The matter he rejects, because merely the first suitable passages have been arbitrarily taken from the most various classical authors, without any definite object in the selection. He is especially opposed to committing poetical extracts; considering them suitable only for the very lowest elementary instruction. On this point, he quotes from Quintilian:—"If I am asked what is the greatest art of memory, I answer, it is exercise, and labor. To memorize much, and think it over, if possible, daily, is a most efficient practice. (For this reason, as I have directed, boys ought to commit to memory as much as possible; and whatever be the assistance which their age affords in the undertaking, the first effort should be to get over the wearisomeness which attends the first practice of repeating matters so often, and and as it were chewing over again the same food. This will be most easily accomplished by beginning to commit short portions, and such as are not of an irksome kind) . . . and poetical matter in the first place, and next historical extracts, such as are freest from any rhythmical character, and also most different from ordinary speech; such as the productions of the lawyers."

Upon this extract Ruthardt remarks:—"The word *labor* can be

appropriate to the learning of poetical matter, only in case it is of so solid a character as to demand an unsuitable amount of intellectual labor for explaining it; and as little as the word *cogitare* be used of the learning and reciting it, since the rhythm helps the mind forward, and withdraws the attention from the words and the thoughts. But if by learning and reciting poetry the composition of it is meant, a much higher degree of abstraction is requisite for this than for prose; and the attainment of this sort of abstraction can not be accomplished, except by means of prose."

A careful examination of Quintilian's words will show that he means precisely the opposite to Ruthardt's interpretation of him. The scholar must begin with learning poetry, says Quintilian, and then proceed to orations, such as are least rhythmic in character; like those of the lawyers. That intelligent author saw that poetry, by reason of its beautiful form, and next to it the euphonious periods of the orators, would most easily impress themselves upon the memory of youth; for youth delights in poetry above all things. Among the most difficult styles to commit, however, according to him, is a prose with the least approach to rhythm; a prose in which not beauty and euphony of periods is sought, but only a sufficient precision of expression; like the prose of the jurists. Quintilian benevolently proposed to lighten the labor of memorizing, by directing short lessons to be taken first, and such moreover as should not be uncongenial to the learner; poetry, therefore, first of all. This Ruthardt overlooks, and lays all the stress upon the two words *labor* and *cogitare*; in the use of which Quintilian had reference not to the fifth classes of schools, but to students of rhetoric* who were soon to enter into active life as orators. When, therefore, Ruthardt opposes the memorizing and repeating of poetry, because there goes to it no *labor* and no *cogitare*—"since the rhythm helps forward the learner, and draws his attention off from the words and the thoughts"—it might very naturally be supposed that he recommended the selection of matter the least rhythmic for memorizing, from the apprehension that the beautiful and euphonious periods of the orator, with their "Freer music of prosaic numbers,"† just like the rhythm of the poet, would act unfavorably upon the thinking faculty, and by their beauty of form abstract the attention from thorough thinking.

But that this is not Ruthardt's meaning is evident, or why has he actually set forth a selection of beautiful prose extracts as material for learning? What he meant was only this: that poetical matter was not so well calculated as prosaic for judicious memorizing, for the

* These students of rhetoric, for whom especially Quintilian was writing, had already completed their studies in grammar.

† An expression of Jacobs.

combination with it of mental drilling, and for developing grammatical principles out of it, &c.

He had, however, a much deeper reason besides for admitting no poetry into his "*Loci*;" for not only has he excluded the poets, but, for the higher classes, almost every prose writer except Cicero. Even Livy is prohibited. As early as the fifth and fourth classes, Cicero is the central point of the exercises in memorizing, a few other authors being resorted to in these classes from mere necessity, to illustrate points which Cicero does not reach.

But why Cicero, and nothing but Cicero? Ruthardt replies, that "Cicero alone is accounted the model of Latin style;" and he zealously opposes Mager, who would select from a variety of prose and poetic writers for his "*Loci Memoriales*." If this is permitted, he says, the great object of having a fixed standard and central point for the study of language is given up; and the most important requisite for writing Latin is quite passed by.

The writing of Latin is the object, then, that is here steadily aimed at again, whether good or evil come of it. If Ruthardt's views prevail, we shall, without knowing it, be carried back again to the ideals, tendencies, and methods of the earlier Ciceronians and to Poggianus, whom we have quoted. They confined themselves wholly to the study of Cicero. "Since Cicero is evidently the greatest master of Latin eloquence and style," says Poggianus, "I have rejected all the other Latinists." Precisely like Ruthardt, he advises that you "commit to memory much out of Cicero; preparing, as it were, an extensive wardrobe, out of which you may select many splendid garments for varying and changing the clothing of your speeches."

Is it an entirely vain fear, that the time of that unhappy old caricaturing, which called itself Ciceronian, will be coming back upon us? Indeed, we may more reasonably ask, Have the old ghosts yet ever entirely left us? The following extract from a German gymnasium programme for 1841 may serve for a reply. Its author admits—for he can not help it—that the idea of a learned language is obsolete, and can not be revived. But yet he advocates, in the spirit of that idea, the drilling of all gymnasium pupils in a Ciceronian Latin style; maintaining that, "In general, only a standard author should be read in the schools whose style is suitable to be imitated; and any other author, Tacitus for example, should only be read for the purpose of comparison with the standard author, and for a short time; and with the definite purpose of giving lessons in changing his style into that of the writer of the golden age, who is used as the standard."

So far can the jack-o'-lantern of a false ideal lead a teacher astray, as to make him believe that a denaturalized, Latinized schoolboy can

be made capable of transmuted the massive, condensed, and thoughtful style of Tacitus into flowing Ciceronian Latin? That is, that he is able to do no less than to correct, like so many school exercises, the works of the greatest Roman historian! But the scholars must meddle with Tacitus only for a little while, lest a longer intercourse should injure their Ciceronian style!*

Does not Ruthardt's ideal coincide with that above quoted, and that of so many other teachers? Cicero is the standard classic, his style the standard style, the measure for all others. Other classic authors wrote well only in proportion as their style approached his.

The highest aim of the scholar is to be, to write Ciceronian Latin. Let Cicero, therefore, be his daily guide and companion; let him learn him by heart: and let him always beware of all abnormal Latin; of the abnormal classics; of Tacitus.

If that is classical education, God keep us from it!

An able philologist† has forcibly opposed Ruthardt's exercises for memorizing, so far as they are meant to serve as an introduction to a Latin style. Matter thus committed, he says, be it ever so well explained and understood, "will never carry the scholar to any thing except a clumsy imitation." The scholar who "desires to express his own thoughts, will at once find himself left in the lurch; he will see that none of his thoughts correspond exactly with those of what he has learned. No sentence, which really has life and force in it, will reappear in his mind, entirely in the form in which he learned it.

Real facility in writing Latin, such as F. A. Wolf demands, is diametrically opposed to this clumsy imitation—to this false facility in mimicking Cicero. What is to be understood by this clumsy imitation, and what by real facility, has been shown in the most witty manner, in his "*Ciceronianus*," by Erasmus, a master in writing good Latin. "There is a silly endeavor," he says, "to write in a foreign spirit; to make Cicero's spirit appear to the reader in our works. What is really needed is, that you think over in various lights what you have read, and by meditation upon it introduce it rather into the very veins of your mind than into the memory, or an index; so that your mind, nourished with all manner of intellectual food, will itself furnish a style which shall not smack of this and the other blossom, or twig, or grass-leaf, but of the very essence and character of your own soul; so that the reader may see in your writing, not a patchwork of fragments of Cicero, but the impress of a mind full of knowl-

* A like apprehension deters theological students from reading Augustin and Tertullian. Something unclassical or barbarous will unawares stick to them, and come out in their Latin examination exercises.

† "*Examination of Ruthardt's Plans*," (*Beleuchtung des Ruthardtschen Plans*.) by Dr. C. Peter, gymnasium director, 1843.

edge of all kinds. Bees gather the materials for their honey, not from one bush ; but, with wonderful industry, they fly about amongst flowers and plants of all kinds. They gather in, moreover, not ready-made honey ; but they prepare it themselves in their mouths, and bowels ; produce it themselves ; and men taste in it nothing of the taste and smell of the single blossom which supplied it."

Is the chief object of Ruthardt, and of his followers, in being so strenuous about memorizing, and about extracts exclusively from Cicero, entirely distinct from the false ideal of those Ciceronians whom Erasmus attacks so keenly in his "*Ciceronianus*," giving at the same time so correct an ideal of training in style ? It is not Cicero alone that you must read, he says ; the bees fly about to blossoms and shrubs of all kinds. And you must not lodge classical quotations in your memory, like undigested food ; but must infuse them into the mental circulation. You must not present to the reader a patchwork of memorized Ciceronianisms, of phrases varied here and there ; but your mind, nourished and strengthened by the healthy assimilation of classical works, should appear in its own original character in your writings, without reminding us, directly, of any books whatever. So says Erasmus.

Politian agrees with him entirely. He compares, as we have seen, the imitators to parrots and magpies, who speak words they do not understand. What they write, he says, is untrue ; without substance or efficacy ; having no power or vitality. He advises to study much and long in Cicero, and in many other good authors. "When the student has mastered these, and gathered together a treasure of knowledge within himself, he will produce independently, without any strict reference to Cicero. One who runs, and insists on treading precisely in the footsteps of his predecessor, can not run well ; and he can not write well, who does not dare to vary from a copy. In short, it shows a barren brain, to produce nothing, but only imitate."

Erasmus would side with Director Peter against Ruthardt's method, as calculated to produce nothing but clumsy imitation ; not so much to educate, as merely to drill. He would shake his head at Ruthardt's claim, that by his method the scholar would learn to think in Latin. "My great teacher, Rudolph Agricola," he would say, "who surpassed all others this side the Alps in learning, who was the first of Latinists, said that the way to write Latin was, to think and write carefully in the native language, and then only to translate into Latin." Has classical education in the nineteenth century progressed so far that its pupils can surpass Agricola, and without more *ado* think in Latin ?

Who will venture to answer, "Yes ; our scholars have arrived at the point where their thoughts arise in their minds, originally embod-

ied, born, in Latin words?" Let none deceive themselves on this point. Their furthest attainment is only this: to have stored away in their memory a mass of Latin phrases, ready at their command, without its being necessary for them first to translate them from German into Latin. But is this thinking in Latin? If a beginner in French has learned the phrase *Comment vous portez-vous?* and takes the first opportunity to use it without first translating it from *How do you do?* is he to have the credit of thinking in French?

There is an unfortunate reaction to be apprehended from drilling youth to write and to speak phrase-Latin; a reaction upon their German style. On the other hand, the classical study recommended by Erasmus, in the above quotation from him, for acquiring a pure Latin style, will have an influence even more strongly favorable upon the vernacular style; and in it the search after Latin words and phrases, to be collected together into a lifeless and mannered Latin composition, is omitted. The right study of the classics improves the man; and therefore it improves his German style.

That Ruthardt's method of studying Latin does not favorably influence the German style, might very well be gathered from the German which he writes himself. Even for an approving reader it is no light task to read through Ruthardt's larger work.

Voices have already been raised in favor of treating the German classics on Ruthardt's plan; to select out some materials for instruction in German, to be used like the "*Loci Memoriales*." Professor Reuter, for instance, says, "Is it not true that Schiller's "Song of the Bell" alone, explained in its material and formal characters, put in connection with other extracts, and indelibly impressed upon the memory, would be a more valuable acquisition than if he had read the half of Schiller, without working it out thoroughly, comparing it, and committing it permanently to memory?"

I was terrified at reading this, and remembered my youth and youthful companions; how with passionate love we read Schiller's poetical works over and over again, and so far from having to be kept at it by our teachers, they had to restrain us from it. This love made what we read impress itself upon our minds "permanently" and "indelibly," without any man's taking pains to impress it upon us. With Cicero and with Horace, we had already gone through the "explanation of material and formal relations;" but an explanation of our German Schiller was thoroughly repugnant to us; it would have been like poison to our love. In like manner, thousands of the volunteers of 1813 "memorized" Schiller's "Knights' Song;" it was sung very enthusiastically in all the encampments during the war of freedom. Does Professor Reuter believe that, if the "Knights'

Song" had been at school "explained in its material and formal relations, put into connection with other extracts, and indelibly impressed upon the memory," the volunteers would have understood it better, or that, at that great period, it would have been sung with more enthusiasm?

The only thing that remains to be done, is to select some German author—Garve for instance—to constitute him a normal author, and to show that his works are a canon for German style. From these works there should be selected a hundred or two pages of material to be learned; this should be "judiciously" memorized by the scholars, so that they shall have a store of German phrases in their minds for all occasions. Let the ideal object of this course be, to bring the pupils to speak and write German as they do Latin; to make orations that shall fit their mouths as well as those of puppets do theirs, and to have puppet-director Garve speak for them all with one and the same voice—like the performance at a theater of marionnettes.

This is not merely a joke. Many things have happened in our times which intelligent men would formerly have thought impossible.

To return to our Latin. Ruthardt directs that the scholar should take up the same sentence a hundred or even four hundred times, that he may thoroughly understand it, and learn to love it! Reuter agrees with him, on the classical principle *decies repetita placebit*.* Peter opposes this view, saying very correctly that the time for the scholar to recur to the sentence is when he has attained to a higher standard of attainment. The sentence remains the same, but the scholar has meanwhile changed. He sees the sentence with new eyes; his power of seeing has increased; and he therefore reads it with new interest, as something new.†

Material to which the scholar is again and again to return can not be too carefully chosen and arranged, and its extent should not be too great. How much in the dark Ruthardt and his adherents are on these three points, appears in the very various material of their "*Loci Memoriales*." As to selection, there is, as we have already remarked, no principle of arrangement, except that short sentences come first and longer ones afterward; and the amount of matter is

* What would the scholar say to this? Compared with this repetition, a hundred or four hundred times of the same sentence, what Gesner calls deliberate reading would be the merest cursoriness.

† I have had a like experience with students of mineralogy. On introducing a beginner, for instance, to the group of quartzes, the clearer and simpler facts struck him at once, as did the great, beautiful crystals, while he observed the smaller and more complicated traits neither with eye nor understanding. Far from attempting to force him to a degree of thoroughness for which he was unprepared, I led him on through other easy groups, and brought him back to the quartzes after eight or twelve weeks. His eye and his intellect had alike now grown more acute; and he was delighted to perceive and understand so much that was new, and wondered only that it had before escaped him.

much too great. If, however, Ruthardt's direction is to be literally complied with, that the teachers also are to commit the "Locî" to memory, this would do much to preserve a right proportion!

Ruthardt's method was received at its appearance with great applause, especially by men of influence, and there seemed a fair prospect of its introduction into the educational world. On the other hand, many experienced teachers took decided ground against it, especially against its being brought into practice in the way its originator recommended. It has been the case with many earlier pedagogical novelties, that they have been pushed even to the point of caricature by their originators; and have only by a later hand been reduced within the limits of moderation, relieved of their absurd features, and put into a practical form. Such was the case with Basedow, Ratich, and others. We may hope that, after Ruthardt's method shall have passed through a severe fire of purification, it may exercise a healthful influence upon our schools. It is already doing it negatively, by opposing the overstraining of the scholars' intellects, in abstract and abstruse grammatical studies; and indeed positively, inasmuch as Ruthardt puts the memory in its proper place, by means of exercises for it, arranged in a definite order; although this is not true to an equal degree. There seems also reason to believe that some "material for teaching language," (*sprachlicher Lernstoff*,) as Ruthardt calls it, either a short chrestomathy or some small classical work, might be very usefully introduced, and the scholar required from time to time to come back to it. If, at the first reading, this material should be too hard to be understood, or should be only superficially understood, it would be very pleasant for the pupils, after some years perhaps, to return to it and find themselves able to understand it more thoroughly. At every successive recurrence, in like manner, they would find themselves able to understand it more freely and adequately, and that too with less and less effort.*

(f. Meierotto.)

We shall, by way of supplement, here characterize a method which has been brought forward by Johann Heinrich Meierotto, rector of the Joachimsthal Gymnasium at Berlin; a teacher of such reputation in Northern Germany, that it has been said of him, that what Frederic the Great was among kings, such is he among the rectors.

In 1785 he published his works already referred to, "*Latin Gram-*

* It is the more to be wished that Ruthardt may live to see some actual result from his labors, because they have been performed with very great honesty and care, and bear nowhere the marks of vanity or charlatanism—a fault which belongs to most inventors of new methods.

mar, in examples from the classical writers," (*Lateinische Grammatik in Beispielen aus den Klassischen Schriftstellern.*) It is in two parts. The first contains the examples in the usual grammatical order; its first half, including twenty-seven pages, being entitled "Parts of Speech," and the second, including a hundred and forty-six pages, under the title of "Syntax." The examples for the forms occupy most space; each case, mood, tense, person, &c., being represented by one or more examples. The paradigm for the first declension is,

Nom. *Natura dux optima.*

Gen. *Vitæ brevis est cursus, gloriæ sempiternus.*

Dat. *Non scholæ sed vitæ discendum.*

Acc. *Famam curant multi, pauci conscientiam.*

Voc. *O fortuna, ut nunquam perpetuo es bona.*

Abl. *Vacare culpâ magnum est solatium.*

The paradigm for the first conjugation begins: Active voice, indicative mood, present tense, singular:—

Omnia mea mecum porto.

Sors tua mortalis, non est mortale quod optus.

Optat ephippia bos piger; optat arare caballus.

The word to be attended to is distinguished by different print. The sentences are numbered in a regular order, and they come into use more than once, as illustrating different cases;* so that they become more strongly impressed upon the memory.

The second part of Meierotto's grammar contains the "Introduction to the practice of grammar." The introductory chapter contains much valuable matter, founded upon experience in teaching, from which I shall give some extracts.

Meierotto distinctly opposes the idea that Latin, like the mother tongue, is to be taught by mere practice.

"Latin ought not to displace the native language; a boy ought not too early to be removed from relations in which he can acquire facility in his native tongue and in expressing his ideas in it." The teacher must beware that while his pupil acquires facility in the dead language, his command of his own shall not be lost or even diminished. "The boy knows already that he must learn the classic language, while on the contrary he found the living language, like his first ideas which he expressed in it, already in his mind, without having to make any especial effort for it."†

"I give," says Meierotto, "a grammar without definitions, axioms, postulates; in short, without any rules; a grammar of examples;

* Thus, for example, "*Famam curant multi*" gives an instance of 1. 1st decl., acc.; 2. 2nd decl., nom. plu.; 3. 1st conj., 3d pers. plu. indic. act.; 4. The verb governing an accusative.

† This profound thought reminds one of similar observations by W. von Humboldt and E. Wackernage.

from which the boy himself can deduce the rules." Rules so obtained will remain the longer in the memory.

All the quotations are from classic writers. "The strictly ancient and strictly Latin authors, who are wholly distinct from the commoner authors, who merely adhere to the forms, make a much deeper impression upon the memory." "Each extract exemplifies one instance of Latin usage, necessary for the scholar; and to be learned in its proper order." This order corresponds with that which has prevailed from antiquity in the Latin grammar; and in this order the rules are to be developed by induction, by the scholars themselves. This they will easily do, if the requisite material is every day laid before them in the right order and manner. Only, the beginner "must not be plagued with the terrible exceptions to exceptions." "Why should they, like our forefathers in their grammatical studies, instead of confining themselves to what is beautiful, seek, like new Herculeses, the jaws of monsters, and other adventures? and pursue an anomaly-hunt through all the authors, and fragments of authors, that exist?"

The more important of these examples are to be committed to memory; a task not very difficult, the scholar having them already half-memorized, by translation, explanation, &c. "These extracts remain as authorities in the boy's mind; and by them he examines and corrects his Latin."

After this introduction, comes a direction to the teacher how to use the collection of examples. The scholar receives first an interlinear version of each extract, in bad German, and unintelligible; which is to be put into good German. The word in each sentence, printed in large characters, is to be especially attended to, and written down by the scholar. The first sentence was *Natura dux optima*. "Natura, nature; dux, guide; optima, the best. Nature guide the best. That does not sound well; can it be improved by varying the arrangement, or otherwise? Nature the best guide. There is still something wanting. Say, nature *is* the best guide; adding only *est, is,*" &c.

Meierotto's method is similar to those of Ratich, Locke, and Hamilton, in commencing, not with abstract grammar, but with extracts from Latin classics. It differs from them, however, in that they make a basis of some one author, Terence, Æsop, the gospel of John, &c., and depend upon whatever opportunity such author may offer for abstracting the grammatical rules from it. It is clear, however, that in such a way not even a moderately complete grammar can be formed; scarcely the complete paradigm of one conjugation or declension. Meierotto, on the contrary, has, with unheard of industry, gathered illustrative extracts from all the classics, arranged them in the order of the grammar, and caused his scholars to deduce the gram-

mar from them. He himself taught the beginners on his system a whole half-year, and only then published his method. There was probably more than one reason for this. The system needed skillful teachers; and even then most of the extracts, especially the laconically short ones, were probably too hard for the pupils, perhaps, although the teacher should adapt his interpretation as much as possible to the powers of the scholar. The method also requires too much from the scholar's reasoning faculties. "The understanding," says F. A. Wolf, "must not at first be drawn upon."

But would not Meierotto's book be useful, in the third class perhaps, as the text-book for a thorough review of the whole grammar? Every one will recognize the value of such a refreshing of what is earlier learned; and could it be had in a better and less repulsive way, than by the reading of extracts in a grammatical succession?*

(g. Jacobs.)

Jacobs' Latin elementary books, and still more his Greek ones, agree in one respect with Meierotto's grammar; that is, they begin with extracts, which proceed in the order of the grammar, and exemplify it. These exemplifications, however, do not touch upon the smallest single points, one at a time, like Meierotto's; but for this a reason is given. Jacobs remarks, in the valuable preface to the first edition of his Greek elementary book, that

It is practicable, by a suitable method, without failing in thoroughness, to save the beginner much labor. On this principle, the proceeding of those is to be disapproved, who put him at once to reading, with the intention that he shall pick up his elementary knowledge, from time to time, as he goes on; as well as that of those who would cause him himself to deduce the elements of speech from examples set before him, and thus to construct his own grammar. The former tends to superficiality, and the last is indescribably wearisome. . . . The training of the mental powers must always be the first object of instructing the young; but not the only object. Whenever practicable, the pupil should do nothing without thinking. But to force him to do every thing by thinking it out, would make his studies miserable, and his life too.

Jacobs is distinctly opposed to Meierotto's method. The arrangement of the extracts in his elementary books, corresponding with the arrangement of the grammar, is not to serve as a source from which to deduce grammatical rules by abstraction, but rather to run parallel with them,† and to form their complement. Thus "the dry skeleton of the paradigms is to acquire a corporeal covering; and an early practice of what is learned is secured. The labor of learning the paradigms should be remitted in no case."

* In a high class of a gymnasium, none of the scholars, otherwise of creditable attainments, knew the full imperative of *hortor*.

† Or, perhaps, rather to follow close behind them. "The first course of the Latin elementary book," says Jacobs, "should be read by the scholar when he has become acquainted with the declensions, and with the paradigms of the regular verbs. The scholar should, in this work, learn not to understand these forms fully, so much as to remember them."

"It is impracticable," says Jacobs, "to arrange sentences in a strict grammatical order, so that nothing shall appear in the text which shall not already have been mastered in the grammar. This I think no great disadvantage; since the teacher will, at first, direct the scholar only to the words distinguished by their print, and will himself translate the others without any further analysis, until the scholar is able to deal with all the words himself." This mode of proceeding is entirely like Meierotto's.

Jacobs' purpose in using extracts in a grammatical order, to obtain a body for the dry skeletons of paradigms, and a prompt applied use of the principles learned, is pursued in other ways by other teachers.* They cause the grammar which has been learned to be brought into practice as far as is practicable, by making simple Latin sentences. For this purpose they depart from the usual arrangement of the grammar. When the pupils have learned the first two declensions (except adjectives,) they learn *esse*, so as to be able to construct short sentences. This construction, again, naturally leads to the use of the first rules of syntax; so that distant parts of the grammar are thus brought into connection with each other. After sufficient drill upon this knowledge, the pupils take up the third declension, and so on. Together with the paradigms, the meaning of the words used in them are acquired; which enlarges the material for making sentences.

CONCLUSION.

Thus we have examined very various methods of teaching Latin; some ignoring the ancient grammatical order, and some supplementary to it. Except Ruthardt's plan, all of them have been for beginners; and from all of them the intelligent educator can learn more or less that is useful. A wise eclecticism is, however, to be recommended, examining the spirit, and considering the judgment, of each master—of Gesner, Wolf, Meierotto, Jacobs; but, on the other hand, not permitting itself to be turned aside by outcries made for the sake of drawing attention.

Before all, I repeat, we must be clear in our idea of what the study of the ancient languages is to be. No right method of instruction can be thought out, without constant reference to its object; to the nearest and furthest objects to be reached by the school.

The ultimate object of classical studies is, thorough comprehension of the classics; enlargement of the sphere of historical knowledge; thorough scientific attainment; in short, cultivation.

* Principal Lauff, on the method of elementary instruction in Latin, "*Annual Report for 1840—1841 of the Royal Gymnasium at Munster*"—(*Jahresbericht über das R. Gymnasium zu Munster in dem Schuljahre, 1840—1841.*) This is a very valuable discussion. In the present work I have discussed, in several places, points on which I differ from the author.

The first-named object, thorough comprehension, must precede all others; since through that alone they become possible. The instruction in language of the schools is directed especially to the acquirement of this knowledge; its first object being, that the scholar shall have a full memory and clear understanding upon all grammatical matters; and, secondly, that he shall acquire a *copia verborum*. For this end is designed the diligent reading of the classics, during which the grammar is reviewed, applied, worked out in more details, and the requisite actual meanings mastered; whereas, by a mere cursory reading, he would obtain barely a foretaste of scientific pleasure.

Johannes Sturm gives a valuable rule for the assistance to be given by the teacher. He says, "Hasten, so that nothing necessary shall be omitted"—this refers especially to cursory reading—"and delay, so that nothing but what is necessary shall be done"—which refers to reading for the purpose of study.

It is very important that these two kinds of reading should be rightly managed, and carried on in the right proportion to each other. If the style of reading is too rapid, there is danger of superficiality, of guessing at meanings, and of slurring over difficulties; from which is afterward apt to be derived a weak, indecisive, and diletanteish habit of looking for nothing but pleasure in the study. A method of reading which is, on the other hand, too slow, wearisome, and overthorough—which requires too much from the scholar, and which occupies so much time in minutiae and digressions that the text becomes smothered in the notes—wears the mind, and destroys all interest in the classics.

All the grammatical labors of the scholar, from the first learning of the paradigms by rote, down to the end of the instruction in syntax, the practice of grammar by writing, and the grammatical side of the interpretation of the classical writers, has, more or less, for its object, the dealing with language itself, in general. The further his progress, the more prominent does this object become; and, most of all, when, either at school or later at the university, he becomes master of several languages, and somewhat acquainted with the nature and historical development of his native language, and with the comparative study of languages, and thus arrives at a more profound view of the nature of language itself. And, with the exception of religion, there is no higher or worthier object of human investigation or knowledge than language.

Even this exception fails, according to the declaration of Luther, that "Theology is only grammar, occupied upon the words of the Holy Spirit." "This declaration," says Hamann, "is sublime, and adequate to the lofty ideal of divine learning."

SCHOOLS OF SCIENCE AND ART.

I HAVE already noticed the contrast between the culture of our educated classes and that of our laboring classes and artizans; and the corresponding contrast of their modes of education.

This latter contrast I have already touched upon, so far as it appears in the two classes of gymnasia on one hand, and polytechnic and other similar schools, in which mathematics and natural science are the leading studies, on the other.

I would gladly have described the mode in which musicians, painters, sculptors, &c., have been trained in the days of the greatest of them. But I felt myself unprepared for this task, and must leave it to men like Waagen, Kugler, and others, already acquainted with the subject. These two classes of schools, those for students and those for artists, resemble parallel lines, which run on side by side without touching each other, while, notwithstanding, each might adopt from the other many useful things.

Considerations of this nature induced me, some thirty years ago, to write the following essay, which I now lay before the reader with some variations and additions. It makes no claim to completion in detail, but merely gives some hints of the relations between the classes educated to literature, and artists and artizans; and of the mode in which they might more and more pass into a beneficial mutual operation. Such a drawing together would necessarily have the greatest influence upon the school system.

I. LEARNED EDUCATION.—EDUCATION TO ARTS AND TRADES.

Children of all conditions receive at first nearly the same instruction, in reading, writing, arithmetic and religion. Subsequently, modes of instruction deviate, that in religion only remaining the same in all.

I propose here to trace two of these modes, those named above. A person destined for a mechanical or artistic pursuit, probably attends, after completing his elementary instruction, a burgher school, or the lower classes of a classical school; where he learns at furthest only the rudiments of Latin, and then takes a place as an apprentice in some workshop. Any one intended for a learned profession, on the other hand, pursues his studies further onward at the schools and

the university. From the moment when these two paths diverge, they become more and more distant from each other: one of them aiming at power; an art: and the other at knowing; a knowledge or science.*

The apprentice of an art or trade does not come to his master to listen to him and look at him, at his ease, as a hearer or spectator, to observe what the master does, to talk about his work, and to learn to give a description of it. He must lay hold with his own hands, and seek by long practice to acquire skill in the performance of certain definite processes. The "master-piece" which is commonly required of him is some article completed by him, as a bureau, a horse-shoe, a watch, or the like. It is skill—a practical power—which he needs, for upon it is to be based all his future success as a citizen.

The path of learned study is very different from this. The apprentice of learning does not exert himself, as does the other, in mere external activity, in training his senses and members, his eye and hand, but usually sits still and receives most of his instruction in an oral form. Listening and reading books are his principal duties, both at school and at the university. By words he is to become acquainted with his world. Language is the key to this world, and accordingly to learn language is the first of his duties. Oral lectures, and books, are to carry him away from the present, among the nations of distant countries and ancient times; oral lectures and books are the means by which many study even the pure mathematics, without practicing them. For "master-pieces," are given the doctor's dissertation and disputation, which are principally to prove that the apprentice is now a master of words.

After such different courses of training, the accomplished student must naturally be a person entirely different from the accomplished artist or artizan; and they can comprehend each other only with difficulty. Let us consider the two extremes to which these courses of instruction tend; the pedant, and the mere mechanic.

The pedant lives entirely in thinking; knows much: can do nothing. His training has divided him from the actual world; his study and his library are his world.

Thus he is estranged from all the affairs of civil life, and becomes entirely unfit to manage them. Unacquainted with the present, he transfers himself by the magic wand of his books, to distant places

* I here take the idea of "art" in its widest sense, as including both such arts as subserve the necessities of life—mechanical occupations—and the free or fine arts. These last are usually based upon the former, being related to them as the clear, pure, transparent rock-crystal is to the common opaque quartz. Many occupations, such for instance as the potter's, stone-cutter's, mason's, &c., belong both to one and the other class, as they are conducted. The reader will see for himself that I have had the mechanical trades chiefly in my mind.

and times; and can tell much more about Greece and Rome than about his native city. He understands about the Ionic, Attic and Doric dialects, but not the Low Dutch and High Dutch; he knows exactly the road which Xenophon followed with his army, but not that to the nearest village. If he is a mathematician, he can compute all the formulas of mechanics, but can not state the construction of a hand-mill, let alone the building of one.

I am describing a pedant, it should be remembered; and justice of course requires me to describe also a mere mechanic, or a mere artist. Such a one lives entirely in the present. Absorbed in incessant manual labor, obliged to it in order to get a living, he looks no further than to his own immediate surroundings, his shop, his home, his village; and he does not extend his sphere of vision beyond them, even by reading in books. He does not inquire how others practice the same occupation, or whether improvements are made in it; but merely pursues it exactly as it was taught him, without any desire to perfect himself, or to put what he is doing into words, that he may communicate it to others. If a master-workman, he instructs his apprentices and journeymen rather by actions, by doing the work while they look on, than by oral explanations.

Such learned men or artizans or artists as these, seem to grow less and less common. The interferences of actual life have always been in the way of the narrow quietism of learned culture. The physician, the judge, the advocate, the preacher, are by their offices obliged more or less to shake off the dust of the schools, to open their eyes to the present, to come into relations with other men, to exercise decision in living and acting.

Only those of that profession which is preëminently termed the literary, and who are commonly also instructors,* needing as such, in order to efficient exertion, the clearest views, certainty, promptness and decision in action and speech, and skill and presence of mind in the management of pupils—the members of this profession alone remain, mostly, helpless, indecisive, and lacking in character. During the last century or two, however, even this class of men has been brought nearer to real life, while on the other hand, artists and artizans have been awakening from their narrow and merely instinctively laborious activity, into a habit of wider vision and increased reflectiveness. Thus the literary and non-literary classes are approximating.

II. HOW MEN OF LEARNING GRADUALLY APPROACH ACTUAL LIFE.—FUTURE PROSPECTS.

Learning was at an early period the exclusive property of the

* In Germany, a very large share of learned writers are professors in universities.—*Trans.*

monks. In their solitary cells, entirely secluded from the world, they would naturally shape out a world for themselves, from books and their own imaginations. But after the Reformation had destroyed the convents, the Protestant man of learning went out into the free outer world at his pleasure, and naturally became connected with it.

At the same period there awoke in many persons a powerful impulse toward the investigation of nature; a pursuit with which only a very few individuals had before occupied themselves, and in which the way was led especially by Kepler, Galilei, and Bacon.

The last of these endeavored principally to direct the eyes of students away from books, to the actual creation; and gained many adherents. When in consequence, instead of mere speculation, and an inner world of mental pictures of distant times and places, developed from the reading of books, the observation of the present creation began to be practiced, attention was bestowed upon the many arts which subserve the purposes of life, while they deal with nature; and thus resulted an unconscious following of the laws of nature. The botanist could not avoid dealing with the gardener, the mineralogist with the miner, the optician with the dyer, glass-cutter, &c. Such connections gradually brought about, in Germany, England and France, entirely new relations and transactions among investigators of nature, artists, and working men. This is indicated by the societies founded for the scientific development of industry, the technologies upon which lectures were delivered even at the German universities; the gazettes for arts and trades, and the industrial and polytechnic schools of Germany and France. All these things testify mainly to the point, that scientific men had set themselves to infuse their knowledge of nature and their mathematical knowledge into arts and trades.

But it could not suffice that a method precisely opposite to the previous one was followed, that these men should merely afford information to artists and working men; they must necessarily receive more and more from these latter. It was not enough to teach on the arts out of a book, nor by attentive observation in the workshops, to gain a sufficient knowledge of processes to enable the lecturer, by his practiced skill in speech and writing, to produce a description of what he had seen. It is not by reading that we learn to do, nor by looking on, or hearing explanation and descriptions. It is rather, and chiefly, by our own practice in it. This, Bacon saw, and for this principle he contended. He said, It is not merely a knowledge of nature that we need, but the dominion over her.

Knowledge of nature, and power over her, must go hand in hand.* On the same principle, others required that every member of a learned profession should learn some trade. A. H. Francke carried this idea into practice, by connecting with the Paedagogium at Halle, rooms where the pupils might practice turning and other mechanic arts. Rousseau and Möser were of the same opinion. What the latter especially contemplated was, some healthy and efficient recreation; a diversion from their labors, which should amuse them, and put their work out of their minds. By this means he would keep their bodily health good and their minds active.

The advantage to men of literary occupations, of a knowledge of some mechanical trade, and especially of the possession of some skill in art, is scarcely estimable, even if they attain it by modestly learning of artists or of artizans. I may quote a few instances.

The successful pursuit of various sciences, such for instance as astronomy and natural science, depends closely upon the progress of certain arts; and one who possesses skill both in such science and such arts, will labor most efficiently in that science. Thus, Doppelmayr relates of the celebrated astronomer Regiomontanus, of Nuremberg, that he made all sorts of instruments with his own hands, and with great skill; and among others, a large metallic parabolic burning mirror. The same author mentions similar facts about various other Nuremberg mathematicians, particularly of Johann Schoner; so that there seems to have existed in Nuremberg at that time, a remarkable union of sciences and arts. Herschel, again, owes his astronomical discoveries to the excellent telescopes which he himself constructed.

In the workshops, there operates a silent practical wisdom, of which many, in their school wisdom, have no conception; and artists and artizans are in the habit of performing many processes of the utmost importance to science, but which are unknown to scientific men, and have therefore no place in any science. The man of science who will only instruct artists and artizans, but will not learn from them in the workshops, will make a great mistake. I may mention an instance or two, illustrative of the point.

The great Kepler wrote a manual of gauging. For this purpose he did not shut himself up in his study, and endeavor by speculation to determine and compute the best form for a cask, but went and carefully examined the Austrian wine-casks—he was then living at Linz in Austria—and their peculiarities. And we find in his book a

* "Perhaps the most frightful gift that an evil genius presents to the age," says Pestalozzi, "is knowledge without practical skill."

chapter headed, "First wonderful property of an Austrian wine-cask ;" and the next one is entitled, "The second and still more wonderful property of an Austrian wine-cask." In these two chapters he showed scientifically with what a correct mathematical mother-wit the form of these casks had been adopted. This great man thus learned from the coopers, and was able to instruct them in his turn.

A second example. It has long been customary to try the strength of lye, wort, and metheglin, by floating an egg in them. This long-used experiment was the germ of the modern areometer, with its scale and various scientific additions.

When the mason lays out a right angle with three cords of 3, 4 and 5 feet long, does he use a method originally obtained from a learned mathematician, or has it been immemorially used without any knowledge of the Pythagorean problem ?

Physicists are familiar with the experiment termed Leidenfrost's, of pouring a drop of water on a very hot iron plate, when, instead of going off in steam, it forms a rolling sphere which gradually disappears without any steam. This experiment was, however, known to laundresses long before Leidenfrost, without being learned out of a manual of mental philosophy. They try the heat of their flat-irons by spitting on them ; and if it does not hiss and steam, the iron is too hot ; but if it does, it is not. I might cite other examples ; but these are sufficient to show how many suggestions in natural philosophy an observant mind may discover in the workshops.

From what has now been said, it will appear how much the successful progress of natural science and mathematics has to do with the coöperation of men of learning with artizans and artists, and how much this coöperation would be promoted by the endeavor on the part of men of learning to acquire more knowledge of and skill in the arts of manual exertion. Nor is it only the investigators of nature and the mathematicians on the one hand, and the artizans and artists on the other, who should come into this relation of mutual learning and teaching. The same should be the case with philologists and historians. I need only mention Goëthe, Wolf, Boeckh, and O. Müller, the representatives of the realist philology.

The closer connection between the instructing class and actual life, has had a distinct reaction upon the instruction of the young. Although the mode of instructing in learned studies may correspond in the main with the description which I have given, a new department has, especially during the last hundred years, been added to the ancient course of instruction, under the name of "real studies, (*Realien*,)" including, principally, knowledge of nature, natural his-

tory, industrial arts, and drawing. The mode in which these are taught may be exceedingly faulty in many respects, and is in particular liable to the charge of endeavoring to teach new things in the old way, by communicating every thing orally. But in spite of this, time will bring about new methods for new studies; and then nature, the senses, life, and cotemporary circumstances, will powerfully assert their rights both within and without the school. At the same time, these improvements should not be directed to procuring a premature preparation of the young for civic duties, a condition which imperils the success of human culture, but to secure a right beginning and solid basis for that culture.

It scarcely needs to be added, that such instruction as this will exceedingly promote the approximation of the literary and non-literary classes.

III. DEVELOPMENT OF INDUSTRY ACCORDING TO THE VIEWS OF ADAM SMITH.

Adam Smith laid down the principle that the great progress of industry in modern times resulted principally from the progress of the division of labor.

Of this division there are three grades. In the rudest condition of society, each family provides for all its own necessities. Even now can be found, not only in foreign quarters of the world, but even in our own country, many neighborhoods where each family weaves, bakes, brews, makes clothes, shoes, &c., for itself.

The first step in the division of labor was the devotion of individuals each to an employment, as weavers, tailors, shoemakers, bakers, brewers. As each of these devoted his whole life to one single employment, each trade necessarily came to a much higher degree of perfection than when a father of a family was obliged to distribute his time and labor amongst so many different pursuits.

Next came the second step, when the master of a trade became a manufacturing proprietor. It was now not enough that each man devoted himself to one occupation; but the various departments of labor which this occupation required were anew distributed among as many operatives. The proprietor directed the labor of all his operatives to one object, usually without laboring himself, but being only the head of his establishment. Thus, for instance, while needle-making was formerly the business of one man, who himself cut the wire, pointed it, pierced the eye, &c., &c., the proprietor of a needle-factory now employed a separate workman for each of these departments of labor. This management must undoubtedly have caused a further improvement in the work, as each operative devoted his whole attention and labor to a single part of the work. As he would

acquire greater skill in this, the work would naturally be turned off faster, and would be cheaper.

The manufacturers, however, soon perceived that in many things their operatives worked only with their hands, without using their heads at all; and that such unintellectual hand-work might often be performed by machines instead of human hands. Thus the invention and perfection of machines, in England especially, became the third step (on Smith's principles) in industrial development. The further this step is carried, so much will unintelligent manual labor be disused. There will at last remain only such arts and trades as require the exertion not of the hands only, but of the mind also; and laborers who like machines repeat all their lives long one and the same operation without change or aiming at improvement, will almost disappear.

IV. SERVILE ART AND FREE FINE ART.

The method of improving industry by the division of labor leads to the perfection of industrial products, which we find among the English particularly; to the manufacture of articles at once well made, cheap, and convenient. But to another department of the culture of industry, the English seem less inclined; and indeed their manufacturing system seems to be directly opposed to it.

Free fine art is in part a product of the prosperity of industrial art, which is its root. From the day-laborer who with difficulty builds him a hut of mud to the architect of the cathedral of Cologne, from the stone-mason who hews blocks for house-building to Phidias, from the potter who makes common pots and kettles to the designers of the beautiful antique vases, from the poor man who digs in his garden to the most accomplished landscape gardener, there is an unbroken succession of grades.

The great Durer began as a goldsmith, and proceeded from that to painting, and to copperplate and wood engraving.

In the poorest hut we find ornamental articles designed not for necessity but for luxury. The poor man's dishes are painted; and in his garden he raises not only cabbages and turnips to live on, but flowers for pleasure. Thus we find everywhere, even in the lowest grades of society, and thence upward to the highest, a desire after freedom and beauty. But even in the highest grades, the curse of humanity prevails; and the loftiest conceptions of the artist can be realized only by painful labor, "in the sweat of the face."

V. INSTINCTIVE ART IMPELS TOWARD FREE SCIENTIFIC ART.

As scientific men learn from artists, so on the other hand, practi-

tioners in industrial and fine arts study the sciences which are related to their art. Thus miners, like Werner and Oppeln, became distinguished mineralogists; apothecaries, like Klaproth, Rose, Gehlen, eminent chemists; gardeners, botanists; dyers, workers in metal, &c., apply themselves to natural science, and mechanics and machinists to the mathematics. Albrecht Durer and Leonardo da Vinci, after bringing perspective to a high degree of perfection in their art, applied themselves to the consideration of its principles, and wrote on the subject.

Thus practitioners of arts raise themselves from mere instinctive readiness to a reflective acquaintance with the laws of that which they practice. They labor powerfully and perseveringly for the progress of science, and from the knowledge of this, again, they derive rules and methods for the perfection of their art.

VI. SKILL IN ART AND SKILL IN SPEECH.

While men of science need an acquaintance with art, in order to make themselves understood by artists and artizans through the medium of actual work, it should be the endeavor of the latter to obtain skill in oral and written language, in order to be able to describe their work, and to discuss it intelligently with men of science. A scientific man who can talk passably, can discuss even work which he neither understands nor can do; while on the other hand, the working man who is destitute of all culture in language, can not speak clearly even about what he both understands and can do.*

VII. DIFFICULTIES.

The idea that operatives and working people should be trained in free art and in scientific knowledge, and that they should be made able to give competent oral or written accounts of their labor, seems in modern times to have occasioned the establishment of industrial schools.

This idea, if misunderstood, however, may occasion the most dangerous errors. For the sake of preventing these, I observe:—

1. Only an operative who is thorough and skillful in understanding and practicing the substantial portions of his art, should undertake to proceed in joining beauty with it. No one is grateful for a handsomely formed stove which will not heat; for an elegant country house which is inconvenient and soon falls to pieces; for handsome

* With the discovery of printing, gradually arose the distinction between the reading and non-reading classes; especially as the Reformation made the Bible, hymn-book and catechism the books of the people. Would not this course of events cause the people gradually to lose their creative instinct for language, and at the same time develop correcter and clearer modes of expression?

tabies or bureaus which warp and crack. First comes the useful, then the beautiful.*

2. Only the operative who has acquired complete skill in his employment, should think of scientific development. God preserve us from any exclusively scientific instruction for journeymen. They should first execute well, and then reflect upon it. Their executive labor should be done unconsciously, as instinctively as bees work, in forming their mathematically regular cells with the utmost certainty. One who is entirely sure of his skill, may then only occupy himself in thinking upon what he does. To speculate before that time, is to incur such a risk as that of the somnambulist who breaks his neck if awakened while walking on a roof. He falls into a miserable condition of half-knowledge and half-capacity.†

3. The power of oral or written representation, like the study of the scientific side of an art, should be sought for only after complete skill has been attained. Only the real master, who feels his actions entirely free in the practice of his art, can speak or write to any purpose upon it:—

“*Verbaque provisam rem non invita sequentur.*”

VIII. SEPARATION AND UNION.

I hope not to be misunderstood, as if I recommended an intermixture of entirely distinct occupations and means of education. Very far from it. Every man has, generally speaking, faculties adapted for every human purpose; but in a higher grade for some purposes, and in a lower for others. On this principle is founded the saying, “*Nihil humanum a me alienum puto.*” That for which each man has the best capacity, what he can most thoroughly master, is his vocation. In this he will take his civic place as a master; it is really his possessions, and even his superfluity, from which he imparts to others, that he may in turn receive from theirs.

It is an error to aim at an averaged, uniform, universal culture, with no reference to any one prominent vocation. Artizans and

* “Wouldst thou seem graceful without certainty of movement? In vain. Grace is a result of perfected power.”—*Goethe.*

† This observation (No. 2) is true, I imagine, of all instruction. Instinctive knowledge must precede all-conscious acquired knowledge; simple speaking, a knowledge of language; singing and instrumental execution, thorough bass; drawing, perspective; seeing and hearing, optics and acoustics; skill in analysis, chemistry; knowledge of mining, the science of it. Our present modes of instruction frequently reverse this order of nature, which is that indicated by the history of the general progress of mankind; we would reach art through science; practice through theory. Mere knowledge about a thing is expected to serve instead of natural endowments improved by practice; and understanding without power or feeling, the possession of both. Thus we educate to a hypocritical pretense of both power and feeling; mere actors; to an empty, stupid imitation of real intelligent life. But the real highest aim of instruction should be, strictly intelligent artistic power.

working men can not easily fall into this error, because each of them is commonly trained up by one master to one definite occupation, which is to be his support; but second-rate universally half-informed men are proportionally more frequent among the higher classes.

It is, however, just as great an error, to devote one's self exclusively to one single occupation, neglecting all the other faculties which God has given us. Even if not a jurist, you should understand law enough to be able to sit as a justice of the peace; if no preacher, you should at least be able to conduct divine service in your family; if no landscape gardener, you should be competent to manage your own garden; if no physician, you should be able in case of need to bind up a wound, if no physician is at hand, as the good Samaritan did.

What we require is, thorough preparation for one chosen vocation, without any unnatural self-limitation within it, or such an exclusive devotion as unjustly depresses all the other faculties, and understands nothing, and refuses to understand any thing, of the doings of our neighbor.

This skill in our own vocation and understanding of that of others, is the true means of all friendly and helpful intercourse among men; and enables us much more completely to "love our neighbor as ourselves."

The tendency of the present day is not towards an arbitrary, confused intermingling of employments, but towards such a human, Christian understanding and union of all classes, as this. The sharp distinction between the jurists by profession, and laymen, has disappeared by means of the local courts (*Geschwornen gerichte*); that between citizens and soldiers, through the militia, &c. The master is still a master, but not through any compulsory power of his guild, but through his own distinguished original powers, preëminently developed by conscientious industry.

EDUCATION OF GIRLS.

[Translated from the German of Karl von Raumer, for the American Journal of Education.]

I. FAMILY LIFE.

WE have seen how important Luther considered the influence of home life ; and that he considered good family management the basis of a good government of the people and of their true happiness. "Family government," he says, "is the first thing ; from which all other governments and authorities take their origin. If this root is not good, neither can the stem be good nor can good fruit follow. Kingdoms are composed of single families. Where father and mother govern ill, and let the children have their own way, there can neither city, market, village, country, principality, kingdom nor empire, be well and peacefully governed. For out of sons are made fathers of families, judges, burgomasters, princes, kings, emperors, preachers, schoolmasters, &c. ; and where these are ill trained, there the subjects become as their lord ; the members as their head.

"Therefore has God ordained it to be first, as most important, that the family should be well governed. For where the house is well and properly governed, all else is well provided for."

These observations are, after Luther's fashion, extremely simple ; and refer us to family life as the source both of the happiness and misery of nations. Is our own father-land to receive a blessing or a curse from this source ?

II. USUAL MANAGEMENT OF FAMILY LIFE AND FEMALE EDUCATION.

Pestalozzi has given us, in his "*Leonard and Gertrude*," a very beautiful and attractive picture of life in a pious family, without losing sight of reality in exaggeration and romance, or setting up an impossible ideal. Upon comparing his representation, however, with ordinary family life, especially that of our so-called "educated classes," the latter does not commonly in the remotest degree correspond with Pestalozzi's ideal. I speak of "ordinary" family life, for I am far from referring to the frightfully disorderly situation of too many entirely immoral, corrupted and abandoned families. But how many families are considered quite irreproachable, which are governed by

an entirely vulgar spirit, destitute of reverence for goodness and truth, of any aspiration after true culture, of love for the father-land, of earnest religious feeling; utterly superficial, short-sighted and narrow-souled! For such persons, the highest moral authority is that most useless and corrupting rule, the prevailing fashion; which they unquestioningly obey without examining it conscientiously or decidedly withstanding it if necessary. Their highest appeal is, What will people say? and the broadest path always seems to them the most certain.

There are many indications of the profoundly corrupting influence of such vulgar and low modes of thought, upon family life and upon instruction. I shall suggest a few instances.

Suppose a father so debased in mind as not to feel any care for his country; to be contented if he is enabled to go on peacefully and prosperously in his own daily labor or business, and in his wretched amusements; must not the example of such a father both destroy every germ of patriotism, and quicken every germ of selfishness?

Nor can such a father maintain a truly and permanently Christian life within his family. He will forever be asking, "What will people say?" He will be ashamed to ask a blessing at table, and will not even think of family prayers; nor will he even consider whether either the one or the other is pleasing to God. But he will be as frightened at the idea that such devotions are exceedingly disagreeable to some of his friends and acquaintances, and that they will call him a pietist for practicing them, as if such fault-finding were the worst misfortune that could befall him. He is a Laodicean, neither cold nor hot; incapable equally of a hearty love and practice of what is good, or of hearty hatred of evil. This regard for consequences continually deceives him.

In thus describing what is at present the condition of too many German families, I do not by any means lose sight of my subject, the education of girls. For there are many homes in which there is no such thing as family life; no such thing as a close union, knit together by the sincere and earnest love of father, mother and children, and thus profoundly happy. On the other hand, a chilly *ennui* prevails at home, and to escape it they resort elsewhere to seek diversion and occupation. The father only enjoys himself when he passes every evening at the casino, or, as it is called, "in society," in card-playing; the mother, and the elder children, attend feminine coffee or tea circles, &c.; and as for the younger children, they are given over to the tender mercies of the servants.

"Nothing can put my heart at rest," says a mother in Jean Paul's

"*Levana*,"* who considers herself very affectionate, "except to take all possible pains to select for my dear little children a conscientious nurse-maid who will swear to treat them like their own mother, and will pray heaven to punish her if she shall neglect her duty to the poor little things, or shall for a single minute trust them out of her sight or in strange hands. Great God, only to think of such a thing! But ah, what do such persons know of the solitudes of an affectionate mother's heart? And therefore I also am in the habit—which is a great encouragement to me—of having all my children come to see me twice a day, after breakfast and after dinner."

How true to life is this! We may see the nurse-maids with the poor neglected children every day on all the city promenades. How often do these servant-girls form improper acquaintances, which they follow up even in an abandoned manner, without any reference to the children. In the Berlin Zoölogical Garden, a lady was once begged of by a woman who had a child in her arms. On looking at the child, the lady was terrified to recognize it as her own. A wicked nurse-maid had been for sometime in the habit of renting the child for money to the beggar, who had misused it in order to excite the sympathies of the public. "Thus," as Fenelon had already complained, "are such little children surrendered to improper and sometimes disreputable women, and that at a time of life when the deepest impressions are made!" And if such young children are given up in such a manner, how will they be afterwards educated?

Now, can the girls of such a family as has been—and truly—described, be educated piously and in a manner pleasing to God? Must not such a result be impossible, since parents of degraded or perverted ways of thinking must necessarily direct the education of their daughters toward a degraded and perverted purpose? This purpose is nothing except to educate their girls in such a way that they will soon get married, no matter to whom, provided he only has a good income.

Accordingly, how shall girls be educated so as to please men? This question states the pedagogical problem of parents, especially of mothers.†

If girls are devoted merely to become pleasing to men, every opportunity must first of all be taken to extend their acquaintance. As soon as they are old enough, therefore, they must go into society, and especially must attend every ball. Even the most avari-

* Vol. I., p. 41.

† Madame Necker says, (Vol. I., p. 63,) "Those mothers who have no aim in educating their daughters except marrying them, and to this end are slavishly obedient to the demands of the public, devote their children, in our opinion, to an unavoidable mediocrity."

scious mother thinks it her duty to purchase a costly ball-dress for her daughter. Dancing gives opportunities for making acquaintances on both sides; and how often has a ball-night, and even a single waltz, given time enough to agree upon an unhappy marriage? In Berlin there is even a term for such marriages; they are called "ball-marriages." Their first enchantment scarcely outlives the honeymoon; and many young couples might be separated again, under the Prussian law, on the ground of mutual "insuperable aversion," in a fortnight after their wedding. But the object of vulgar parents is attained, as has been observed, when their daughter has obtained a husband, no matter if she drags out the remainder of her life in the most comfortless wretchedness.

We shall find no occasion to wonder at the subjects and methods of female education, when we have ascertained its object; for this object is pursued with the utmost consistency. "Since every thing is directed," says Madame Necker, Vol. I., p. 32, "to enabling the young woman to become the choice of a young man, all care is bestowed upon the cultivation of outward appearances, no matter how other things turn out. In this pursuit, the mother takes a passionate interest in her daughter's success, and all possible means are used to secure it." The girls must put themselves on exhibition; must make a brilliant appearance in society. For this purpose, dancing is a better means than any thing else which can be taught. No art is more zealously pursued, or with such unheard-of self-sacrifice. During the winter series of balls, it is often remarked, they undermine their health, and are thus obliged to go to the baths in the summer, in order to re-establish their health for the next winter. Thus they alternate, until health is entirely gone.

The next most important pursuit is singing and playing, which girls learn for exhibition in society. The piano is peculiarly adapted for this purpose; for even persons destitute of all musical feeling or talent can be drilled to a wonderful degree of skill in piano-playing, especially upon the lately introduced "dumb pianos," without strings. They are tormented every day with hours of finger-exercises. Where it was formerly usual to play sonatas, &c., it is now the custom to play only finger-exercises, the teacher causing them to play, in specified places, *pianissimo*, *piano*, *forte*, *fortissimo*, and with various other degrees of strength, indicated by their appropriate words. They are taught, in particular to go at once from the softest *piano* to the loudest *forte*, because this produces the greatest "effect;" and what do they play for except "effect?" "In such hands, the fine arts cease to be fine arts; the idea of the effect to be produced upon others

quite drives out any attention to the effect to be produced on the mind of the player."*

Piano players thus trained can not fail to gain the approval of most persons, even of those quite without musical capacity, as most persons are; for even such can judge by the eye of the player's skill of hand: it is of no consequence that the player plays utterly without feeling or pleasure, and has tormented herself with laboring in the sweat of her face to acquire her dexterity; the attainment is sufficient, and all else is of subordinate importance. "The principal thing is no longer to love and to admire; it is to be admired. The young woman does not trouble herself about what she herself feels, but about what feelings she awakes in others."† Good manners at present forbid the hearers from permitting it to be seen how much the performance wearies them. They are expected to praise every thing, and so are even those who have talked incessantly during the playing. If such musical exhibitions were made in Madame de Genlis' "Palace of Truth," the expressions of the real feelings and thoughts of the hearers would be well worth listening to.

The pieces of music which pianists prefer are simply such as are the fashion, even if the worst possible; provided only that they are composed for "effect," and will thus serve the desired end.

I have scarcely patience to speak of the mode of singing now usual in society. How disgusting is it to one accustomed to a correct and simple method of singing secular and sacred music, when he hears for the first time this unnatural, vulgar, affected singing, with its jumping from a scarcely audible *piano* to a shrieking ear-piercing *fortissimo*; its insufferable long-winded howling instead of a pure and precise tone! He feels himself suddenly fallen from the cheerful region of a beautiful fine art, amongst musical caricatures. If the singing were visible, as in Tieck's Garden of Poesy, he would think himself another St. Anthony, all beset with swarms of horrible phantoms.

Parents take especial interest in the study of French by their children. What is the object of this study? To enable a girl to read the masterpieces of French literature, or to extend their sphere of mental vision from the province of one language to another foreign one, and thus to acquaint them with other words, idioms and syntax? Are they to institute a comparison between French and German?

If we should put such questions as these to ordinary parents, they would not understand them at all. Our daughters learn French, they would say, for a reason that all the world knows. It is to be a means

* Madame Necker, Vol. I., p. 73. † Madame Necker, Vol. I., 72; and comp. II., p. 164.

of showing themselves cultivated, when they are in cultivated society ; especially in the higher circles where French is spoken.

The importance of the objects aimed at in the study of French, best appears from the mode in which instruction is given in it. Yet it is misusing the term "instruction" to apply it here, for this is not instruction, but mere drilling, such as is used to teach starlings and parrots to speak : and this is sought, not only by wealthy parents, but even by those of small means, who often pay high rates to masters, or more frequently, mistresses, French governesses especially, for the sake of this drill. And extraordinary indeed are the creatures who are often sent from Paris to Germany as governesses, and to whom foolish parents confide the care of their children. Mothers who do not understand French, must listen to the chattering of these governesses with their children, without the means of knowing whether they are not talking the most harmful things to them ; and even if there were no danger to the morals of the children, still this talk is the most empty stuff ; nonsensical conversational phrases, usually such as are current among the lower ranks in France. But governesses of this class are not capable of any thing beyond this unintelligent drill ; they know nothing of instruction ; having usually never studied at all, and understanding French only because they are French women. I have known these women, to have no ideas whatever of the French declensions and conjugations, and unable, if they read, for instance, *pourriez-vous*, to find the meaning of *pourriez* in the dictionary. But aside from this, their whole stock of knowledge is so entirely made up of the most ordinary conversational phrases, that they were unable to translate the easiest French book, unless it consisted altogether of such phrases.

What has been said is sufficient to show that in this sort of studying French, nothing is thought of except mere drilling : not culture at all, at least in any proper sense ; for nothing is more different from it than such French talking. " Shall I learn to speak French," says Goethe, " a foreign language, in which I must appear silly, do what I will, because I can only express common and coarse shades of meaning ? For what distinguishes the blockhead from the man of sense, except that the latter comprehends quickly, clearly and accurately, and expresses forcibly the delicate shades of peculiarity in what is around him, while the former, just as every one must do in a foreign language, must get along by the aid of stereotyped memorized phrases ?"

Thus Goethe, the representative of German culture, comes into the most diametrical opposition to the so-called " educated classes," who think that ability to speak French constitutes culture. He tells them

plainly that they must always appear foolish in their French conversation, and have to get along with stereotyped and memorized phrases. But no such mere babble in French as that, can be admitted to be even a bad substitute for real culture.

And again ; it is necessary in order to avoid a waste of labor, that girls should practice talking French from a very early age, if they are to talk it with even a moderate degree of correctness. The wretched influence of this practice on the native language will be understood by any one who comprehends how great a gift of God is that of the mother-tongue, and how wonderfully, by means of it, he is able to express and communicate his deepest thoughts and feelings. But this living speech, welling forth from the inmost being, is exactly the opposite of the entirely mechanical French which children learn, and which includes nothing whatever either of thought or feeling. And if they obtain by practice some facility in French conversational flourishes, they forthwith transfer their lifeless mannerism to their own language, and talk German without feeling or thought. Girls, too, who are sent to female schools, frequently fall into the hands of such French women as have already been described. Some parents, who think no attainment valuable in comparison with facility in speaking French, send their daughters to French or Swiss schools, where they can hear and speak nothing but French. In such a foreign atmosphere, they too often become quite estranged from their native home and country.

This unnatural over-valuation of the French has, unfortunately, nothing whatever in the nature of an antidote, in the methods employed in teaching German. This observation applies, however, not to the rudiments of instruction in reading and writing, but to the more advanced course in German, instruction in which is almost as perverted as that in French, though in quite an opposite manner. While girls are trained to practice French modes of speech without feeling or intelligence, the teacher in German, on the other hand, requires them to understand fully every thing that they read ; nay, they must do more than understand it ; they must be conscious of their own understanding of it. To this end, all that they read is explained to them at great length, and with great fullness ; they are made to write out whatever they have felt and thought while reading ; and to torment themselves most pitifully, to waken in themselves some feelings or thoughts which they may write down.

Such instruction is fit enough to train blue-stockings ; it is nothing except a school of the most heartless and false hypocrisy. The mode of training used to make them read "with expression," is one quite

similar to that used to teach to play the piano, "with expression." As in the latter case, so in reading, the *forte* and *piano* tones are in part brought out by numberless oral rules, and partly by showing how the various grades of expression are to be secured by using more or less force in the touch or voice. Thus, in a poem of Gellert's, I find various sizes of type used, as follows:—

"How GREAT is the *almighty* GOODNESS!
Is there one MAN who does not feel it—
Who with *hardened* susceptibilities
SMOTHERS the gratitude which he ought to feel?
NO! To appreciate God's *love*
Shall *ever* be my SUPREME duty.
The Lord has *never* forgotten me;
And neither shall my heart forget *him!*"*

Wooden teachers think that to read with stress of voice is to read with expression. It is most repulsive to a natural-minded person to hear girls declaim with such pretentious affectation, especially when, as is often the case, they blunder and throw the accent into the wrong place, thus betraying the whole mindlessness of their art.

Buffon's maxim is often repeated, that "Style is the Man;" but our ordinary method of cultivating the style can certainly not be recognized as a true method of mental culture. How absurdly selected are the themes given to girls for composition! They are, for instance, set to write letters describing the death of a father or brother, or the birth of a sister, and by this means to put themselves into the appropriate state of mind!† Or they are put to write essays upon the usefulness of the sciences, the excellence of virtue, &c., &c. Nothing can be more tiresome than to read the letters written by girls who have been taught in this way; first painfully thought out, and then copied off clean. Such letters contain nothing at all, except a quantity of formal phrases, in which they excuse themselves to their correspondent with hypocritical modesty, as not possessing that faculty for writing letters which the other has; that they have no time to acquire it, and the like; and the whole letter is filled with such matter. If after reading it all, we inquire, What in brief is the substance of that? there is no answer. How different is the case, when an unaffected girl who has escaped such a perverting training, narrates without any painful forethought to her friend, whom she has seen, what journeys she has made, what books she has read, and whatever other things have happened. It is a pleasure

* Rhenish Gazette (*Rheinische Blätter*), 1835, (January to June), p. 354.

† "Waste none of your time in putting yourself into states of mind," says Claudius,

to read such letters, often characterized by poetical feeling and native humor, and free from the encumbering constraint of school discipline.

But this does not by any means complete the list of the constituent parts of the school instruction of our girls. Read, for instance, the first invitation programme that comes to hand, of a girl's school examination: what an excessive number of studies is there! Many of them, rightly taught, would be exceedingly beneficial; and if ill-taught, exceedingly harmful. Such for instance, is natural history. Who does not take pleasure in seeing a girl who loves flowers, carefully watering them every day, placing them in the sun, and taking care of them with as much love and skill as the most industrious and intelligent gardener! But some children nine or ten years old, instead of amusing themselves in a childlike manner with the colors and smell of a flower, are forced by the teacher to pull them apart and determine the correct names of all the parts; as root, stem, leaf-sheath, leaf, upper surface, under surface, circumference, base, apices, veins, &c., &c., or the teacher spins out a lecture on the ordinary violet which would occupy eight or ten printed pages. Just as if God had let the flowers grow, only so that teachers might make use of them for their idle foolish pedagogical experiments. Even what is most alive and beautiful, fades and dies if touched by the hand of a foolish pedant.

This instruction of girls in so many departments, usually with a pedantic discursiveness and pretense of thoroughness, leaves but very little time, as may easily be imagined, for active occupation in house-keeping. I have known girls who labored at their school lessons, even into the night. Young housekeepers find themselves in no very pleasant situation, when they find that the time which they have thus spent leaves them in entire ignorance of what they need to know and do in their new vocation. Their kitchen, for instance, must be entirely under the control of their cook, no matter how ignorant she is; and the young mistress, instead of being able to instruct her servant, is on the contrary forced to take the utmost pains to learn her art from her, and not to make any blunders herself.

It has been attempted to remedy this difficulty by placing girls for a time with a cook or boarding-house keeper. But besides that such an arrangement brings a young girl into a situation not the most desirable, she does not in such a place learn the sort of cooking that she will need to practice at her own house, and much that she does learn will be useless there.

I have already alluded to the manner in which the daughters of

families of the class which I have been describing, use their leisure time. Parties, balls, the theater, occupy much of it; and they endeavor to kill time at home, by reading novels. It would be difficult to decide whether the parties, the balls, the theater, or the romances, exert the worst influence on a girl. I have already mentioned balls. Theatrical exhibitions are attended without any discrimination by parents between what is good and bad in morals or artistic value. One of the most corrupting of Kotzebue's plays, in which all the five acts consist of one sustained *double entendre*, is now the favorite performance at Breslau, and is attended by young and old. An improving school indeed is afforded for girls, by an equivocal play, performed by actors of equivocal character, and with professional skill; and where vices are made to appear desirable and virtue wearisome and stupid!

But perhaps the most destructive habit of all is the indiscriminate reading of all romances that girls can find. A morbid voracity possesses them; they read and read, without becoming at all satisfied or nourished by what they devour. It operates, on the contrary, as a poison. If a standard work happens to stray amongst the trash of their circulating library, they pay no attention to it. One of these romance readers, when asked if she had read Goethe's "*Iphigenia*," replied "I believe so!"

This sort of reading destroys the most agreeable and active mental faculties of a girl's mind, and substitutes a fixed character of frivolity which makes them entirely unfit to fulfill their household duties with modesty and efficiency, and to lead a quiet and godly life. Serious and holy thoughts find no place in the minds of such perverted young women; for how could such thoughts dwell in the same mind with frivolous love stories and erroneous, vulgar and fantastic ideals of love?

But it is time to turn away from this too common, godless and hopeless method of educating girls, with all its accompanying errors, and to inquire after the right method.

III. MARRIAGE.—DUTIES OF PARENTS AS TO EDUCATING THEIR CHILDREN.

Luther has referred us to the family, as the source of the happiness or misery of nations; let us proceed to examine what are the sources of the happiness or misery of families.

These states are inaugurated through marriage; and they have as many sources therefore, as there are different marriages. While a consecrated love has caused the marriage, if it was, to use a common expression made in heaven, there are others an infinite distance below

these, which have been brought about by the most impure lust or the coldest and most calculating avarice.

A consecrated beginning promises a holy and blessed married life, in truth and love, even to old age; but if the source of the marriage was impure, the subsequent married life will commonly be also impure and unblest. We have already seen what degraded views are only too common, on the subject of marriage, even amongst those of the higher ranks; and this may indicate the corruption that prevails in such marriages.

Let us now consider what are the duties of the father and mother, whose marriage is such as God approves, in relation to the education of their children.

I have already referred to the beautiful delineation of a sanctified family life which is presented in Pestalozzi's "*Leonard and Gertrude*." We necessarily love and respect Gertrude, when we see her so full of faithful love to her husband, her children, the neglected poor of the parish, and at the same time so intelligent and active in her comprehensive benevolence.

I find but one fault found, even by women, who well understand what is agreeable to them. Leonard, they say, is a good-hearted man, and industrious at his work; but weak, and often wanting in tact, and easily led astray. Such a person is not fit to be a father of a family; a wife could find no support from him; she would on the contrary have to take him under her protection and guidance, and make up for his deficiencies. But they exclaim, if he were only as a father what Gertrude is as a mother, especially with reference to the education of the children!

These very correct observations lead us very naturally to the consideration of the respective duties of father and mother in teaching their daughters.

Many persons believe that this department of education belongs to the mother alone; that the father should scarcely have any thing to do with it. This may appear correct, but it is appearance only. The man who marries with a sense of the sacredness of the step, must to some extent know what he is doing; must have some sort of idea and conception of marriage. He will reflect upon the duties which he assumes to his wife and to his children—in case he should have children. Love and conscientiousness will oblige him to consider the subject of children's education; its objects, and the road toward them. With every year and with every child who is sent him by God, his pedagogical problem becomes clearer to him, and his skill in solving it increases. An intelligent and modest wife will find herself sup-

ported by such a man, and will willingly learn from him ; and on the other hand an intelligent husband, who knows his abilities and duties, can with confidence entrust to his wife all the details of the education of her daughters. For however great his good will, he will not be in circumstances to undertake the management of this detail. Such a labor would usually require more time than his duties as a citizen will permit ; and what is more, would require gifts which he has not, but with which women are richly endowed.

But what is the proper duty of the father in educating his daughters, is a question not answered in Pestalozzi's character of Leonard. He has made the wife conduct the whole of it, without advising on the subject with her husband at all. In this department, in fact, she performs the double duty of both father and mother.

At the same time it is not to be denied that the importance of the labors of the wife, even in the education of boys, can not be too highly estimated. The most skillful educators are agreed on this point.

Thus Fenelon says, in his valuable book on the education of girls, "Are not the duties of wives the basis of all of life? Is it not they who destroy or uphold the family? They exert the most important influence upon the good or bad morals of almost all the world. An intelligent, industrious, profoundly religious wife, is the soul of the whole household; she governs it in things both temporal and spiritual."

Fenelon then proceeds to show more at length, how the wife's influence may tend either to the salvation or the destruction of her husband and her children ; so that her labors for the good of society are scarcely less important than those of her husband.

Luther says that pious families establish the happiness of nations ; and Fenelon and Pestalozzi add to this, that pious wives are the chief basis of the happiness of families. Even though they have no direct influence upon church and state, they still have an indirect one which is important, by reason of its influence upon the education not only of girls, but also of boys.

Every one knows how great have been the obligations of eminent men, such as the Gracchi, St. Augustine, &c., to their mothers. And how many obscure and unknown labors of mothers, in the education of their sons, are known only to God! Innumerable are the men who have all their lives blessed the memory of the dear mothers who brought them up to goodness from their youth, with unflinching faithfulness.

And if the influence of mothers upon the education of boys is so great, notwithstanding that fathers, teachers, fellow-pupils, and so

many others, exert a coincident influence in this education, how much greater must it be upon that of girls, who are intrusted almost exclusively to their mother's care.

The consideration of the importance of this influence has of late years led to the establishment of institutions expressly to train girls as teachers; it has even been suggested that teachers' seminaries for girls should be established. In such institutions, the inspector and his wife and children are intended to form a normal family, in and by whose influence the pupils are to be trained; and in particular, especial care is taken to teach them, as much as is possible, in accurately fixed hours.

A sensible man will feel at once the unnatural character of this plan. Girls belong to their own families; family life is their school; their own father is the normal father, their own mother the normal mother; such is the ordinance of God. The older girls, in assisting their mothers in housekeeping, in teaching the younger children, &c., learn in the simplest and most natural way what they will subsequently need to know, as housewives; without being pedantically and coarsely instructed about their future duties as mothers, and being only made into governesses after all. For nothing but governesses can be formed by such a seminary as we have made mention of; stiff governesses, who will bring their husbands no dowry except a system of education; and who will believe that only they understand this subject, having studied it *secundum artem*, whereas the husband not having graduated at such a school, can know nothing of it, and has no business to say any thing about it.

IV. REMEDIES FOR DEFECTS IN HOME LIFE AND FEMALE EDUCATION.—INTRODUCTION.

Fenelon's work on "*Female Education*," begins with these words:—"Nothing is so much neglected as the education of girls." At present, perhaps he would write, instead of "neglected," something like "bescribbled and perverted." So much we have already seen. But what is the remedy? It is easy to find fault, but difficult to effect improvement, and doubly so when we scarcely know how or where to begin. Yet it will not suffice to fall into inactive despair.

Let us above all things retain our belief that God has planted maternal love in the heart of every mother; and that every mother, at least generally speaking, will gladly fulfill her duties to her children, if she knows what they are. But if they pursue the most mistaken measures, as we have seen they do, if they even do this at a cost of self-sacrifice, it is usually for the reason that they think these mistaken measures are the right ones, and such as will promote the

good of their daughters. If, for instance, a mother fancies that the greatest misfortune to her daughter would be to remain unmarried, she would resort even to the silliest means to prevent such a misfortune. But if they could be convinced that it is by no means always a misfortune to remain unmarried, or at any rate a much smaller one than that of an unhappy marriage, such as we have referred to—if they could be convinced that good men are not commonly to be found where they look for them, in balls and parties of pleasure—surely they would not remain in their wrong ways; surely maternal love would then bring them back to the right path.

But sensible mothers will reply: "We are no better off for this delineation of the common perversions of education, even though we are forced with sorrow to acknowledge its truth. What we need is, to know how to rescue ourselves from the current of evil customs, and how to educate our children in an intelligent and Christian manner."

"Nor is it of any use to us to acquaint us with general principles of education. We may be convinced of their truth, but if we attempt to put them in practice, we shall quickly see how great a gulf there is between counsel and action. "To act according to our own reflections brings us inconveniences," says Goethe; but the case is worse than this. Inconveniences we were accustomed to; these would be no obstacle to our good will. But abstract pedagogical rules are of no use whatever; no more than a couple of algebraical formulas would be, to enable us to teach our girls all the practical arithmetic of housekeeping."

"What our children need is little details of training; the smallest details; we need advice upon points which men contemptuously term minutiae, and trifles. But things of great importance are hidden within these trifles, as in seeds, whose germ only develops in after years."

From my own conviction of the truth of such claims as these, I shall in the sequel discuss as much of these details as I have been able to master from my own observation of the pedagogical labors of women within the circle of their own family.

I have already devoted a chapter each to "Early Infancy" and "Religious Instruction."* Although in these chapters I have considered details, yet it has been with too little reference to their management in daily life. I should therefore expose myself to the blame

* "In addition to what I shall say in the following chapters, especially the last, on religious and moral education and instruction, I would refer to these two chapters, and also to the subsequent section, headed 'Christianity in Education.' See Barnard's *American Journal of Education*," Vol. VII., 381—412.

of which I have been speaking, if I did not endeavor in the following pages to make up for such deficiencies.

V. RELIGIOUS AND MORAL CULTURE.

1. *Before the preparation for confirmation.*

The parents are bound to the sacred duty of cultivating the seeds of the new birth. The mother should pray for the child, and should teach it to pray for itself as early as possible; so that prayer shall become a second nature to it. Our ancient morning and evening hymns contain stanzas very proper to be used as prayers by children. Such a short prayer in verse should be taught the child by the mother as soon as it can speak; and it should repeat it after her, with its hands folded, syllable by syllable. It should afterwards learn to pray without having the words repeated to it; still with folded hands.

The mother should relate to the child Bible stories, particularly about the child Christ. After the third year, Luther's smaller catechism may be taught it by heart, but only in very small portions and without the explanations, which Luther himself directs to be taught to children of from seven to ten. The child may during this period also learn short verses of the Bible, and stanzas from hymns, particularly Christmas hymns. The children will often come to their mother at times when she can hear them repeat their texts and verses; and she can often find other occasions to remind them of what they have learned, and to make brief and forcible applications; which must not however be extended into long sermons. A good picture Bible will strikingly illustrate these maternal instructions; and an older sister will find much pleasure in showing the pictures to the younger ones, and telling them the appropriate stories.

The shorter and more simple the prayer which the mother hears her child repeat at evening and morning, the greater will be its tendency to cause the child to add petitions relating to its own little affairs. It will at night thank God for all His favors given during the day, will pray for parents, brothers and sisters, and if it has done any thing wrong, will sincerely ask God's forgiveness.

However insignificant such little beginnings of Christian instruction may seem, they still contain the living germs of the subsequent Christian life. They are the seeds of profound love and undoubting confidence toward God, of humble confession of sin and hearty gratitude to him who died that we might obtain forgiveness; seeds of love toward all mankind. Thus, Christianity will become a second nature to the child, so firmly rooted within its nature that it can never be uprooted, even by the most violent tempest.

It is evident of course that Christian education can exist only in Christian families; but even Christian parents must exercise great watchfulness to see that their lives harmonize with their teachings to their children. Otherwise the little ones will be altogether perplexed and doubtful. Even earnest Christians easily fall into many errors, such especially as tend toward a false pietism. Such errors are, too frequent and verbose admonitions to the children; too long devotional exercises; obliging them to express pious feelings; and continual, wearisome, pietistic sermonizing. I might add, the too early carrying the children to church. Ordinary sermons are too long and too hard of understanding for children, which indeed is a reason why a special divine service, shorter and adapted to children's minds, is needed. But such a service will be found very liable to degenerate into an insipid, affectedly childish, and entirely useless pietistic style of sermonizing. Various errors are practiced in the mode of conducting religious exercises. They weary by their length, and still more by their frequent abstract dogmatizing. Teachers frequently give out to female pupils themes, for composition, on religious subjects, far beyond their powers, and leading them into a class of discussions where they are not at home, and ought not to be. At a period like the present, when so many of the clergy believe so profoundly in the reflective theology, in the so-called "Christian consciousness," at such a time as this, the poor school-girls fare but ill. What they need is, to grow up in Christian simplicity, in an undoubting, deep-rooted, common-sense faith; and to remain all their lives children, in the sense in which Christ requires it, of such as are to constitute the kingdom of heaven. Dogmatical discussions, which they are usually unable to follow, only confuse them, and render them liable to errors in doctrine.

While instruction of this sort strains and over-exerts the understanding very foolishly, there is an over-exertion of a still more harmful but opposite kind. I refer to the mode pursued by some sentimental religious teachers; who, instead of earnestly and seriously pointing out to their pupils the way of salvation, devote all their attention to the purpose of influencing the feelings of the girls, for merely the moment. For the moment, I say, because this sort of overstrained feeling is usually followed by a reaction into entire indifference. Too often, also, the teacher, in his joy at having produced the desired state of feeling, adds a further complimentary notice of the pupil, for her possession of feelings so susceptible, pure, &c. The excitement of the girl's feelings soon passes away; but not so the unblest vanity which the poor child thus contracts from her instruction in religion.

Girls educated at home in the Bible, the smaller catechism, and the old religious hymns, to a knowledge of the elements of Christianity, are thus properly prepared for the instructions which precede confirmation.

2. *Fear of death.*

One blessing of early Christian instruction is, that it leaves no room in children's hearts for the fear of death. This good result is, however, sometimes hindered by foolish parents, who speak of death in the hearing of their children as a terrible thing, of which every one must be afraid; or who say on one occasion and another, "Don't do so; it will kill you."

If children are taught, even when those die who are most beloved, that the dead are with God, and happy; and are taught the texts of the Bible on this subject, and the beautiful encouraging verses of our ancient hymns, then all the tears which they would shed would be only for the absence of the beloved dead. They would weep no doubt, being only feeble children. But if they should not, it should not be considered a mark of hard-heartedness; and still less should they be blamed as for indifference; for such treatment will be very likely to make them hypocritical.

Children who have from early youth been taught from the Holy Scriptures that through death we pass to heaven, and to the Saviour, will by means of their encouraging and profound faith be found most efficient comforters to their parents, if afflicted by the death of those they love.

3. *Awakening of envy and covetousness in children.*

I have already referred to Hufeland's book, "*Good Counsel to Mothers on the Physical Management of Infants*;"* a book which every mother should become familiar with; which Jean Paul even says she should learn by heart, before the birth of her first child. Hufeland says, "Few persons will ever believe that it can be of any importance to secure for children, in the very earliest portion of their lives, the enjoyment of open air, and various other things herein prescribed; and yet this is exactly the time in which the foundation of sound bodily health for the child must necessarily be laid." Precisely as important and fundamental as physical management in this early period of life, is for the body, is its moral training for the soul. A child often receives impressions which last its whole lifetime, before we have any idea that it can receive any impressions at all. "If the disfigurements of the soul," remarks Jean Paul, "which wrong management during the first years of life entails upon children, were

* *Guter Rath an Mütter über die physische Behandlung Kleiner Kinder.*"

as visible as broken bones, deformed limbs, and other corporeal defects what a terrible sight would the rising generation present!"

I will instance a few cases of such wrong management:—

We often hear it said to little children, "Eat quickly, or else your sister will get it;" or, "If you don't eat it right up, I will." If a child has a new garment or toy, it is told, "This is yours all alone; your little brother can't have it. See; the other children have nothing so pretty; nobody but you." I have often observed mothers look on quite indifferently at such things, and even do the like themselves; a most painful sight. Such things implant and cultivate ill-will and vanity in children, before they are old enough to feel the pleasure of giving or of sympathy. It would be better to let other children be about when a child is eating, even when it is very young; and to let it give them now and then a mouthful. They will be pleased, and will show it. Or if there is no other child to be present the person who feeds it might perhaps take a spoonful of the food, and commend it, as received from the child. Such methods would early accustom it to have some regard for others, and not for itself alone. If a child receives a gift of flowers, or any playthings that can be divided without being spoiled, it should early be accustomed to give away some part of them. Things not divisible, it should be taught to use alternately with other children. Almost every child, thus taught, will even desire to impart of its possessions to others.

It is exceedingly dangerous to excite any sort of rivalry in children; although it is frequently done. I have seen not merely ignorant nurses, but mothers and fathers too, caress the children of others until their own children became angry and cried. The parents would then say, "See how that child loves me!"

4. *Love of brothers and sisters.*

This seems a perfectly natural and inborn disposition; and yet we find many families whose children never agree, but are constantly quarreling with each other.

I am not one of those who with Rousseau would charge all the faults and sins of children upon their parents and teachers; although incompatibility of dispositions in parents often brings much harm upon the children.

Many if not the most of children's quarrels arise from questions of *meum* and *tuum*. We often hear such dialogues as "It is mine!" "No, it is mine." "She has got my doll!" &c. The egoistic tendencies of property result in most harmful envy, quarreling, reviling and blows. Parents or adults in charge must be to blame, in part at least, when the difficulty becomes so serious as this. We have al-

ready seen that they sometimes themselves stir up envy and covetousness in their children.

A second cause which interferes with children's affection for one another, is one which is eminently the fault of the parents; namely, the preference of some one child by the latter, and the consequent worse treatment and stricter discipline of the rest. Such conduct excites in the children thus unfairly treated, a profound dislike and envy and grudge against that one who is preferred and favored. It is frequently those who may happen to be less favored with mental or bodily excellencies, who are thus ill-treated by their parents, whereas these are precisely the ones who need a double share of faithfulness. Children of more attractive exterior are, on the other hand, often most foolishly doted on. This kind of conduct has a most evil influence not only in the children who are favored, but on the neglected ones also.

It will not be denied that fraternal love is an innate quality; although it is not so powerful an affection as that between children and parents. Children also, however, unfortunately bring selfishness into the world with them. The problem of education—for mothers especially—is, as much and as early as possible, to extirpate the evil tendency towards disagreement; and to cherish and develop the germs of fraternal affection. We take great pains to root the weeds out of our flower-beds, before they grow strong enough to injure the useful plants. In like manner, should mothers seek to promote love and unity, and to destroy covetousness and envy among their children, and so much the more anxiously, because in this case the planting and the destroying become difficult much more rapidly as time advances:

I shall venture here to call attention to some common failings.

The first child is, until the second is born, the chief object of its mother's cares. If now a second child appears, and, as is natural, receives just as solicitous care, it will easily happen that the first child will seem to itself to be neglected. How can this be prevented? A child must, from the first day of its birth, be the principal object of its mother's care. She must consider of importance even the smallest details which relate to it; and whatever she can not herself do for it, she must carefully see done under her own eyes. But it is exceedingly desirable that the child should not think itself of importance, any more than is absolutely necessary. But however quietly and unobtrusively the necessary care is taken of a child—being at the same time punctual and thorough—and notwithstanding that the little one is as early as possible left part of the time to itself, while lying in the cradle or on the floor, and notwithstanding that the

child's necessities are made as few and attended to with as little flourish as possible, still it will be very liable to miss something of the usual attentions when a new-comer must also be attended to.

The birth of a brother or sister should be made an occasion of festivity; and they should frequently be permitted the pleasure of seeing the little one. Nor should the good old custom be omitted, of putting a little case of gilt paper in the cradle of the new-comer, with all sorts of little presents for all the children, who should be permitted to find it there. And the ceremony of baptism should be made one of special enjoyment; so that they may retain a delightful impression of this holy occasion.

If it could be so contrived that the elder children should not feel themselves neglected nor put aside on behalf of the new-comer, they would be certain to greet the increase of the family with unmixed pleasure, and heartily to love this additional brother or sister.

Another error which should be avoided is, to reprove too harshly such little oversights of the elder children as too rough handling of the younger, &c., as if they had intended to inflict pain. We often hear nursery-maids saying, for instance, "Naughty child, you have hurt your little sister;" when perhaps the poor child, out of nothing except pure love for the baby, squeezed it a little too hard, or threw some toy into its cradle, with the idea of amusing it. Such actions should be prevented, no doubt; but should not be treated as if they were intentional ill-conduct. Children should be told, from the beginning, "You must be very tender with your little brother or sister; and you must not cry nor make a noise in the room where your mother is taking care of it." If they cry, they should at once be taken out; and should be made to look upon it as a penalty to be taken away from the cradle, but as a reward, to be allowed to stay there.

It is very bad, for a nurse-maid in charge of an older child, to say to it, "Never mind, you shall be my darling; you are better than the baby." Although such expressions may be used from affection, and with the best intentions, they should not be allowed; for they set the children in a sort of opposition of interests, which every possible means should be used to prevent from coming into their minds at all.

When children have grown old enough to play with each other, if they should quarrel, it will not be best to punish one of them on behalf of the other, but to endeavor with few words to re-establish a good understanding; scarcely to observe at all which was to blame; but to direct the attention of both to the evils of quarreling. For it is very easy, if an investigation is entered into, to do injustice to one

of the parties, by failing to take notice of some little occasion of discord.

By thus never punishing one child on account of the other, it will come about that any penalties inflicted on one will grieve the other; that both their joys and sorrows will be common to both.

Many other similar details might be added, each perhaps insignificant in itself, but all together tending powerfully toward the important result of maintaining peace and unity among children.

I have seen children of from three to six years of age, old enough, that is, to begin to learn texts from the Bible, very deeply struck with that passage from the hundred and thirty-third psalm, "Behold how good and how pleasant it is for brethren to dwell together in unity! * * * for there the Lord commanded the blessing, even life for evermore." And a mere reference to these words of holy writ, without any extended admonitions, would frequently make them ashamed of a disagreement.

Boys should learn texts and hymns, along with their sisters, from their mother, and should be kept in the nursery, until they reach the school age. During all this time, all the mother's efforts to preserve unity amongst them should be exerted equally toward both. If she shall be affectionate, firm and intelligent enough to succeed in this, a charmingly affectionate relation will continue to exist among them afterwards. The girls will feel a careful love toward their brothers, and the latter will soon feel themselves the protectors of the former.

These efforts of the mother should be under the influence of the father; which ought to be the soul and the impulse of all her labors for her children. And even if he is not in a situation himself to take charge of all the details, he should control the spirit of them all.

5. *Timidity. Antipathy.*

Parents should be extremely careful not to have their children frightened. A fright, even in jest, perhaps by means of some sudden appearance in the dark, would very probably not only implant a timidity which would last for years, and could only be got rid of with great pains, but might also bring on permanent nervous disorders.

Children should never be threatened with wild beasts, nor told, as they frequently are, "If you do so, the dog will come and bite you," &c. Nor should they be threatened with the chimney-sweep, whose appearance is of itself sufficiently frightful to little children. They should rather be told, "He is a good man, but can not wash himself except on Sundays. Then he is as white as anybody." I have seen

a child so well cured in that way of his apprehensions, as to shake hands with the sweep in the friendliest manner.

The fear so common among girls, of spiders, caterpillars, mice, frogs, &c., can very soon be cured by judicious care, without at all interfering with feminine delicacy.* There is a mistaken notion, often found even among servants, that to be frightened, to cry out, and to show great horror at any thing repulsive, indicates great tenderness and delicacy of feeling; and that such sickly nervousness is very elegant. Educated people should be the first to overcome such weaknesses.†

If any one should be inclined to consider this horror at every thing of a disagreeable appearance, as an allowable trifle, he should reflect that it is closely connected with something of much more importance. Girls who declare that they can not see a spider or a mouse without being frightened and trembling, are also in the habit of saying that they can not look at an open wound, or see blood let; in short, that they "can not endure the sight of blood." And it is often the duty of a mother, at home or among her neighbors, to take the part of a Sister of Charity, if needed, and to be helpful and kind, with coolness and skill, without being frightened.

6. *Greeting. Asking. Thanking. Asking pardon.*

Children should be taught as early as possible to salute properly every person who comes into the house, and to return thanks for whatever is given them; and also to ask for what they want. If they are not taught to thank and to ask, they will very soon come to think that every thing and any thing they think of must be given to them; and that they are entitled to command, and must be obeyed by all. Thanking and asking teach them that they depend upon their older friends; and that things are given them and done for them, out of love, and not from obligation. They thus also learn to give thanks to God, and to prefer their requests to him, who gives us all our daily bread, even without our asking, and yet commands us to pray to Him. Children who are not taught by their parents to ask for any thing nor to give thanks for it, will never think of asking a blessing at table.

It will of course be understood that the requests and thanks here spoken of, are not mere feelingless and memorized forms of empty politeness. Children should not salute strangers with any specially

* I speak only of harmless animals. The antipathy to snakes is a correct instinct, although not keen enough to distinguish between the poisonous and harmless varieties. There are many cases where no natural instinct holds children away from dangerous animals, and they must be warned not to play with or tease them; such as ill-tempered dogs, &c.

† See the "*Wandsbeck Messenger (Wandsbecker Boten)*," Vol. II., p. 63.

adjusted formularies, but with the same ease which they use to their parents and neighbors.

Young children should also be accustomed, when, for instance, they cry angrily, or throw any thing away in a pet, or do any other passionate thing, to ask pardon for it, if only by saying "I will not do so any more, if you will be pleasant to me again." If they are not early accustomed to do this, it will be more difficult to bring them to it afterwards; they will be found contrary and obstinate. And children who have thus grown up obstinate, will be found to conceal any fault which they have committed, and to be resolute in refusing to confess it, from a feeling that either confession or asking forgiveness is shameful. Children, on the other hand, who have from an early age been accustomed to ask forgiveness, if they once yield to the temptation to conceal a fault committed, will be made very unhappy by doing so. Like David, though after the measure of their youth, the concealment of the matter will be a pain in their bones, and like him, they will become cheerful again when they have confessed and been forgiven. One who has thus learned to confess to his parents and to be forgiven, will learn to confess and find peace before God; but one who has from his youth been persistently silent, because he has not learned to humble himself by honest confession, can find no such peace.

7. *Truthfulness. Fairness.*

It should never be allowed to set before young children, to make them behave well, either good or bad consequences of their actions, which are not actually to result, and which usually can not happen at all. A thousand small lies are told children, which are thought quite harmless; but they are not so. The more we permit little girls to enjoy the wonders of fairyland, and the less we practice dissecting for them a beautiful poem, so that they shall understand how much of it is true and how much not, so much the more strictly must we adhere to the truth in our daily intercourse with them. A child can not preserve his unlimited and impregnable faith in the words of his elders, if he discovers as he grows older that they have told him falsehoods about one thing and another. There is even danger that such a discovery may weaken his faith in God's own word.

Truthfulness is the firm basis of all moral instruction. If the mother succeeds in cultivating her daughter's disposition to openness and candor, so that she is always uneasy until her mother knows every thing, little or great, which concerns her, then she may hope for success in her general plan of education. I know, of course, that success here, as everywhere, depends upon God's blessing; but parents

are co-workers with God in this particular, and must do their part with faithful and unceasing labor.

Of all the means by which a child may be kept from lying, the chief is, that it should always find its elders telling the truth. Nor should children be punished for doing some accidental injury, or for an omission which does not imply positive disobedience, provided they confess what has happened with entire truthfulness and a proper regret. Many mothers think it the greatest fault their children can commit, to break by accident, a cup, or a pane of glass; and such an offence they punish most severely. If an unlucky child, accordingly, meets with such a misfortune, he tells lies about it from fear of being punished; committing a fault for which his unjust mother is really to blame.

But if a careful and judicious mother finds her child concealing or denying what it has done, it should be emphatically punished for the lie. If a child, otherwise honest, should for once tell a lie, and be punished, then when it confesses its fault, at the next occurrence of one, it should not be treated angrily, but with increased love. It should be made to see that its lying had caused grief, and that now there is joy at its returning to the truth.

Children should early be taught that "Lying is a shame to men." And severe punishment should be inflicted for lying, and for direct intentional disobedience.

8. *Obedience.*

In order to give as few occasions as possible for punishment, it will be well for the mother to give as few commands as possible; only when they are absolutely necessary. Fathers do not so often fail in this particular; but I have known good mothers who all day long were constantly crying out, "Don't do that," and "Always do so," and who consequently quite failed to make these innumerable commands impressive. Nothing should be forbidden except what it is decided not to permit any longer; and nothing should be commanded except what can and will be carried through. This will soon bring about the pleasant result of making obedient and happy children; for there is no more unhappy and uneasy creature than a disobedient and ill-trained child.

Mothers often commit the error of refusing to a child's request, and often without reason, the same thing which they afterwards yield to its crying. It does not help the matter for the mother to say, "First be still, and then you may have it." The child should not have at all what it cries for. If it thus never gets any thing by crying, and above all, nothing by crying for the thing which has once been

refused, it will very soon leave off trying to get its own way by that means, and will quietly acquiesce in its mother's negative. But this rule should be very early observed; even before the child can walk or speak; for it is incredible how soon children observe when they can count upon this mistaken complaisance, and will endeavor always to accomplish what they have succeeded in once.

9. *Crying.*

Much complaint is made of children's whining and crying; although, as has already been shown, an intelligent mother can do much to prevent it. It is very common, for instance, for a child to cry out, as often as it falls, or runs against any thing. This habit, however, is usually a result of mistaken tenderness on the part of those about the child. It can not be expected that a mother shall not be frightened at seeing her child fall down, but even the most timid mother must govern her feelings, and treat the accident as quite unimportant. She might exclaim in a cheerful manner "Hurra," or "Jump right up again!" and ought not to help the child up or lament over it, however much she may desire to do so; and least of all should she give it sugar or any thing else to comfort it. When she sees that the child is going to cry, she should promptly direct its attention to something to look at, or say, "Come, we'll go quick and get this or that," pointing out something at the other end of the room, or something out of the door. In this way the child may be made to forget its fright, for it is this, and not pain, which is commonly the matter when it falls; and if it felt pain, it would thus learn to bear it without making a noise.

There are other cases where the mother can prevent the child's crying, without its being noticed by the latter. Thus, if she sees that the child is getting tired of playing by itself, and is therefore losing its interest in its amusement, or that it has run about until it begins to feel tired, she may, before any outbreak of unhappiness occurs, take it upon her lap for a little while, and tell it a story, or sing it a song. Or she may herself join in its play, and invent some new variations of it. If the trouble comes from hunger, and it is nearly the time for eating, the hour may be anticipated a little, without the child's noticing it, for the sake of keeping it quiet.

Very small children should not be permitted to see the preparations for meals, much before the time of eating; it would be a daily incentive to crying, instead, as many suppose, of teaching them patience, and would teach them still more effectually, greediness in eating and drinking. The child's food should also be made all ready before being brought to it, and should be brought in with all the ap-

paratus, and not too hot, so that it can be given at once. This will secure the satisfaction of feeding a good-humored child, without having to hear its crying.

The mother should prescribe the limit of the quantity which the child may eat. If it stops before eating it all, it should not be made to eat more. But if all is eaten and the child sets up a crying, be careful not to give it more; for the child would notice this, and very soon there would be raised after every meal, a shrieking for more. If the mother is convinced that the crying was from an absolute need, she must merely be careful to give rather more next time.

These are perfectly simple and harmless means, and may be used by every intelligent mother to prevent her child from crying, without any danger of flattering or accommodating its whims and fancies. Such management will render the nursery pleasant to her husband; whereas no one can find fault with him if he avoids it when filled with constant crying.

10. *Watching children. Plays.*

It is one of the first rules for a mother, to watch her young children closely, but to do it so quietly and unobtrusively that they will not observe it. However important they are among the objects of her attention, it is equally important that they should not know this. When the child is playing by itself, it should suppose itself entirely unnoticed. Nothing is more delightful to see than a child entirely absorbed in its play, without any thought of any persons who may happen to be near; and nothing is more disagreeable than a child who at every motion looks round to see if it is observed how prettily it plays, or asks "Am I not playing prettily?"

Children should be permitted to play by themselves as much as possible; and should be supplied not with too many toys, but with such as can be made some sort of use of. The simpler the toy, the more room is there for the imagination, and the greater the child's enjoyment of it. It is not, however, by any means intended that the mother should not sometimes amuse both herself and her child by joining in its plays, but only that the child must not be permitted to suppose that it must always have some one to play with.

11. *Amusements of girls.*

For little girls there is no better amusement than playing with dolls. In their earlier infancy they will find pleasure in nursing their dolls, putting them to sleep, and imitating all the management of their mother with the babies; and at a later period they will enjoy making dresses for them. This should be encouraged by the mother; for although the little girls will not think of it, this will be an excel-

ient preparation for their future duties. But I would not recommend too many dolls; it will be found best for each girl to have one, whom she will love about as well as if it were a little sister. In like manner, cooking for the dolls in little cooking utensils is a good occupation for little girls; and they will find a special pleasure in entertaining their brothers with the results of their culinary labors. The excessive luxury and superfluity which I at present observe exhibited in the dolls and other playthings of children, I consider very harmful.

All games of chance with dice or cards are decidedly to be rejected; as is the game of *loto*. There are an abundance of harmless games in summer, ball, *battledore*, *graces*; and in winter, when the children sit round the table on long evenings, there are many others, in which all the children may join, and the parents too. Such are games with songs and with words of more than one meaning; riddles, *charades*, telling stories, &c. Such games are not merely modes of passing away the time, but they are useful in many ways. It is a good sign in a child to take a lively interest in them; and their enjoyment of them should be marred as little as possible by any prohibitions, especially by any austere ones. Games of *forfeits* often lead to foolish tricks; and are not to be recommended.

12. *Greediness. Love of dainties.*

Two faults often noticed in children are, a desire to eat whenever they see another person eating, which renders them infinitely troublesome to those about them; and a love of dainties. These two faults may be prevented before they become fixed, by accustoming the child, as soon as it is weaned, to set times for eating. For the nature of its food, I refer to *Hufeland*. At no other time should the child receive any thing, nor should even the most honored guest be permitted to give him any thing. If the mother strictly observes this rule, and the nurse also, and the father, the child will learn to see other grown-up persons or children eating, without the least desire to partake.

A child brought up under this rule, and with simple and regular diet, and also so that unconditional obedience to parental commands has become a second nature to it, will not readily learn the habit of greediness. I have known children so trained, from three to six years old, who could be left alone for hours together amongst fruit and confectionery, without any desire to obtain them.

These rules are not meant to prevent children from the innocent enjoyment of their fruit and cake on feast-days. On the contrary, a child plainly brought up, with a healthy appetite, and hungry, will enjoy such things much more than those who suffer, from constant

devouring of dainties, under a morbid craving for eatables, and a disordered stomach.

13. *Cleanliness and order.*

For the bodily treatment of children I refer to Hufeland; and also for rules for cleanliness in particular; a point upon which he is very strenuous. Cleanliness should be made a habit for children. It should be an invariable rule, especially for girls, to keep their bodies, as well as their clothes, clean; and not only this, but they should also be accustomed to observe and set right even the least dirt about them, and any disorder or disarrangement. It is scarcely calculable how much time may be saved by strict and punctual order. Little girls should early be accustomed not to go to sleep until their playthings are all in their places; for every thing, even the minutest, should have its own place. And older girls should be taught to consider it their duty, not only to clean up every piece of work which they are doing before beginning another, but always to put in the right place whatever they see out of it. This trouble will be saved however, if all the rest of the household are in the habit, which we have advised, of always putting every thing in the right place, and never any thing in the wrong one. They should also be taught always, before they leave a room, to observe whether there is any thing which ought to be carried out; and when they are going into one, whether any thing needs to be carried in; so as not to be going about with empty hands.

A young girl thus brought up to order and punctuality, so that they have become to her a second nature, will never be one of those order-crazy housewives, whose incessant restlessness and furious stirring up of the inmates of the family are almost more uncomfortable than any possible degree of disorder. The object of these good people seems to be not so much a quiet and well-arranged household, as constantly moving things about, and cleaning up. A girl brought up from youth in a household of the proper habits of quiet good order, will understand how to maintain the same without restlessness or a pedantic stiffness of management. She would not value little things above great ones, nor, like those inordinately orderly women just spoken of, consider the days and hours of house-cleaning absolutely invariable, even if a change was demanded by the sickness of a child, or to accommodate some important business of the master of the house.

14. *Good manners; modesty.*

Girls must from the earliest period be trained with special care to polished and elegant manners; which can be done without the

pedantry of some governesses, or the help of a dancing-master. The movements of healthy and well-managed little children are naturally graceful, and those of girls have often a special elegance. As the last grow somewhat older, there arises in them a certain tendency to wildness, and a degree of coarseness along with it. To prevent any evil results from these tendencies in girls, is the task of an intelligent mother. But it is wrong to say, as is often said, "Don't do this; what will people say?" or "Don't; what if any one were looking at you?" and the like. It will be quite enough for the mother to say, "Do not do that; it is disagreeable;" or, "I wish you not to do so;" or, "Your father has forbidden you to do it." To violate such an indication of parental wishes, should be always considered and treated as a thing totally out of the question.

Wild and boyish plays should never be permitted to girls, either in company with boys or when alone.* However great our pleasure in seeing them heartily enjoy running, jumping, and similar hilarious sports, it is still necessary that these sports should be restrained within moderate limits; so as not to become inelegant or vulgar. A vulgar habit once learned, is unlearned only with difficulty; and there is much more reason to expect polished and agreeable ease of manner from a young lady who has from infancy been brought up in habits of elegance and modesty, than from one whose attention is only directed to the importance of their cultivation after she has grown up. One thus neglected must always be thinking, "How am I acting? How do I stand? How do I step?" whereas the most attractive of all qualities in a young girl is unconsciousness; entire freedom from self-observation and self-examination. And if elegant manners have become a second nature to her, she will show it, whether at home or in the largest circles of society.

15. *Clothes.*

Girls may perhaps have an innate tendency towards vanity and love of ornament; which, like all other innate faults, may be counteracted by early good management. Thus, girls should be accustomed from childhood to be always neat and orderly in their dress, but not to be conspicuously ornamented. It will do no harm to cultivate their taste for elegant and appropriate dress, and a distaste for that which is inelegant and unappropriate. Little girls should be simply dressed in clothes proper for their age. There should be no day in the week in which they may go in a disorderly dress, but they should be dressed every day nearly alike, without very frequent changes. It

* "In choosing amusements, all company liable to suspicion must be avoided. No boys and girls together." So says Fenelon. The application to mixed schools is easy.

is of course proper to wear their Sunday dress on Sundays; for it is the Lord's day.

The great importance attributed by very many women and girls to dress, ornament, and such externals, is often and very truly spoken of as ridiculous, and as showing that heads which have so much room for entirely idle unimportant things, must be pretty empty of every thing else. But this is not often so felt that it is made a subject of grave admonition to girls.

16. *Amusements.*

In like manner, I am inclined to consider the usual amusements indulged in by grown-up girls, as matters in which a well-trained and domestic young woman should be brought up to find no pleasure. If her susceptibilities to such higher pleasures as really strengthen and stimulate the mind through the eye and the ear have early been cultivated, she will not easily be brought to find pleasure in the ordinary foolish kinds of diversion. And if a young girl who reflects, as one brought up in a Christian manner would be most likely to do, that time so idly spent can do the mind no good, and will very easily do it harm, she will refrain without constraint or argument from occupations so dangerous to the purity of the soul.

But it will not be fair to charge these amusements upon girls as sins, because it will be found that most of those persons whom they are bound to respect and love, think otherwise on the subject. But there is no respect in which a mother needs to exercise more care, than in watching lest her daughters should take credit to themselves for not partaking in one or another class of amusements; and that they do not for any such reason despise other people, or set themselves above them. For spiritual pride is far more destructive to the soul than vanity, or love of adornments.

To direct their daughters between these two rocks, must be the endeavor of all Christian parents.

17. *Relations of the sexes.*

There are many mothers who think it necessary—in my opinion very erroneously indeed—to initiate their daughters in all the mysteries of the family relation, even in those of the sexes to each other; and upon points which they think they may profitably find themselves informed in case they should get married. We have seen to what a point of coarseness and caricature these views were carried in the *Philanthropinum*, after the teaching of Rousseau.

Other parents err in the opposite direction, by telling little girls many things which as soon as they grow up they will find quite untrue. This practice has already been mentioned as always hurtful;

and it is so in this case. Such matters should not be discussed at all in the presence of children; and least of all in a mysterious manner, which stimulates curiosity. Let the children believe, as long as they will, that an angel brings their mother the babies; a common explanation in many places, and preferable to the messenger which some substitute, namely, the stork. If children grow up under the immediate eye of their mother, they will very seldom ask unseasonable questions on the subject, even when her confinement keeps her away from them; and such a belief as that suggested will be found not to clash unpleasantly with the pious instructions which she has given them.

If girls ask, subsequently, how do little children come? they may be told, that the good God gives the little child to the mother, and that its guardian angel is in heaven, where it was undoubtedly an invisible agent in procuring so desirable a gift; but that they, the inquirers, need not know, and can not understand, how God gives the children. Girls have to receive a similar answer to a hundred such questions; and the mother's duty in this particular is, to keep her daughter's thoughts so fully occupied with what is good and beautiful, that she will have no leisure for curiosity about such matters.

A mother whose mental authority over her child is what it ought to be, will only need to say once, seriously, "It would not be well for you to know about it; you must avoid hearing it spoken of." A daughter brought up with the proper moral feelings, would from that time feel an entire distaste to listen to any references to things of the kind.

That girl is fortunate whose mind remains a genuinely childlike mind until she becomes married. Afterwards, as her understanding becomes enlightened, she will be profoundly grateful to the mother who has watched over the purity of her life, and the purity of her thoughts also.

18. *Nursery-maids.*

There can be no greater pleasure nor more delightful employment for a young mother, than herself to take care of her child, and to have it always about her. This does not, however, imply that she is to have constantly and exclusively the duty of holding it and waiting on it, which would very likely lead to the neglect of the older children. It would be her best plan to secure the services of a female attendant, young, and if inexperienced, then at any rate uncontaminated; and this attendant she should teach, under her own eyes, how to take care of the child in the proper manner. If the mother likes the maid, and is willing that she should have a part in the affections

of the child, the child will soon like her, and she it. Such treatment will in a measure render the maid acquainted with the wishes and ideals of the mother for her child's training. A well-disposed young woman will very soon acquire a feeling that it is a high honor to be employed in preserving the child from any harm, whether of body or soul.

Where the family is not in circumstances to keep more than one maid, the mother should so arrange that the maid may do most of the domestic labor, while she herself takes charge of the child. A careful and ingenious manager will always be able to find some hours, from time to time, in which the maid can take care of the child, or take it to walk, but in the mother's presence. I add this condition because even the very best young girl ought not easily to be permitted to take children out to walk by herself; as so doing would expose them to many risks consequent upon her own youth, even if only those are reckoned which consist in the opportunity for idle chat.

The case is, however, altered when any thing happens which renders it absolutely necessary for the children to be intrusted for some one occasion, to the maid. The servant, having seen that her mistress is always faithful in attending to her children, and never neglects them for any idle amusement, will be very much more careful in watching over the children and seeing that they receive no harm, than a maid would be to whom the children should be often and entirely intrusted, while the mother is pursuing her own pleasures.

It may be asked, if there are so many disadvantages connected with the employment of young nursery-maids, why it would not be better for the mother to employ some old and experienced nurse, to whom she can confidently commit the whole charge of the children? The answer is, that greater reliance can not be felt upon an older woman, because there is no security that she will love the children better, or be more prudent in taking care of them; and thus even such older women as are well qualified for the physical management of children, might thus exert a most harmful intellectual influence upon them. Such an experienced nurse-maid will not be disposed to receive instructions from a young wife, how the child is to be managed, because she will feel that she understands the subject much better herself. And as she will commonly have served in other families before, she will be always critically comparing her previous service with her present one, and will remain a stranger in the house.

But the feelings of a young girl who grows up to become, as it were, a member of the family, will be very different. The nursery,

the garden where she has lived, frolicked, sung, and played with the children, where she has entertained herself and them with fairy tales, histories and hymns, the chamber where she has prayed with them, and with their mother for them;—all these things will, as will the mother and the children themselves, remain during after years, a most happy recollection in her mind.

I have myself known such cases; and if they are few, the reason is, doubtless, that mothers do not exercise conscientious faithfulness toward their children, nor pass their pleasantest hours in their company.

Toward other servants, with whom their relations are not so close as with their nurse-maids, children should be taught never to be guilty of using an unkind manner, nor insulting language; and still less to give them orders. They may only request what they want. Parents are often to blame for the improper conduct of their children to servants. They find fault with them in a passionate manner in the presence of the children, who are only too quick to observe it and to imitate it. If a parent is satisfied that a nurse-maid is a worthless person, her duty toward her daughters, with whom such a servant must often come in contact, will require that she be dismissed at once.

19. *Holidays for children.*

People entirely worldly-minded are often found to be of the opinion that in families which live in a religious and retired manner, there prevails gloom, and a contempt and avoidance of all enjoyment. "These pious folks" they say, "think every pleasure a sin, and forcibly restrain their children from all worldly enjoyments; a proceeding which for that very reason makes them doubly eager for them." Those who say this do not remember what the apostle said, "Rejoice in the Lord, and again I say, rejoice;" an expression utterly at variance with their theories of Christian family life. And even if they were cognizant of it, they would necessarily misunderstand the expression "in the Lord," until they should themselves have escaped out of the restless tumult of the pleasures of this world, and themselves experienced what it is to rejoice in the Lord.

But I am now to speak not of the seducing pleasures of adult persons, but the innocent and beautiful holidays, and the little festivals of children. The mother will naturally bestow much more attention than the father upon the management of these, and the modes of securing to the children a real enjoyment of them.

Although I quite agree with Claudius, that children should have many holidays in a year, yet the three great church feasts of Christ-

mas, Easter and Whitsuntide, should be distinctly marked by superior magnificence, so as to be quite different in the children's minds from the other holidays.

Of these three festivals, Christmas is that usually most elaborately celebrated as a children's festival. From the latter part of autumn up to Christmas day, the children, small as well as great, should devote their labor, however awkward, to preparations for furnishing little Christmas gifts for their parents, grand-parents, &c., and for poor children. While at work, an advent or Christmas hymn should from time to time be sung. The more nearly the festival approaches for which there has been so much preparation and anticipation, the more will the joyous anticipations of the children increase, and the easier it will be to teach them appropriate verses and texts, and thus to secure the spiritual blessing of the birth of Christ.*

It is very important that in family devotions, during the period of Advent, there should be read, not a book of the Bible without any special reference to the time; but that there should rather be read portions from the prophets, Isaiah especially, and toward the latter part, the first chapter of Luke, which includes the birth of John, the Annunciation, and the visit to Elizabeth. And the hymns sung on the same occasions should be in like manner selected as appropriate.

The giving of the presents is better on Christmas eve, than on the morning of Christmas day. To postpone the presents until New Year's takes out the very heart of the festival, the rejoicing over Christ's birth. And besides, New Year's is usually devoted to the business of contemplating the mutability of human things, and to the melancholy recollection of departed friends.

When the children are assembled round the Christmas tree, three or four verses of the hymn "From heaven high" should be sung, then the father should read the gospel for the day (Luke, chap. 2, 1-14), then two or three verses of the hymn "Praised be thou, O Jesus Christ" may be sung, and then old and young may joyously turn to the distribution of the presents.

These should be appropriately varied, as the giver and receiver are old or young, rich or poor, or prefer one thing or another. Nothing superfluous should be given, and nothing too expensive for the giver's means. Nor should the other extreme be practiced, and nothing be given the children except mere absolute necessaries, such as shoes,

* Such are, Isaiah, chap. 60, 1-3; John, chap. 3, 16; 1 Epistle John, chap. 4, 19; John, chap. 15, 12; Ephesians, chap. 5, 1-2; the first two stanzas of the Advent Hymn, "How then shall I receive thee," and of Luther's two Christmas hymns, "Praised be thou," and "From Heaven high;" of these last, as many stanzas as can easily be learned.

stockings, and other ordinary garments. These must be had at any rate, if there were no Christmas; or the family were heathens or Mohammedans. Books or pictures may be given, however—such as the children like; those for instance of Speker, Poggi, Richter; Grimm's stories for children, Wackernagel's reading book; or a box of tools, &c. The Christmas tree should not be turned into a confectioner's shop, but should be made fantastically beautiful with gilded apples and nuts, stars and lilies. At its foot should be a meadow with a pond, in which should be swans and gold-fish; and close to the trunk, a little hut with Joseph, Mary, and the Christ-child, adored by the shepherds or the wise men of the east; and over the hut should be seen the star.

To the children, the whole occasion should be made to appear like a beautiful dream, quite separated from their daily life. With this dream upon them they should go to sleep, and should wake up in the morning to a renewed enjoyment of the festive occasion.

The cheerful Christmas time is followed by the very different passion week. During this time should be read at family prayers the account of Christ's passion; on Good Friday, the account of the crucifixion, and also Isaiah, chap. 53; and then should be sung the hymns, "O Lamb of God, &c.," "O head with blood, &c.," "We thank thee now, Lord Jesus Christ, that thou for us wast sacrificed," and the like. And the children should learn the following texts relating to Christ's passion; Isaiah, chap. 53, 4, 5; John, chap. 1, 29.

But it would perhaps be better, instead of so very directly instructing the children in the history of the Passion, to omit indoctrinating them, and to leave them to the impressions which they will derive from family worship, reading the accounts of the passion, singing the hymns which relate to it, and the general effect of the whole atmosphere of their home and their life during the passion-week.

This gloomy and dark period is followed by the brilliant day of Easter: the festival of Christ's resurrection. On this occasion may be sung "Jesus my trust;" and the gospel for the day may be read.

On Easter day should be read also the fifteenth chapter of 1 Corinthians, on victory and triumph over death, and on the joyful and assured hope of eternal life, with a reference to Christ risen, "the first fruits of them that slept." "If he had not arisen, then the world had been lost."

At Easter, also, it is well to give the little ones a lamb out of the toy-shop, which their vivid childish fancy will regard as alive, and they will take as much care of it as if it were a real lamb. When

the children are older, playing with Easter-eggs is a game that will amuse them for a good while before the day comes.

If the quiet period which precedes Easter is really passed in a peaceful and retired manner, the children will from an early age receive an indelible impression of the alternations of rejoicing and grief in the course of the ecclesiastical year, without the necessity of any extended verbal explanation of the difference. The gospel for Easter-day, and the sparkling Easter hymns, will fill their childish hearts with joy; and if as at Christmas, innocent childish pleasures are provided in connection with the day, the Easter festival will become a time of the greatest rejoicing, whose profounder significance will become every year more clear to them, as will in like manner the more serious meaning of the preceding passion-week.

Our ancestors were accustomed to apply to the spring festival of Whitsuntide, some expressions of the psalmist relating to adornments for feasts. At this time, mothers fasten green boughs over the children's heads on the bed, before they wake, and hang on them flowers and little things, that will please them. Old persons whose parents observed this custom, always remember the delightful feeling with which they went to sleep the night before, and looked up amongst the green boughs in the morning.

In after life, these three chief festivals will remain in our memories of childhood, as far back as they reach, days of blessing, mystery, and holiness.

There are other Christian festivals which have descended to us from the earliest period, which might well continue to be celebrated in the family, even though they are not by the church. On the day of the Three Kings, the gospel of the Adoration of the Wise Man of the East might be read, and the Christmas tree lighted up again with the hut at its root with Joseph, Mary and the Christ-child, and the wise men adoring; and the shining star over-head.* St. John's day is celebrated in many parts of Germany, by hanging over the door garlands of flowers gathered for the purpose the day before. Little children have also a wreath bound to the arm, which they wear to church. In other places, St. John's fire is lighted on some elevated place.

In like manner, St. Michael's day should remind us of the angels, especially of the guardian angels of our children; and on St. Martin's day, we should tell the children the story of the charitable bishop, and should remind them also of the baptism of Martin Luther on that day.

But I can not go into details of all the numerous festivals which are

* The sport of making a bean-king on the eve of this festival is well known.

celebrated in so many parts of Germany for the children or by all the community. Such are May-day, when the children sing over the departure of winter; the spring procession, when old and young, the clergyman at their head, go all round the fields, praying for the blessings for which they are to return thanks in the autumn; the harvest-home, when harvest crowns are worn, and all sing joyously, "Now let us all thank God." Those who were brought up in the country will remember this festival with pleasure.

The celebration of the national anniversaries is, and should continue to be sacredly observed. Above all should every German family continue to commemorate the battle of Leipzig. On the 18th of October, the account of that glorious day should be read over, patriotic hymns sung, and children and children's children thank God for their escape from a severe servitude; for the preservation of the national life of our people. Even if all the fires on the mountain tops should go out, and if sinful ingratitude toward God and the heroes who have fallen in a sacred strife, and a stupid indifference to freedom and the independence of the father-land should dishonor thousands, let us remain faithful.

"No! howsoe'er may alter
The chance and change of time,
My memory ne'er shall falter
From thee, thou dream sublime!"

Children take great delight in celebrating their birthdays. We may allow to their natural egoism, the pre-eminence which each in turn enjoys on his own birthday; to be the king of the feast, to receive the presents, to enjoy his favorite delicacies, and to invite his young friends to visit him. But still, the day should not fail to be distinctly made a day of thanksgiving for the blessings of the past year, and of asking a further blessing upon that which is to come.

I thus make some allowance for the egoism of children. But it is delightful to see children as much delighted at the birthdays of their parents as at their own, and contriving for weeks beforehand what they can do to make the occasion pleasant, and to provide presents.

But I must quit the subject. Holidays for the children, if interest is felt in them, are cheerful and joyous occasions in family life.

Yes: "Rejoice in the Lord; and again I say, rejoice." Pleasures such as these here alluded to leave no bitter taste behind; are followed by no painful and sickly feeling. On the contrary, they vivify

both soul and body, and refresh and strengthen both young and old.

And if children have been early trained to partake and enjoy such pure and innocent pleasures as these, they will, when grown up, be tormented with no lust after destroying and impure ones.

VI. HOUSEHOLD OCCUPATIONS, HIGHER CULTURE.

It is a main point in the education of girls, so to cultivate their minds that they may always have an inclination towards what is noble, good and beautiful, and that the many useless thoughts so ready to creep into empty heads, may be kept out by better ones.

Jean Paul says in "*Levana*," after making bitter complaints of the prevalence of the evil just alluded to, "But what help is there for it? I answer, the help actually in existence among the poorer classes. Let girls practice, instead of the common useless and vision-cherishing kinds of ornamental work, the various kinds of household labor; by the help of which, dreams and reveries will be driven off, by the new tasks and requirements which every minute will bring."

In another place the same author says, "Let no woman, however ethereal—or rather windy-brained—say that housekeeping is too mechanical for the dignity of her intellect; and that she prefers pursuits as purely intellectual as those of men. Was there ever any intellectual pursuit without a mechanical one with it?"

It is my own opinion also, that every young woman, no matter what her rank or circumstances, should without fail be instructed in the details of practical housekeeping; and even that her education can not be termed complete if this part of it has been neglected; although at the same time, I do not consider a training to such domestic duties exclusively, to be sufficient to occupy the minds of young women. There are many whose daughters are taught, besides the usual elementary studies and those of a religious kind, nothing except housekeeping duties and manual labor; the purpose thus sought being to keep them in simplicity of mind, and occupied, aside from their work, with none except religious thoughts. This is, however, a mistaken course; for in default of an appropriate higher culture, the minds of girls will become interested in a very useless and indeed dangerous way, in things of the idlest and foolishest kind.

Fenelon says, "Ignorance is often a cause of *ennui* to a young girl, and prevents her from finding an innocent employment for her leisure. When a girl has grown up to a certain age without the habit of serious occupations, she can neither after that acquire a taste for them nor learn to estimate them fairly. Every thing serious is disagreea-

ble to her ; every thing that requires continued attention, wearies her. The love of pleasure which is so strong in the young, the example of her companions, occupied in their diversions, all serve to give her a distaste for regular and industrious occupation."

And in another place he says, of the occupations of such ignorant and empty-minded girls, "They burn with eagerness to have experimental knowledge of all that they hear of, and that people are doing. They love to hear news, to write letters, to receive them. They want to be talked to about every thing, and to talk about every thing ; they are vain, and vanity makes them talkative ; light-minded, and their light-mindedness prevents them from having any of those serious thoughts which would predispose them to silence."

I now turn to the consideration of the means of preventing young girls from occupying their thoughts with foolishness, and of turning them toward useful things. I shall first discuss the mode of making them familiar and skillful in the duties of housekeeping.

I have already mentioned how at a very early age a girl may begin to be of some use to her mother in domestic duties ; but she should by no means be permitted, until well past her childhood, to have any knowledge of the solitudes of housekeeping. The mother should be careful not to say before her children that such a thing is expensive ; that it had to be bought once, and must now be bought over again, because it is broken or spoiled. The children should be careful not to injure or break any thing, not because it costs money, but because their mother has told them to be careful, and because it makes her feel sorry to have any thing spoiled, and still more so, to have her children careless, awkward, and most of all, disobedient. Little girls should never hear it remarked that a thing costs much or little. Boys are less inclined to trouble themselves about such matters ; but girls notice them very early ; and nothing sounds more disagreeably than for a little thing to be saying "Mother gave a good deal for that," or, when a thing is broken, "They can buy another."

Girls should not have what is called pocket money. As long as they are children, they should receive whatever they have from their parents, and with gratitude, but without adverting to the large or small expense of it. Thus they will receive any little thing with as much pleasure, and will be as thankful for it, as if it were something far more costly. It is much more affecting and more beautiful to see children on a birthday presenting flowers which they have gathered or cultivated themselves, or to see them, with the innocent notion that what they like best, must be most agreeable to others also, making a

present of one of their playthings, than to see them presenting things that they have bought with money which was given them before.

In like manner, any thing produced by the labor of older girls is more valuable than any purchased gift. This mode of managing will also early teach girls the better way of assisting the poor, by giving them some article of property, or something to eat.

At a subsequent period comes the time when it is the duty of the grown-up daughter to aid her mother in all the cares of the latter; and to exercise independently all the various accomplishments in which she has gradually been trained by her industrious assistance in housekeeping. If she is a good scholar in arithmetic, she will easily keep the housekeeping accounts; and will feel herself honored to be allowed to take part in the household cares of her mother, in return for the untroubled careless happiness in which her childhood was passed. All the assistance in housekeeping and cooking, which children according to their capacity can give their mothers, will be made pleasant to them by the very fact that they are not obliged to exercise the foresight which is necessary.

An older daughter, by helping her mother consult and manage for the necessities and enjoyments of the younger ones, will learn better how to manage money than by having an allowance with which to supply her own clothing, &c. Nor will she need any pocket money. To a grown-up, modest, intelligent and well trained daughter, her mother can safely say, "Whatever is mine is yours also."

My reason for claiming that girls of every rank and condition should learn to be skillful and efficient housekeepers is, that when they become mistresses of a household, no matter how splendid their situation in life, they will need to exercise a keen supervision and a reliable judgment over their household management; and will need to know what they may properly require from their servants; from whom we find sometimes that too much is demanded, and sometimes too little. But she can not use such a supervision and judgment, without having before become acquainted with the details of housekeeping by actual practice in managing them herself.

Still less can the mistress of a family afford to be without this previous preparation, where her pecuniary resources are limited. Early training will enable her to manage a household even in difficult and narrow circumstances, and still to preserve enough ease of mind and leisure for intellectual pursuits. It is true that a shrewd woman may even without such previous experience in housekeeping, by means of a resolute will and steady industry, learn to fulfill her housewifely duties; but she can never avoid a preoccupation with them, and a

certain anxiety, the necessary consequences of her want of experience. This will prevent her from feeling that freedom and ease of mind which are indispensable for the further cultivation of some talents very important in the family, which she has probably somewhat developed before. A sense of pressure and solicitude about household matters will also operate to prevent her ear and her mind from being open to the interests of her husband; in whose vocation, and intellectual life, she ought to take a lively interest.

A Christian and educated housewife, whose judicious and patiently efficient industry proclaims itself in but few words, and still less in incessant restless hurry and scolding and unquiet; whose virtues and talents render her home a more pleasant and peaceful spot to her husband than any other; who trains up her children in Christian simplicity and piety, without any of the narrow and mistaken pietism which contemns and neglects any of the talents which God gives us;—such a housewife should be the ideal result sought for by female education. Such a one will unite the highest attainments in house-keeping and in elegant culture.

The Christian ideal of higher mental culture is something which so intimately permeates and inspires to the whole being, that it must be extremely difficult to set it forth; to do thus I shall however endeavor.

Culture is something not confined to any single points; and should begin in the earliest childhood. It is a great mistake to suppose that it can be given by any the greatest number of hours of instruction, although instruction is as indispensable to culture as are strings or keys to a good musical instrument. The instrument will produce no music, unless it has both the vibrating body and the whole structure for acting upon it.

A young girl may be instructed, even thoroughly instructed, to use a favorite mode of expression, on all possible subjects, without possessing a single trace of the higher grade of culture. This consists, not merely in development of understanding or memory, but of the feelings also; in fact, of the whole being; of all the sacred gifts of heart and head. It is evidenced by the whole life; by the atmosphere of the family; by the tone of conversation; by a certain faculty of observing every thing quietly, but of retaining and considering only what is good, what is proper. It moderates the passions, watches over enthusiasm, preserves the power of loving deeply and purely, and keeps alive the power of feeling true and pious enjoyment in nature and art. Culture, in young women, should never develop into learning; for then it ceases to be delicate feminine cul-

ture. A young woman can not and ought not to plunge with the obstinate and persevering strength of a man into scientific pursuits, so as to become forgetful of every thing else. Only an entirely unwomanly young woman could try to become thoroughly learned, in a man's sense of the term; and she would try in vain, for she has not the mental faculties of man.

In opposition to these sentiments I may be directed to learned ladies; a second-rate article, which, thank God, is extremely rare. Of the well-known Madame Dacier, Jöcher remarks, "She had acquired uncommon skill in Latin, Greek, and criticism." She edited many classical authors; translated, amongst others, Plautus, the "*Clouds*" and the "*Plutus*" of Aristophanes; and "then applied herself to Terence with so much zeal that she got up every morning at four o'clock, and labored at the work all the forenoon." According to this account, Madame Dacier was certainly a very "thoroughly instructed" lady. But she was just as deficient in delicate womanly culture as she was thoroughly learned; for otherwise how could she have translated those most indecent works?

Compare with her the princess in Goethe's "*Torquato Tasso*," who says, "I rejoice in being able to understand what intelligent men say. If an opinion is given about a character of antiquity, or his deeds, or if mention is made of any department of learning, which wide experience shows to be useful to mankind, because elevating in tendency, I follow with pleasure such discourses of noble souls, because it is easy for me to follow it."

Only compare such a princess with that other caricature of a female pedant, coarse, amidst all her learning. The princess was called a scholar of Plato; but so far was she from measuring herself with men, that she only rejoiced in being able easily to understand and follow the discourse of intelligent men.

High culture shows itself in the whole demeanor of a young woman, before she utters a single word about any thing which she has learned; while girls too often display the most utter want of culture, by the tactless manner in which they try to lug in their little bits of school knowledge. The studies of girls should be intended not to make them know much, and still less to make them as it were hang about themselves their scraps of knowledge, like lifeless and tasteless ornaments, trying to look splendid in them; but that they should thoroughly assimilate whatever they do learn with their whole being, and make it a well-chosen and valuable ornament of their minds. Such a mode of studying will secure them the permanent possession of what they learn, to their own pleasure and the pleasure of all

around them ; and as mothers, they will be able to communicate their knowledge to their daughters in the best way ; not merely to instruct them, but to cultivate them.*

VII. READING.

The entire opposite of an elevated Christian culture is that vulgar, frivolous perversion of it too often found in German families. I have already referred to the elements of this perverted culture, and have cited as one of the most pernicious of them, the wretched habit of reading romances of all sorts, just as they may come to hand. This habit produces a sickly voracity ; they read and read without being either satisfied or nourished by what they swallow down so greedily. On the contrary, it is a poison to them. If a classical work happens to stray by mistake into their circulating library, they take no notice of it. I have quoted the young lady who replied, when asked if she had read Goethe's "*Iphigenia*," "I believe so."

All readiness and activity of mind are, by such a course of reading, destroyed in girls ; and they fall into habits of constant absent-mindedness, which render them totally unfit to fulfill their household duties skillfully and prudently ; to live in simplicity and godliness. Serious and holy thoughts find no place in the mind of such a silly ill-read girl ; and indeed, how could they abide in the same mind with frivolous love stories and perverted, vulgar, fantastic notions about love ?

The miserable results of such wretched habits of reading should admonish us to watch carefully over the reading of our daughters, and to select for them, ourselves, and with conscientious care, books which shall promote our object of giving them a pure and noble culture, and one pleasing to God. On the subject of this selection, however, we find the most various and conflicting opinions. One eminent authority goes so far as to say that it is prudery to prevent girls from reading Boccaccio's "*Decameron* ;" while others pass to the opposite extreme of rejecting books which are entirely harmless. Among the latter are most conspicuous the fanatical and narrow-minded pietists, who, in order to be certain to avoid all offense, take offense at all and sundry books, scarcely excepting books of religious edification.

It is between these extremes that the proper rule of proceeding will be found.

But I shall hear it suggested that it would be well, if instead of this admonition, I should set forth a list of books which might safely

* On the relations between these views of culture and the Christian ideal of the image of God, see under the head of "Christianity in Education," in "*American Journal of Education*," Vol. VIII., p. 216—223.

be put into children's hands, I answer, that I have endeavored to draw up such a list, both by myself and with the aid of friends interested in the subject, and have failed. I very soon perceived, moreover, the reasons why it must of necessity fail; which I can easily explain by a comparison. Let it be attempted to prepare a list of selected articles of food, which shall be adapted to and healthful for the most various human constitutions. How many faults would be found with the choice made? One can not bear this, another that; one likes this, another that; many will miss their favorite dishes; and the doctor will prohibit many of them to the ill or sickly.

Quite similar would be the result of making out a list of books selected for reading. One and the same volume would be sound and nutritious food for one girl, and quite unsuitable to another; would be very pleasant to one, not at all to another. In short, I became convinced that so great are the differences between girls, in respect to age, character, talent, taste, and cultivation, that it would be totally impossible to make out a list which would be suitable for all. It must instead be a duty of intelligent parents and teachers to select books suitable for each individual child; and for this purpose to become thoroughly acquainted both with the children and the books.

In thus selecting, the following principles must be borne in mind:—

1. To consider, whether in the case of many books, they shall be put into the hand of the girl, to be read through by herself without any omissions, or whether they should first be read over by a competent person, and any unsuitable portions left out. This course would be beneficial, especially with many poetical masterpieces.

2. That in the family library there are frequently books suitable enough for men, but not at all for girls. They should therefore not be permitted to pick and choose for themselves from the whole collection, and still less should they be permitted to take out whatever books they may fancy from a circulating library.

3. That fashions prevail also in the reading world. Romances of chivalry had their day, and so did family romances, bandit romances, ghost romances, the "*Mysteries of Paris*," "*Amaranth*," and so on, *ad infinitum*. While these were the fashion, each was in turn eagerly devoured, and talked of in all circles; but how soon were they forgotten! And it was best that they should be forgotten. It would be well if girls could avoid ever occupying themselves with such mere transient, fashionable stuff, but should rather read over and over again the best standard works.

VIII. INSTRUCTION.

We have seen that a young woman may possess a great store of knowledge and skill, and yet not be "cultivated." The mental acquirement of girls are too often mere memorized stuff. Like Locke, their teachers have taken their minds to be originally nothing but a *tabula rasa*, a piece of blank paper, a canvass, on which the painter may represent many different things, the canvass remaining canvass, however, all the while.

Instruction should be of such a kind as to produce an actual vital assimilation of what is taught; so that all which is learned may be as it were mental food, be turned into flesh and blood, may serve to increase, strengthen and improve the whole being; in short, may promote the process of culture.

The culture of girls commonly requires a process of instruction entirely different from that of boys. The latter, with their tendency to unruliness, must early be subjected to discipline, reprov'd, accustomed to steady and persevering mental labor, to obedient subjection to a regular order of things. Such a training is required by the destined life and labors of a man.

But such a course of discipline would not be the best preparation for the duties of girls. I have known girls for whom their fathers had prescribed strict plans of study, with time-tables, &c., like those for a school, to which they were holden so closely that I believe they would scarcely have given themselves time during one of the prescribed exercises, to carry a sick brother a glass of water. No one could approve such a scheme as that.

But should there be no regular school-like plan for the studies of girls? Certainly; there must be order; but quite different from that of a school. Real order requires that every thing be done at the moment when that thing especially is needed. For example: if a pastor, profoundly engaged in reflecting upon his sermon, were summoned to a death-bed, he ought to leave his work on the spot and hasten to the sick man. The more sacred duties of his office must take precedence of all study.

This example may be applied to the whole life of a girl. A regular order for the daily occupations should be prescribed for them; but they must also be accustomed from early childhood to leave books or piano at any moment when necessary, to assist a smaller child, or to be of use to their parents. Such cases can not of course be provided for in the order of the day: they are the exceptions to the rule. But girls should also be trained, as soon as the exceptiona!

service is over, to return at once to books or instrument, and go quietly on with their studies as if nothing had interrupted.

School instruction is inferior, for girls, to home instruction, because it affords no interval for these services of love. And if the studying for several hours, one after another, is the one chief thing sought, then the school is unsuitable for girls.

Any one who disagrees with these views, and so highly estimates the importance of continuous study, uninterrupted by any thing whatever, as to consider such domestic services of comparatively little importance, may perhaps learn a better way of thinking from Goethe:—

“Early let woman learn to serve, for that is her calling;
 For by serving alone she attains to ruling;
 To the well-deserved power which is hers in the household.
 The sister serves her brother while young; and serves her parents;
 And all her life is still a continual going and coming,
 A carrying ever and bringing, a making and shaping for others.
 Well for her if she learns to think no road a foul one,
 To make the hours of the night the same as the hours of the day;
 To think no labor too trifling, and never too fine the needle;
 To forget herself altogether, and live in others alone.
 And lastly, as mother, in truth, she will need every one of the virtues.”

These golden words describe the most important object in the education of girls. They ought to learn to serve, in order that they may learn to love, not merely with the tongue and with words, but in deed and in truth. And the poet adds, by such serving they become able to rule; at least within the department where the authority belongs to them, if they are capable of exercising it.

Fenelon strongly objects to the plan of insisting upon strictly observed hours of instruction, like a school, and that for other reasons than those already quoted from him. “A too pedantic regularity,” he observes, “which insists upon continuous study without any intermission, is very injurious to girls. Teachers often affect to prefer such a regularity, because it is much more easy for them to do so than to exercise that incessant attention which takes advantage of any favorable moment.”

And in another place he thus describes the too regular kind of instruction: “There is no freedom nor cheerfulness in it; it is study and nothing but study; silence, stiffness, constant prohibition and threatening.”*

* Madame Necker expresses herself strongly opposed to an excessive number of study hours, and to too long lessons (1, 82). She says, “A quarter of an hour is the shortest time which I have allowed for one lesson; but Miss Edgeworth has limited many to five minutes and with good results.”

Fenelon requires an attention which shall seize upon every favorable opportunity. But such opportunities will occur far more often to a mother who teaches at home, than to a teacher who works in school; and the teacher, tied fast to his fixed hours, can not make the best use of such favorable opportunities. I shall further state other weighty reasons against educating girls at schools; after having first explained why it is so very desirable that mothers should as far as possible instruct their daughters at home.

It may be supposed that in our day, when girls are more than ever obliged to learn every thing school-wise, they would, on becoming mothers, find themselves able to teach all that they have learned, more especially as the very power, the art of teaching, is made one of the objects of their studies.

But I am grieved to say that I know more than one woman who has been instructed for years at a girl's school, and distinguished herself there, and yet has not been able to do any thing at all for the instruction of her children.

May it not be the fact that the very practice of learning in school is the reason why, when grown up, they find themselves quite incapable of teaching? Thus educated, they know of no mode of instruction except the so-called "methodical" one; and if they have themselves remained natural and simple, they will find that their whole nature revolts at the attempt to teach in the manner in which they were taught. That which in their teachers was so frequently a stiff pedantic manner, must, when imitated by a woman, appear the most ridiculous caricature. And what mother would desire to appear unnatural and ridiculous to her own children?

If a mother who was educated at school is desirous of herself instructing her daughters, she will commonly find it necessary to neglect and forget the methods which were pursued with her, and to seek to adopt for her own purposes a simple and artistic one.

There are but few studies in which a mother can not direct her daughters sufficiently. Some however require the aid of a teacher who possesses both capacity and experience, and whose long practical labors have made him acquainted with many means of lightening and abridging the work of study. This is especially the case in the first beginnings of some studies; such as reading, writing, and playing the piano.

But such considerations are by no means the only ones which mothers urge against undertaking to instruct their daughters. They repeat, "We have not the time; we have not the knowledge; we have no skill in teaching;" there is almost nothing which they have

not, except one thing whose deficiency they do not willingly admit—steady, persevering, conscientious good-will.

Many a mother says she has no time to teach her daughters, who nevertheless has abundance of time for useless and idle society, for the theater, for all manner of similar purposes. If they would only reckon up the hours which they thus waste in one week! But they lack the requisite knowledge. How easily might they acquire it, if they would only make use of a small part of the time they spend so uselessly; if more especially they would learn by the very work of teaching.* Do they lack skill in teaching? A sensible mother, who sincerely loves her children, who makes it a conscientious duty to educate them well, will, by God's help, soon discover the best method, a simple mode of teaching, not encumbered with artistic rules; and for which she can consult to good advantage with her husband, and with intelligent friends.†

If she is fully in earnest in her task, and still finds that her attainments are unequal to it, it will then be time enough to look for help.

The best auxiliary plan will be, where several families are like-minded and in sufficiently close social relations, for one of the mothers, say one who knows French best, to admit the daughters of the rest to the instruction which she gives her daughters in French; for another in like manner to take charge of singing; and so on.

If circumstances do not admit of this arrangement, a number of associated families might employ a private teacher, who might instruct their daughters either in one of their houses, or in turn at each, at fixed hours.‡

In addition to the reasons already adduced against instructing girls of the higher classes in the so-called "Institutes,"§ may be mentioned the following:—

When children from families of the same general character, standing and modes of thinking are taught together, none of them hears from the other any thing inconsistent with what he hears at home, or with his home impressions. But the case is quite different at the Institutes, even at the best of them. At these are found a collection

* "*Docendo discimus.*" "We learn by teaching."

† There is a great difference between modest mothers who distrust their own powers, and those mis-educated, over-educated, conceited women, who think the work of instructing their children far below their dignity; a business proper enough for mediocre, subordinated drudges, but not for ethereal and elevated minds. Such mistaken mothers are sounding brass and tinkling cymbals; they are destitute of maternal love. But they have their reward.

‡ I have not mentioned, because it seemed to me too self-evident, that every father ought to instruct his own daughters, so far as his knowledge, faculty for teaching, and leisure will admit; and that he ought to have a general charge of their instruction and education, and is more or less responsible for it.

§ Female boarding-schools.

of girls from families of the most various and even diametrically opposite views on religious and national subjects, and especially on matters connected with social life and amusements. Girls who at home hear little of frivolous worldly matters, such as balls, theaters, &c., here come in contact with others who describe these things to them as most delightful. It is no wonder that this arouses in them the most lively desires to attend theaters and balls, so that from that time forward they plague their parents incessantly with requests to go there, even to such a degree that the latter are often weak enough to let them go, to get rid of the annoyance.

Having thus spoken generally of the instruction of girls, let us proceed to the separate departments of it.

1. *Reading.*

The study of reading should never be commenced before the sixth or seventh year. The more determinate and surer methods which an intelligent and experienced schoolmaster will use will enable him to teach reading very quickly. A mother, however, will proceed very uncertainly in the business; will for that reason make the study very disgusting to the children, and by means of the consciousness that she is to blame for this, will herself become disgusted and impatient.

When this happens, the child will imbibe not only a distaste for learning to read, but against every thing that she may try to teach him.

But I do not deny to all mothers the ability to instruct in reading, for I myself learned to read from a most loving and patient mother.

When the children have learned to read, they no longer need a teacher; an intelligent, educated, pious mother will herself be very competent to conduct their further studies.

The question will now arise, What shall the children read? Shall it be the "*Children's Friends*," of which so many hundreds of thousands of copies have been issued, with their tiresome stories of good children and bad children, of good William and naughty Louis, &c.? Shall they at the same time commit to memory the verses in these books, such for instance as that most remarkable one composed in the name of one of these good Williams, by some foolish pedant well grounded in vanity, but thoroughly ignorant of his catechism, which begins thus:—

“ When I do what's right
And with all my might,
Nor ever disobey,
How happily I play!
Praise from my papa,
Love from my mamma—
Every thing I see
Loves and praises me.”

But I will devote no more time to these flat and tiresome books; most of which originated in the equally flat and wearisome period of "Nationalism."

At a later period, other writers, especially Wackernagel, compiled books based on the right principle, namely, that children should read only good matter and such as has a permanent value. This principle is the more important, because what children read at an early age impresses itself so much more deeply upon the memory; being almost indelible by the course of subsequent years.* We merely would not desire to fix in their minds any bad materials, or indifferent ones, which will grow there all their lives like ill weeds; which will be ever re-echoing there, like miserable street music which we happen to hear, and which afterwards continues to haunt us in spite of ourselves.

A second point to be borne in mind in selecting books for young girls is, that they should not only be good in themselves, but adapted to the age and character of these particular girls for whom they are chosen. I would not insist that they must understand all of the books. At the present day, as Goethe observes, the word "understand" is not understood. It is most commonly misused by school-teachers; and it can not be applied to most of the books which children particularly like. Ought they not to read Grimm's fairy stories until they understand them? They should not be put to read what they are able to understand, but what they like. And it is the duty of the mother to watch conscientiously that they shall learn only to like what is good and beautiful, and that they shall read only such materials; and that no bad books shall get into their hands.

If a child is interested in a book, the mother will be under no necessity to constrain her to read it. She will not, for instance, be obliged to take pains to confine her little scholar's attention while reading the story of Aschenbrödel; or the Little Brothers and Sisters. And it will be a great delight to the child to be able to read the stories which it has learned to like by hearing them often told; and it will be no more satisfied with reading them over and over, than it was before with hearing them told.

Besides Grimm's stories, much good matter for children has been written by Poggi. Such are also Speckter's fables, and many portions of Hebel, Schubert, Claudius and Uhland. I have already spoken of reading the Bible.

If we desire to make the children thoroughly dislike reading, we

* Fenelon's observation on this point is, "It must be remembered, that at this age nothing should be put into the mind which we do not desire to have remain there during the whole life."

can find no better mode than by overloading the simplest matter for reading with remarks, expositions, applications, &c.; by making them rewrite it in other words; and performing other insufferable pedantic school exercises. Natural good sense will protect a mother against such absurdities.

It may be inexpedient even to cause the children to repeat stories which they have heard or read. Fenelon says, on this point, with great good judgment, "Stories should not be told them as if they were lessons; the children should not be made to repeat them. Such repetitions, unless quite spontaneous, are irksome to the children, and deprive them of all enjoyment of the stories. If the child has a facility in talking, he will of his own accord tell over such stories as he likes best, to persons whom he loves. But such an exception should not be made the rule." The same principle might well be applied to the subsequent exercise of written repetition.

I have already spoken of the insufferable affected style of reading which is so unnaturally taught to girls. Against this style Fenelon appeared, as an advocate of a natural style of reading; and in an age and country where unnatural fashions were culminating, in vast periwigs, and in hoop-petticoats. We Germans ought to be ashamed of ourselves! Fenelon's observations are as follows: "All the advantage of instruction in reading is nullified by the practice of teaching children to use an artificial mode of emphasizing. It should not be attempted to make them read without any faults. The proper object is, to make them read naturally; as they speak. If they read in any other tone, their practice is worthless; it is mere school declamation."

2. *Writing.*

As soon as girls have learned to read, they may be taught writing; which should be done by a skillful teacher. When they have learned to write, they may begin spelling, which the mother can teach.

I agree with Bormann, that writing is really learned by reading; because it is mainly the eye which acts, by furnishing us the knowledge of the form in which the words must be written.

The mother may proceed by dictating to her daughters something which they have already read, in some good book; what is written may then be corrected by comparison with the book, and then written out clean by the pupils. The faults may be entered in a book by themselves. If the matter was at first written without errors, the transcription may be omitted. I know by experience that under this system, girls will make a progress that is daily perceptible; only continued patience is necessary in the mother. If the mother be not

herself entirely perfect in her spelling, she can still correct the writing, by a careful comparison with the print; which will improve her own spelling at the same time.

(*Later additional paragraphs.*) Since writing thus far on the subject of writing and reading, I have, for the first time, become acquainted with that method which begins with teaching writing, and proceeds from that to reading. By this method, the pupils at first learn to write all the single letters, from copies furnished them; then combinations of two letters, say of one consonant and one vowel, such as ba, be, bi, and so on, through the whole alphabet. Then follow combinations of three or more letters; and words. Thus writing and reading of what is written go on hand in hand. After thorough practice in such writing and reading, the written letters may then be compared with the corresponding printed ones, and then syllables, words and sentences; by which they will learn to read print without much trouble. This method seems to possess many advantages.

The first is, that it is adapted to the nature of girls, who like to be employed in something that occupies their hands, and are even too fond of drawing on the slate. Accordingly, they learn to write down and read off letters, words and sentences, by this method with much greater interest than if they were required in a more passive manner merely to recognize and read them from printed pages.

There are also some advantages in respect to spelling; especially in that this method makes it necessary to pay close and particular attention to each single letter. This is a point of great importance for the attainment of a correct habit in orthography; and the method itself brings up the correct spelling of many words.

It is an additional and not insignificant consideration, that this method of teaching reading will supply the place of others frequently used, which are unnatural and disagreeable.

3. *French. English.*

I have already mentioned the common mode of teaching French, and the purpose of it. Although I expressed disapprobation of both of them, still I did not mean that as society is at present constituted, it would be expedient not to learn French at all.

The mother might begin her daughter's instruction in French in an exceedingly quiet way, by saying two or three French words every day to them, while they are knitting or engaged in other employments, and by repeating them until they are well impressed on their minds. In this manner, the children would in the course of a year gather quite a valuable collection of words, which might afterwards be shown to them in print, and then copied by them; a process

which will acquaint them with the great difference between the German and French orthography. They may then learn the declensions and regular conjugations; then, by rote, the irregular verbs, and then they may begin to read French, and to translate it orally and in writing. For this latter purpose some good reading-book should be used, arranged upon the principle of proceeding from easier to harder lessons.

Oral translation should at first be as literal as possible, without reference to the German idiom. For instance, "Il me semble que je pourrais aisément répondre à cela," should be first translated:* "It me seems that I could easily answer to that;" and afterwards into the more idiomatic form, "It seems to me that I can easily answer that." If entire periods are translated together, and freely, without this direct attention to the sense of each word, the pupils will misunderstand many words, and substitute them for each other.†

The mother may read to the girls the beginning of some interesting story from the German translation; and may then give them the whole in the French, without any translation. Curiosity to know the sequel of the story will impel them to master the whole of it.

The question is frequently asked, What is the best method of instructing in German composition? I reply, careful translation from the French, and afterwards from the English, into good German, is the best exercise in composition. If the mother doubts her capacity to correct such translations, let her give lessons from some French book of which a good translation is at hand, which she can consult in correcting. Madame Necker recommends careful written translation as "practice in good style," and also as "practice in patience; a quality very likely to fail women in intellectual labor."

Besides translations from German into French, may be used also translations from French into German; which may serve to correct the translations of the class, by comparison.

When the girls have got so far in French that they can read an easy book without especial effort and constant use of the dictionary, they may begin English, in the same way in which they began French.

But what will be the result of this course in relation to speaking French? In my opinion, girls who have committed to memory French words, phrases, declensions, and conjugations, have secured a store of French words and idioms by reading and translating from French

* In place of the German translation, English is here given, of course, but the point will be sufficiently clear.—*Trans.*

† What I have said in another place respecting the absurd system of Hamilton, will sufficiently show that I am not here recommending it.—"*American Journal of Education*," Vol VI., p. 537.

books, and whose mothers have made them practice speaking French to a moderate extent, will necessarily speak it better than those who have only been practiced in talking over a narrow selection of phrases which embody no thought, but are merely the current conventionalisms of governesses.

In point of literature, England confessedly offers a much greater choice generally, and specially for girls, of valuable, morally pure and interesting books, than France. Among other advantages, it contains many books for children which are so natural and simple as quite to put to shame many of the childish and affected German books for children. For this reason, and for many others, I think that in case it were necessary to select but one of the two languages, French or English, for a girl to study, it should be English.

4. *Arithmetic.*

I have but little additional* to say on the subject of instruction in arithmetic. It will be easy for the mother to teach her little ones to count with beans, nuts, &c., and to instruct them in the rudiments of adding, subtracting and dividing. It would be my advice that they should avail themselves of the counters already described, in order to give the children correct ideas and readiness in writing numbers; and at the same time a thorough understanding of and readiness in managing the decimal system—a very important point. After this period however, it will be best to employ a teacher; not a pedantically methodical one, but a simply practical one, to give the little girls skill in those parts of arithmetic which they will need to use in after-life; especially in mental arithmetic. The degree to which a mother can be of use in this matter depends upon her attainments in arithmetic. She might in any event now and then give the girls a problem in mental arithmetic while they are sewing and knitting.

5. *Singing.*

There are now-a-days but few mothers who have not learned to sing while young, either at school or of a singing-master; but usually, as I have mentioned, only for the sake of making a good appearance in society. But the gift of song ought to accompany women all through their lives. Thus, Madame Necker says,† “If our love of art were perfectly pure, we should not lay aside music as soon as we find ourselves too old to make a show with it in society. It would continue to delight our children, to adorn our domestic life, to sanctify and cheer us, and to encourage and support us even if left to solitude.”

I have often heard young mothers say, “I sung much when I was

* “*American Journal of Education*,” Vol. VIII., pp. 170—182.

† Part I., p. 160.

a young girl, but not such songs as I can sing with my daughters." And it is very true that opera airs, and the artificial affected songs now taught to young ladies, are quite unadapted to children, and that it would be altogether unfortunate to have them introduced into the nursery. If such music is the only kind that the mother knows, she should first buy a good book of church chorals, arranged rhythmically, because children will learn and retain such more easily than un-rhythmic ones. Out of this book she should herself learn such hymns as are best for family worship, and should practice them with her children, so that she and they can sing them at morning and evening along with the whole household. Then let her procure a good collection of songs; say the "*German songs for Young and Old*,"* and make use of that. But she should in any case beware of being betrayed into the use of any of the foolish and feeble songs about youth and virtue, which are got up expressly for the young.

The only singing practice proper for little girls, is simply the natural singing together of easy pious or joyous songs,† without any methodical instruction at any prescribed time. They should not be made to sing any longer than is pleasant to them. If any one of them happens to be destitute of a musical ear, and to take no pleasure in singing with the rest, she should be allowed to be silent, so as not to interrupt the rest. She should, however, commit to memory the words that are sung; which the singers will remember without that by repeating them in singing; and it is probable that after a longer or shorter time, she will join in with the rest. If the children fail in singing the first time, they should by no means be laughed at; for practice will remedy the defects. Nor should even very little children be prevented from joining in with the others; and they will be found surprisingly soon to master the melody. It is "out of the mouths of babes and sucklings," that, we are told, God "hath perfected praise."

If the mother is quite incapable of teaching her children singing, *i. e.*, unable to sing a melody, the father, or some other member of the household, or some female friend, should be induced to sing frequently with the children; for if they are to develop into highly cultivated adults, they must not be allowed to grow up without singing.

Scientific instruction in singing should never be given to girls until they are grown up and well developed physically. If it is done

* "*Deutsche Lieder für Jung und Alt*," Berlin: Reimer, publisher, 1818.

† "*Old and new songs for children, with cuts and melodies, (Alte und neue, Kinder-Lieder. Mit Bildern und Singweisen)*." Edited by F. Poggi and R. von Raumer. Press of Gustav Mayev, Leipzig I would recommend this little book, were I not one of its editors.

before, there is danger of important injury to their health, and also of permanently destroying their voices. There may be some exceptions to this rule, but they do not vitiate it. Grown-up girls, if their health is sound and their lungs strong, may now receive instruction in singing, of an artistic character, but it should be according to the rules of the old school. Unless the mother is entirely capable of superintending this part of their instruction, a skillful teacher, male or female, should have charge of it. It is to be hoped that in every town there may be found at least one such teacher who instructs in the old style, without being infected by the vicious modern method. For the really good training of her voice, a girl should first for a long time sing scales, learn to hold notes, to make runs and trills, to take intervals accurately, &c., until thoroughly able to execute them; all before being taught any difficult song or *aria*. It is only by such practice that the singer gains entire control of her own voice, and learns to manage her breath and voice both, so as to avoid any risk to her health through too much singing. Nor can a truly scientific method of vocalizing be attained without such a symmetrical course of training as this; nor that entire certainty and freedom in execution, without which it is impossible to give herself up to the singing so as to fully apprehend and give the expression.

Many directions for vocalizing may be given by the teacher; for instance, on the mode of increasing or diminishing the volume of the voice; and of always beginning with a soft low tone. This was the practice of the old school; while the present practice is, often to begin with a mere scream, and of delivering the upper notes in an actual yell. But the most essential quality of good vocalization is, that the heart shall be really in the music, and that the singer shall herself really feel what she sings, or if her song be descriptive or narrative, shall entirely sympathize with it. This principle also makes it evident how necessary it is that the text and music of songs should be noble and good in character; for no one would wish his daughters to be singing frivolous meaningless songs with all their hearts, or to put themselves into full sympathy with such. The poor girls, whose practice, commonly, only teaches them to produce an entirely false "effect" in a purely mechanical manner, are fortunate that it is so; that they merely utter the sounds, without feeling or intelligence; without being in the least moved by the matter of what they sing. I once heard a young lady, in a large assembly, sing a new song with so much feeling as to produce in me much sympathy for her, that she should so young be able to enter so fully into the feeling of so passionate a poem. But as I had not understood a single word of it, I

afterwards asked her the substance of the text. She replied that it had only been given her to sing in company, and that she had not had time to trouble herself about the meaning of the words. But is it then right to train human beings as one would train a bull-finch, whose nature it is to learn to whistle tunes without inquiring into the words?

A sharp distinction should be made between the scientific instruction in singing, which girls should only receive after they are grown up, and their previous merely natural practice, during which they only sing songs without any methodical training at all, and learn to sing correctly by listening to and following with the correct singing of others.

But however desirable it may be that all whose voices are even moderately good, should pass through the good old-fashioned course of instruction in singing, it is still far better that they should sing by rote all their lives, than that they should be given over to a perverted method. But if confined to such mere natural singing, the pupil should from the beginning take every opportunity to hear good singing, with a view to her own improvement.

A really good method of teaching singing ought no more to destroy, by its study and practice of great masterpieces, the power of enjoying the simplest good music—even popular songs—than the reading of Faust ought to destroy the capacity for enjoying Goethe's minor poems. The greatest singers—Catalani for instance—have produced their most powerful effects by singing "God save the King;" as has Jenny Lind by her national melodies.

6. *Learning the piano-forte.*

Much of what was said of singing, applies to instruction upon the piano-forte; although in one respect they differ essentially. Singing is innate in a well-organized person, as much as in the birds; thousands of people sing merely by instinct; the proportion of really trained singers is very small. But playing the piano is born in nobody. Each person must learn it separately, as if it were a foreign language; while singing is a classified mother tongue.

Playing the piano is therefore an art, in every sense; and should not be studied at too late a period. This instruction the mother should not give unless she is not only a thoroughly trained and skillful player, but also very patient. Otherwise, it will be much better to employ as capable a teacher as can be found.

There quickly appears a difference amongst scholars on the piano. Some are not satisfied with moderate acquirements, but must proceed to studies of a higher grade; while far the most girls, as well as their

parents, contemplate a grade of attainment much lower, though still very desirable. Indeed, the circumstances of the case usually confine them within these limits, as will be perceived on a moment's consideration of the sort of instruction on the piano which can be had in the country, and in small towns. In such places it is exceedingly rare to find an instructor skillful enough to teach his pupils to execute the more difficult class of compositions; and the piano is taught mostly by the school-teachers. It is much to be desired that these should be instructed in a good style of piano-playing, that their taste for good music should be developed, so that they shall afterwards be able to teach to play good music, and no other. The kind of music to which I here refer is only the simplest; especially chorals, popular melodies, accompaniments to songs, &c. Ability to execute such music upon the piano, will enable a young girl to give pleasure to her parents and brothers and sisters, and in after-life to her husband and children; and to cheer, adorn, ennoble and sanctify her home.

Opportunities for a higher musical culture are commonly to be found only in cities. But what is learned even there, no matter with how much application and expenditure of time, is unfortunately too often only that mere heartless skill in execution of which I have already spoken. The most important point therefore is, to find the right sort of a music teacher. The model of such a teacher, among those known to me, was music-director Forkel, of Gottingen, an enthusiastic member of the school of the great Sebastian Bach, and who had enjoyed the personal instructions of his son Emanuel Bach at Hamburg.

Forkel's biography of Sebastian Bach contains a chapter on the proper mode of teaching to play the piano-forte. "Bach's method," says Forkel, "was the most instructive, efficient and certain, that ever existed. First he taught the touch. For this purpose he made beginners during several months play nothing except separate exercises for each finger of each hand, with special reference to a clear and definite touch; and for this kind of practice he wrote six little preludes, and six duetts."* "After this, he gave his pupils more important pieces by himself, such as would best exercise their powers. To help them at difficult points, he used the judicious plan of playing the whole piece over to them; saying, 'It should sound so.' It can scarcely be imagined how many are the advantages of this plan." The pupil, "whose business it is to reproduce the whole piece together, in its true character," thus acquired an ideal which he applied

* Published by Peters' of Leipzig.

all his industry to endeavor to equal. The method was exactly the opposite of that used by so many teachers, who merely show the pupils how they ought to execute some single passage before they comprehend the whole character of the piece, and thus the style and execution appropriate to it; although it is this understanding of the whole which is indispensable before the proper mode of playing each part can be understood.

These remarks, it is true, do not apply to those very common pieces of music which consist of nothing but a patchwork of musical scraps and phrases; but only to those which have a symmetrical character, and distinct musical physiognomy. This is the character of Bach's compositions; which we like better the oftener we play them; just as one whom we love, becomes more and more beloved by longer intercourse. When we like a piece of music in that way, when we come, so to speak, into a personal relation with it, we shall execute it with a sort of pious feeling, which will scrupulously avoid whatever may injure its beauty or turn it into caricature.

It would be fortunate if music teachers could be found, capable of instructing in Bach's manner. Could this happen, the compositions of that great master might again come into vogue; compositions profound and full of feeling, but still pure and holy, and without a trace of ungoverned fleshly passion.* Such music is most appropriate for girls; whereas precisely the reverse is true of that very common mawkishly sentimental kind of music which is either full of an impure fire, or quite burned out.

I need not observe that I do not mean that girls ought to play nothing at all except Sebastian Bach's compositions. The especially important point is, that they should not only be thoroughly instructed from the beginning, but that they should never at any time be allowed to play mere musical nonsense of a low grade. Bach's preludes and "inventions" for beginners have however a permanent artistic value.

The rule that children shall never read any thing of a bad or vulgar character is entirely applicable to music. If they are always brought up to hear, sing, and play only good music, as they grow up and their sphere of knowledge increases, it will become a second nature to them to avoid promptly whatever is disagreeable and bad, and to love what is beautiful and good; no matter in what form. They will find pleasure in the works of the great masters however diverse; in Palestrina and Lasso, as well as in Händel and Gluck; and so they will in

* That able musician, Mendelssohn Bartholdy, had the greatest admiration for Bach; and it was by his means that Bach's Easter music was performed in Berlin in 1828, after remaining in silence for a hundred years since 1728.

the simplest popular songs. The case is far otherwise with those very numerous persons who have been so unfortunate as to hear and practice and get accustomed only to bad music. It is very uncommon and very difficult for such to purify their habits, to acquire new ones, and to turn back to what is pure and beautiful. Such an exception was a student who came to Forkel to take music lessons. Forkel, learning that he had already played a good deal, required him to execute some piece on the spot. The young man did so, evidently thinking that he succeeded excellently. When he concluded, Forkel said, "See here, my dear friend, you will have to begin by forgetting every thing that you have learned so far." Without being discouraged, the young man set to work and studied diligently under Forkel, with good success. This story I have from his own mouth.

Most of what I have said of singing and piano-playing is the result of my own experience. If there are any points which seem objectionable, I refer to the most excellent and never sufficiently to be recommended work of Thibaut, "*On Purity in Music (Ueber Reinheit in Tonkunst)*;" a book which has had an incredible influence towards a renewal of the recognition and practice of good music, and the disuse of bad.* The editor of the last edition, Ministerial-councillor Bähr, takes special notice of the fact that Thibaut, by the term "Purity in music," meant by no means merely technical purity of touch or expression. "What he meant," says Bähr, "was something quite different, much loftier, I might even say a moral quality." For this reason he was "the irreconcilable enemy of every thing shallow, vulgar, unhealthy or flippant." I can not deny myself the satisfaction of quoting the following paragraphs from Thibaut:—

"Music has one particularly dangerous quality. In a painting, if there is a limb wrongly drawn, or an immoral character, the correct eye finds at once a reason for criticism, or modesty turns aside the gaze, at least in the presence of others. But into music can creep every thing impure, spasmodic, immoral; and thus the whole attention may be unreservedly bestowed upon what, if represented by words or the pencil, would for decency's sake be at once repelled. Therefore it is that the work of our composers and musical virtuosos is easy. Tendencies to nervous weakness, to wildness, extravagance, vulgar pleasure, afford only too many strings which easily respond to

* In 1851, eleven years after the author's death, the third edition of this work was published. When it first appeared, in 1825, its interest and value were much increased to me by the fact that ever since 1804, I had been in the habit of hearing sung, with pure minds and pure voices, in the house of my late father-in-law, Chapel-master Reichardt, the very masterpieces so much praised by Thibaut, of Palestrina, Leo, Durante, Händel, &c.

the touch, and even the connoisseur often has to listen in silence to the exclamation of "Oh how beautiful!" for very shame, because the correct explanation of the reason of the phrase could not decently be fully stated. And if the public is played well into such habits of vulgar and evil preferences, this bad taste, once confirmed, will despotically govern artists."

"Plato has spoken against the corrupting tendency of music. But what would he say, if he should hear the musical torments that we have now-a-days to endure; the compositions botched together in so many unnatural ways, so extravagant in softness, in wildness, in amatory expression, and yet so seldom possessing the real musical fire!"

"In music, as at present usually employed as a department of culture, we find everywhere ornament, a mass of wonderful difficulties, overloaded decoration instead of feeling and clearness; but very little material for encouragement or pleasure, except in the way of gratifying vanity or artistic self-conceit. Thus it happens that our young women, as soon as they are mistresses of a home where they can command their time, joyfully throw all the so-called 'scientific compositions,' which they have learned, to the winds."

"Music only shows itself divine to us, when it carries us out of ourselves into an idealized state of susceptibility. A musician who can not accomplish this object is nothing except a mere mechanic, or hod-carrier."

"The favorite 'effects' are for the most part only evidences of ignorance, or of a cowardly desire to serve and please every body. Nature does not proceed by leaps; and healthy feeling does not stray about at random, nor proceed to extravagance. The favorite symphonies, fantasias, pot-pourris, and so forth, are therefore often the most ridiculous things in the world. There is a mysterious introduction; then a sudden volley of explosions; then an equally sudden silence; then an unexpected waltz movement; then, under the natural excitement of such a passage, an equally appropriate transition to a profound and melancholy movement; then, all at once, a furious storm; out of the very height of the storm, after a brief pause of expectation, a passage of light and fanciful character; and finally, a sort of hurra, which brings the whole piece to an end, with a great shriek of exulting love. It is true that such stuff pleases, but after what manner?"

"But the worst evil of all is, that under this favorite name of 'effect,' the most destructive poison is inculcated; namely, this very same convulsive, perverted, extravagant, delusive, crazy folly, which

stirs up every thing evil in the mind, and tends to the ultimate utter destruction of all true musical sense."

"If many of our virtuous maidens knew what it is that they so often hear, or sing and play, and for what purpose one of our most favorite performers has directly and most cunningly contrived many of his compositions, they would be sickened with shame and mortification."

"It is not enough to astonish with agility of finger, nor with executing in a wonderful manner what amounts to nothing at all. What should be done is, to make our sense of hearing a medium of enrapturing us, without regard to the existence of mechanical difficulties in the music which gives the delight. It may perhaps be pardoned in traveling exhibitors of musical skill, that in order, in their rapid transit to choose what shall be most certain to produce an effect on their audience, they execute their most extravagant music, and almost nothing else; for in like manner the public would much rather see a rope-dancer stand on his head, than to see him represent the most ideally beautiful attitudes by easy and graceful movements. But it is a bitterly provoking thing that everywhere time, money, and health, are squandered in learning what is empty and without significance; and that in the struggle to execute capriccios, the art of executing simple music in a spirited, tender, and song-like manner, has almost entirely disappeared. There is but one encouraging circumstance, namely: that at the end of the period of childishness and caprice, these tormenting studies are usually given up; and that those who have been fortunate enough to learn in their youth affecting, pleasing, elevating melodies, continue to take the greatest pleasure in them even to the extremest age."

I sincerely hope that these extracts may induce some who may not have read Thibaut's book, to peruse it.

After Thibaut, one of the most useful authors in this department, is Winterfeld, who devoted fifty years of persevering labor to the attainment of the most distinguished musical culture and of the most comprehensive historical knowledge; and whose valuable historical writings have thrown new light upon ancient masters and masterpieces, some of them entirely forgotten; such for instance, as the talented Eckard. It is to be hoped that the nineteenth century, which with a few exceptions is so poor in productive musical composers, may apply all its powers to the reproduction of those ancient masterpieces, and to their adequate execution.

7. *Pictorial Art. Drawing.*

We have already laid it down, that girls ought, as much as possible,

to be kept from hearing, reading, singing, or playing any thing ugly or bad. To these we add, that they should not see any such thing. It is no doubt impossible to preserve them entirely from it; but we should not fail to do all that is possible to this end.

Thus, we should never have in the house any ill-favored or ambiguous or licentious pictures; but should adorn them, so far as our circumstances will admit, with pure and beautiful ones; such as will by their daily presence exert a quiet, ennobling influence to an incalculable extent. Parents who care for such a purpose, should spend much of the money which they lay out for costly furniture to adorn their rooms, for those much nobler decorations, good engravings and lithographs.

Children are very early given picture-books, in examining and illuminating which, they find an absorbing amusement. In former times, the pictures in these have usually been extremely ugly, even so that it could scarcely be perceived what they represented; although the vivid fancy of the children seemed to find no difficulty in deciphering them. But at the present time, we owe heartfelt thanks to the artists of Munich, who have not disdained to publish beautiful picture-books. These contain correct and vivid representations of beasts, Alpine scenery, hunting, trades, heroic scenes, &c.; and the most laughable illustrations of stories, like Münchhausen's "*Travels*," "*The Father, Son and Ass*," &c. The pictures of Richter and Poggi are exceedingly well adapted to children; their delightful, innocent little boys and girls; Prince Eugene storming Belgrade, drinking Reutlinger wine, &c.

If there are any remarkable works of art at their places of residence, such as churches, palaces, galleries of paintings, &c., girls should be from an early age accustomed to find pleasure in them. I know from my own experience how deep and permanent are the impressions which works of art make upon children's minds. Born in Wörlitz, where the beautiful gardens of the Duke of Dessau are situated, I was, while a boy, there in the habit of seeing in the castle and other buildings, fine pictures, engravings and statues; and now in my age, they all yet remain vividly before my mind. And this habitude of my juvenile years was in the nature of a preparation for my subsequent studies of the more important galleries of pictures and antiques.

When seeing works of art for the first time in the company of girls, it is best to avoid most carefully giving a too hasty opinion upon them. A silent and unaffected examination of the objects,

"Forgetting itself and the world, and living in the works only,"

is the only proper mode of observing them ; and this admits of no interruption. All have heard that affected admiration and that most pompous and foolish assumption of criticism, which are so frequent in picture galleries. Ladies look at Raphael's great masterpiece without either love or devotion, and only long enough to think out some opinion upon it, which shall be diametrically opposed to that of all intelligent judges, and thus more piquant ; though it is in fact, both stupid and stupidly bold. They observe, for instance, "That foot is quite mis-drawn. Is that meant for St. John ? For my part I never could see why they make such a disturbance about Raphael. I think Van der Werf is much superior?" I am not exaggerating ; such opinions are really heard.

I do not of course mean that old and young should all be silent about the works of art which they see. It would be well to express without restraint the first impression which they make upon the mind. But to give a critical judgment upon them is quite another thing. The sonnets of A. W. Schlegel, describing works of great masters, are much better adapted to the minds of girls, than critical judgments upon the same paintings. The lives of such painters as they like will also have the greatest interest for them.

In discussing music, I spoke not only of hearing, but of singing and playing. To this active participation in music, drawing corresponds in art. Drawing, as practiced by girls and women, commonly consists in nothing except copying pictures. I knew a young lady to occupy a whole half year in copying one landscape, the original of which, which her own work did not equal in value, she could have bought for a thaler.* An English proverb says, "Time is money." This lady—to hazard a criticism of a somewhat unchivalric nature—had earned, by six months' labor of the most drudging kind, almost one thaler. But this time, wasted in useless mechanical copying, she could certainly have expended to better advantage upon her housekeeping, her children, and their education.

But what is the object of the study of drawing by girls ?

First of all, one which will probably be little valued by the over-educated, they should learn to draw for domestic purposes. They should be able to sketch the chair which she wishes the cabinet-maker to make ; to draw for the mason a sufficient plan and sketch of a cooking-apparatus of which he knows nothing, but which has been proved successful elsewhere ; and so on. She should be able to draw birds, dogs, riders, houses, &c., for the children ; who will take the greatest pleasure in observing how it is done, and in trying to

* About seventy-five cents.

draw the same thing, or others. Girls need to know how to draw flowers and embroidery patterns; and, if they have a talent for it, to sketch beautiful landscapes, or buildings, when traveling.

Instruction in drawing ought, according to these views, to aim at securing to the pupil the habit of clearly and correctly seeing, and truly and elegantly representing what she sees; it must train both eye and hand. The teacher should use special pains with drawing after nature; and should treat copying rather as a mere technical practice. Such instruction, and above all the serious and careful study of the works of great masters, will train girls to a love of what is beautiful and good, and to a dislike of what is ugly and bad. This love and dislike will have a great influence even upon their daily domestic life. Their eye, well trained, will instantly detect everything inappropriate or tasteless, and every wrong arrangement about them; and will not permit them to rest until the faults are corrected.

8. *Natural sciences.*

I have already discussed the modes in which these should not be taught, which, however, are unfortunately those most commonly practiced.*

Botany—if the term does not too strongly imply the methods of the schools, and the masculine mode of study—is peculiarly adapted to girls. Science, I have already observed, seeks principally truth; but art, beauty. While the botanist endeavors to establish as correctly and completely as possible the idea of the species *Rose*, the painter tries to present his ideal of a *Rosa centifolia*; and the poet leads us, through the gardens of poetry, to roses of unimaginable beauty.

It will be evident to every one, that girls should be trained much more in the artist's direction than in that of the botanist. This is indicated by their own tendency to paint and embroider flowers. It seems quite unnatural to every man of plain sense, to see teachers of girls, with a pedantic and wooden stiffness which makes them look as if they thought nobody but themselves had a thorough knowledge of the subject, pulling roses and lilies to pieces, even to their most minute parts, and making their pupils describe them in the technical terms of the botanist. Girls ought not to look at flowers with the destroying eyes of the botanist, armed with his microscope, but with the eyes of a sensitive flower-painter. It is that love of flowers which makes girls cultivate them carefully, and watch their growth from germination to seed-gathering, which is delightful.

Similar to this love of flowers, is a girl's kindly cherishing of domestic animals; lambs, fowls, doves. And here, in like manner,

* *American Journal of Education*, Vol. VIII., p. 123.

they should not be confined to descriptions of genera and species, but should acquire a detailed personal knowledge of all these animals, their peculiarities and family habits. Caged birds in towns, however carefully cherished, are but a poor substitute for the domestic animals of the country, and the free nightingales and finches and larks of the woods and fields.

The sober, strict, and mathematically governed realm of the mineral kingdom may at first seem quite unadapted to girls. But we forget that the wonderful beauty of the precious stones are the delight of their eyes; and that work in metal also pleases them, not only by beauty of form, but by the attractive brilliancy of the substance of the metal itself.

9. *Instruction in history.**

History is taught, as we have seen, even in educational institutions for men, on very different principles; and it will be even more difficult to come to a general agreement upon the mode most proper for teaching it to girls. Care must be taken not to lower the dignity of history, by making it the subject of a mere leisure conversation; and also, to avoid all that pedantic character so repulsive to the feminine character. A course of historical instruction which treats with equal indifference of all people's and all periods, carries the pupil straight on through thick and thin, and then at the end requires that all this waste stuff shall be preserved in the memory, is out of the question for girls, and indeed for boys either. But further: while every man who pursues any of the more elevated callings, must possess just such a thoroughly impressed knowledge of the career of the most important nations, it would be a great error to require the same of a woman. To represent the different characters of the three chief periods of the Peloponnesian war, may be a very proper subject for an examination for a doctor's degree, and might not be too difficult for the graduating examination of a gymnasium, but as a theme for a composition by a girl, it is an absurdity. And this is not a mere imaginary example; it is a case which actually occurred in a German institution for girls, not long ago.

Such preposterous conduct would rather tend to make an intelligent man inclined to exclude the study of history altogether from the education of girls. At least, he would be quite ready to subscribe to the general views of Immanuel Kant, one of the closest German thinkers on female education, who says: "Never a cold and speculative instruction; always cultivation of the susceptibilities; and this

* On instruction in geography I refer to the previous chapter under that title; which applies both to boys and girls, with a few easily distinguished exceptions. Vol. VIII., p. 111.

as far as possible in a mode adapted to the characteristics of the sex. Such a kind of instruction is rare, because it requires talent, experience, and a heart full of feeling; but women may well dispense with every other kind."

Whatever differences of opinion may prevail respecting what education is appropriate for the female sex, it will certainly be admitted that the cultivation of the susceptibilities, of the feelings, of the sense of what is great and noble, should be the end proposed in the education of girls; and not cramming the memory. They receive no advantage from mere forced impressions on the memory. It would be much better to restrict the matters to be learned by rote, to some twelve or twenty names and dates, between which all the remaining historical knowledge acquired might arrange itself as if between boundary stones. An error in chronology would make a much better appearance in a modest and retiring girl, than would the least appearance of an assumption of historical learning.

With regard to the mode of communicating the historical knowledge which, according to the foregoing views, is proper for female education, it would be very easy to decide what it should be, if the talent for judicious, true and vivid narration were actually so general as it would seem to be, by the tenor of many school programmes and similar writings. But as a thorough investigation will show that the case is quite otherwise, it will be well to fix upon a few books to be used as a basis of instruction. What has already been said will sufficiently indicate that universal histories and compends should not be of this number. However excellent they may be—and we have some excellent ones—the method which they follow is not adapted to girls.

Biblical history, and its collateral studies, pertain to religious instruction. Of the other departments of history, the German history should occupy the first rank, and Greek and Roman the second. As for a German history in all respects satisfactory, it is perfectly well known that no such exists either for men or women. The larger work of Kohlrausch gives a lively and vivid general view of it. For Greece and Rome, I would recommend the appropriate portions of K. L. Roth's "*Compendious View*."* And in connection with both, appropriate portions from our most eminent historians should be read. For the most ancient nations, the Egyptians, Hindoos, Persians, very little time will suffice. And in like manner the subject of Greek and Roman mythology should be restricted to the most indispensable portions. The Greek legends may be learned from Gustav Schwab's

* "*Gediegener Darstellung*."

well-known work. After this, they would listen with interest to Homer, so far as he is suitable for them. And they might somewhat in the same way be made acquainted with our own *Nibelungen Lied*.

It is of course of the greatest service to young girls, to be familiar with the lives and characters of the chief models of female excellence. But if they should be so unfortunate as to become influenced by the excessive compliments which many well-meant books on these subjects are accustomed to heap upon the female sex, the benefit derived will be less.

10. *Manual labor.*

A child should never be entirely unemployed, even during the first five or six years of its life. As long as a little girl keeps herself busy in her various plays, with her dolls, in looking at pictures, in running about, &c., so that she is never without occupation, and does not say "I don't know what to do," so long she should be allowed to play just as she pleases, except that she should be prevented from playing such games as may be dangerous either to body or mind. But as soon as the mother observes that continual play is no longer satisfactory to the little girl, that she is sometimes at a loss for occupation, she must contrive all manner of little occupations for her, to prevent any such vacant moments. She might give her a horse-hair and some beads, not too small, and of various colors, and show her how to string them; or she may draw on a card a star or a cross in pencil, then pierce the pattern with holes with an embroidering needle, and show the child how to sew through them with different colored threads. Such easy kinds of work, of which there are many, and which permit the children to see clearly what they are doing, afford them far more pleasure from their industry than mere knitting, which is commonly the first thing taught, and which soon wears out children's patience, and hurts their little fingers. It will be better to let the knitting wait a little longer, until such other occupations as those just mentioned have somewhat developed the habit of industry. These occupations, it is true, do not produce any valuable result; they only keep the little ones employed.

All girls, of whatever condition, should learn knitting and sewing. When a little older, they should be taught to sew all sorts of linen with entire neatness, and to knit their own stockings well. If girls gain skill in these sorts of work, they will by that means become capable of artistic and ornamental kinds of work, which they should however be only permitted to practice in the intervals of their ordinary domestic labor, and as a reward for industry. It will be

found that girls will take much more interest in learning how to do ornamental work, when it is allowed them as a recreation from their regular sewing, than when it is required of them.

No general rule can be laid down for the time of beginning to teach handiwork to little girls; because they develop so differently. But to go without learning to sew and knit should be as much out of the question as to omit learning to read.

If a girl should appear to be destitute of any natural liking for female handiwork, the attempt should be made to teach her to like it by showing her how to make clothes for her dolls, and afterwards by employing her in making them for the poor. Poor children might be brought to her, or she might be told of such who need clothes, and she might be made to understand that by making the necessary effort, she might help them. Then her mother might cut up old shirts and other garments, and let her daughter help make them up into others for the poor children. She might also teach her to knit stockings for the little feet which she sees naked.

As another means of giving a little girl a taste for sewing and knitting, she might be influenced by a wish to prepare something pretty for a birthday present to her father. If the plan succeeds, pains must be taken to keep up her satisfaction in work of the kind, especially by taking advantage of any further occasions. In such management, each child must be influenced as its peculiarities may require.

It would be desirable that girls should acquire enough skill in work of an artistic kind, to be able to do whatever pertains to the tasteful adornment of a room or a dress; but such work should not consume too much time or money; and must not be pushed to too high a degree of artistic accomplishment. It has often grieved me to see a poor child straining its eyes and sitting bent over its embroidering, to work with her needle a little landscape or a picture of the Madonna, of which a much better copperplate could be bought for less money than the silk cost for the embroidering. And my feelings have been the same to see girls working long and hard with a crochet or netting needle, to make a few yards of lace which could be bought much cheaper and prettier at the shop.

It is very useful to have girls learn to make their own clothes, if only that they may afterwards be able to teach others to do so.

I have already stated how a more intellectual employment may very well be combined with such mechanical work.

IX. EDUCATION OF GIRLS IN THE COUNTRY.—EDUCATIONAL INSTITUTIONS FOR GIRLS.

What has been said thus far, has had reference principally to families living in a city. The condition of families in the country is very

different. A teacher competent to instruct little girls in their elementary studies can be found in almost every village; but there is more than one reason against sending girls to a village school.

If a mother is at the head of a very large country household, without servants enough to enable her to find time to instruct her daughters, or if she is actually not competent to the task, I would advise her to take into her house some educated German young woman, as her assistant in the education of her daughters. But even then she is, as a mother, bound to take as large a part in the work as is possible. In a very respectable family known to me, such a German governess was at the same time trained by the mother to the duties of a mistress of a household; and was, indeed, on the footing rather of an oldest daughter than of a governess.

It is always better, unless there is some absolute necessity in the case, to employ such a female assistant at home, than to send daughters to girls' schools; which takes them away from the domestic circle where God meant them to live, and out of the sight of their parents. I may repeat here what I said in regard to infant schools: "The bond of affection which connects the members of a family is at the present time continually slackening. Father, mother, children, each have their own views, and follow their own paths. Every thing which aids in this unfortunate dissolution and scattering of families should be carefully avoided."

I shall be asked, Do you then reject all schools for girls? No; it is unfortunately true in too many cases that a substitute for home education must be had; and that it is therefore absolutely necessary to intrust a daughter to such an institution. And any one having a moderate acquaintance with such a necessity will be ready to thank God for the existence of those noble women who are willing to devote their whole lives to the laborious task of, as far as possible, filling the place of their mothers to orphaned daughters. There is a like necessity where the mother is very ill and suffering, or disordered in mind, and the daughters not grown up. In such cases, Christian institutions for the poor lost children are of infinite advantage. By this I mean, institutions so penetrated and sanctified by Christianity as every household ought to be; without misusing their religion merely as a signboard, or teaching their pupils a gloomy seriousness of demeanor and pietistic habits of speech, as if these were the signs of true faith.*

While therefore I gratefully acknowledge the necessity and the

*Such an institution is the well-known and excellent one of my dear friend, Auguste Teschner, at Waldenburg, in Silesia.

blessing of good schools for girls, as a substitute for home education, I must still repeat—

“Only so far would we adhere strictly to principles and rules, especially the fundamental laws of divine and human order, as to avoid the danger of becoming so estranged from them and accustomed to our substitutes as at last to think these absolutely right. We would rather use all possible means to aid in re-establishing those ancient and obsolete laws, and a pious and honorable family life.”

X. RECREATIONS.

When I wished that every mother might devote as much of her time as possible to occupations with her daughters, I could not of course include those ladies who are accustomed to spend their mornings in making and receiving visits, and several times a week to attend tea-parties and other such assemblies; so that regard must be had not only to the time consumed in these employments, but to that expended in the toilette (I designedly use the French term).

Such a mother wastes the hours which would be pleasantest and most valuable for her children; and her evening amusements even prevent the conclusion of the whole day by the whole family together, parents, children and servants, by a short and simple family prayer. While their mother is away at her evening parties, the little children have to be put to bed by strangers' hands; although it is eminently the mother's duty to hear them say their prayers and to give them a last blessing before they go to sleep. And the older children lose their pleasantest evening hours; which their mother could spend more quietly and uninterruptedly among them, than any others of the day.

Accordingly, the plan of bringing up children, which we are suggesting, would require the sacrifice of such amusements as these; but not that of the best kind of social enjoyment, which is certainly to be found in a happy family life. The little children should, at least in the winter, go to bed at six o'clock; and the other girls should, until they have grown up, go to bed at eight, and get up early. Then the parents and their grown-up children will have the whole evening for that relaxation from their day's labors, which is quite necessary; and they may either spend it at home with any friends who come to see them, or in visiting the families of other friends. This is the time for conversation, music and reading. The father may read aloud the greatest masterpieces of Goethe, Schiller, Shakspeare, &c.; and particularly such as the girls ought not to read for themselves, because they contain passages which should be omitted.

For a mother who spends the whole day in her sacred and often fatiguing duty, such an interval of relaxation is not only permissible, but necessary. If she works and cares and labors straight on until she goes to sleep, she can not wake up next morning refreshed and cheerful and ready to return to her work. This can only be possible by means of such an interruption in her hours of labor. A housewife who labors without any interval, who has no free hours for intellectual pleasure or friendly intercourse, becomes a mere drudge, and will soon be incapable of any vivid mental influence upon her daughters.

Every winter's day should also have its evening relaxation ; which may in spring and summer include walks, in which the whole family should take part.

Besides these modes of enjoyment and intercourse, the mother may, as soon as she is no longer kept at home by little children, visit with her family pleasant localities and cities rich in works of art. They will return, rich in mental pictures and pleasant experiences, mentally strengthened and stimulated ; and will afterwards often and with pleasure look back to these delightful days.

Such a family life as I have depicted, is so beautiful and so rich in true and innocent pleasure—pleasure which so many seek in vain by means of diversions incessant and restless, unsatisfactory and often at variance with pure morality—that it most bountifully rewards the care and pains of a conscientious mother.

XI. CONCLUSION.

The subject thus far discussed has forced me to go into the examination of many details. But it is out of the question to discuss all of them. If twice as many had been mentioned, any experienced mother could suggest many points which still required explanation. But it has been seen that these details had not always been classified by any system, and their single cases brought together under general rules ; and indeed, that mothers, for whom the discussion is designed, do not find satisfaction in general rules and universal principles, but want advice for particular cases.

I shall add a few words on a subject with which I began, namely, family life.

In these present sorrowful times, we look about on all sides for help and salvation from our condition of moral and political corruption. Many are seeking such help, especially in reforms and renovations of church and state ; and are hoping that the regeneration of these two, may bring new life, blessing, and health, to all the lesser spheres of life which they include. But my own belief, on the con

trary, is, that it is from the smallest of all these spheres, the family, that new life, blessing and health, must come, to church and state; that both state and church, no matter how perfect the forms of their organization, must be mere forms, quite empty, or at most imperfectly filled out, as long as the families which constitute them remain corrupt.

Nor can such families themselves, such unhealthy and corrupt members of state and church, reach a condition of real prosperity, until they rid themselves of the same corruption; and least of all, can good results be hoped for, if that corruption still remains, from the education of girls, which is a matter so entirely included in and depending upon the family.

It is therefore incumbent upon me, as upon every one who undertakes to write upon female education, to state openly and truthfully the darker side of our family life; and to give the best advice in my power, for its improvement.

I know well, and feel deeply how great a responsibility rests upon him who dares to give counsel about education. A woe is denounced upon him who offends even one of the little ones. May such offense be far from this book, and may it contribute to the happiness of the young.

And finally; it is my most heartfelt desire that God may grant that Christian purity and piety, the training of children "in the nurture and admonition of the Lord," and with these the peace of God and the hope of eternal life, may return to the homes of both high and low.

SUGGESTIONS ON FEMALE EDUCATION.

GERMAN AUTHORITIES.

It is an evidence of the corruption or of the over-refinement of female education, that far more care is bestowed upon the art of outwardly pleasing, than upon the cultivation of inward good qualities.

Thus we see young women at great pains to adorn themselves, wherever they have an opportunity to be seen; but all the careful order and neatness of their costume is mere artifice; and not an expression of their actual character.

They learn dancing and music, foreign languages, all to make an impression on strangers in society; to excite astonishment; but to establish and maintain unity and love amongst all the members of a household, by humility, courtesy, childlike attachment, judicious treatment of servants, a kind indulgence to the weakness of others, and encouragement to doing good, is an art unknown to them.

They read books, study works of art, attend plays, chatter about scientific affairs, and know how to be witty and to say cutting things; but in their own homes to comfort those who suffer, to make up for deficiencies, to be content with a little, to do nothing for themselves and all for others, and quietly but efficiently, voluntarily, without bustle, to give new attractions to the uniformity of the quiet life of home, the art of doing this is unknown to them. And yet it is here that their true sphere of greatness lies.

In learning, wit, artistic knowledge, in everything which is the business of a man, man can surpass her.

The more a woman departs from that sphere of activity which nature has designed for her, to shine upon the theatre of masculine action, so much the more does she lose her natural grace, and become intellectually ugly.

ZSCHOKKE.

For scientific education, so far as this belongs to girls, instruction by a man is best. For how entirely different, how much clearer and deeper are the perceptions of the masculine mind!

The delicate feminine feelings can be developed only in a woman.

All girls taught among boys by men, retain all their lives more or less of an unwomanly character.

Women who grow up under the care of women only, as in convents, or in very large boarding-schools, are liable to pass entirely under the dominion of feminine littleness, from which they never escape.

Men who live long, or always, without the beneficial influence of the female sex, are punished for it by the infliction of the most wretched pedantry. This is the revenge of insulted nature.

CAROLINE RUDOLPHI.

Awakened from this dream,
What is left to me of this angel?
A strong mind in a weak body;
A hybrid between man and woman;

Unfit either for dominion or love ;
 A child with the weapons of a giant ;
 A creature half way between a wise man and an ape.
 Who, in order to crawl painfully along after those who are stronger,
 Has fled away from the proper beauty of her sex ;
 Who has also submitted to be cast down from a throne,
 To lose the charm of the sacred mysteries in her keeping,
 And to be stricken out of Cytherea's golden book,
 All for the sake of the approbation of a newspaper !

SCHILLER. (*Poem.*)

Said a king to his son, " Be diligent
 In learning all arts, in acquiring all manner of knowledge.
 If you come to need then, they will be your capital ;
 If you do not, they will always be accomplishments.

RUECKERT. (*Poem.*)

Girls are destined to become prudent and economical housewives, and the faithful helpmeets of citizens ; and as mothers, to have charge of the first education of their children.

For these domestic and civic duties they should be educated, from childhood up.

ARÉTIŃ.

Of the moral qualities which education should always aim to cultivate in the young, there are some whose development we feel to be especially appropriate to the female character ; such as softness and tenderness of feeling ; depth of sensibility ; mildness ; pliability ; patience ; self-forgetting and self-sacrificing love ; contentment ; and submission to limitation within a narrow sphere ; a quality the most important of all.

But as these qualities border upon many faults, such as excessive excitability and variability, irritableness and willfulness, passion, pretentiousness, coquetry, envy, detraction, injustice, talkativeness, meanness, and indolence, these tendencies should be allowed to indicate objects to be sought by education ; and the following principles in particular should be established :

1. The education of girls should, from their childhood up, be a preparation for their future duties. Playing with dolls is proper for their younger years, and after that, they should be made acquainted with household work.
2. They should of course be therefore trained to industry and economy ; which are under all circumstances prime virtues for women ; and also
3. In domesticity ; which nothing will better teach, than the mother's example.

Too frequent visiting and going out with companions of the same age, however innocent, gives girls a habit of chattering about nothing, and makes them afraid of work, lazy and disorderly, and inclines them towards dissipation.

But there is nothing more useful as a means of moral training, than judicious familiar intercourse with high-minded and intelligent men and women. This is a protection to feminine virtues, and instructs in the real tone of good society, far better than idly frequenting the ordinary heartless and mindless circles. In domestic life, where they are much more secure from the foolish flatteries of superficial youths and men, they will learn practically the virtues of accommodation, patience, perseverance, contentment, subordination, etc.

4. Education ought not to destroy the desire of pleasing, which is natural to women, but to keep it pure and to elevate it. To this end it should be deeply impressed on their minds, that unfeigned good will, un-

assumingness, good nature without being undignified, simplicity, good taste, and gracefulness in speech, attitude and movement, are all attainable in proportion as no direct effort is made for them.

5. Since it is the lot of the female sex to make others happy and to be made happy, by love, education must teach them to set the greatest value, not upon external beauty, which fades in a few years, but upon such lasting virtues as endure under all circumstances; upon mental beauty.

6. As the duties of the housewife and mother require many sorts of mechanical labor, sometimes alone and sometimes in the family circle, her instruction and education should be adapted to give her mind activity and regularity, and the habit of reflection even upon the smallest matters. She should also however learn to live with reference to others than herself. Instead of permitting herself to be absorbed in silent fancies and reveries, she should be conversable and sociable, cheerful and joyous, and should bring cheerfulness and pleasure into life, so often troubled and burdensome.

Elaborate intellectual training, half-learning, ingenious reasoning on such matters as their husbands are concerned with, does not promote a husband's happiness, but rather interferes with it; often occasions others to admire her more than he does; and leads to vanities and errors of all kinds.

But quick intelligence and a modest desire for information, "which gladly hears when acute men are talking, and takes pleasure in understanding them," a genial manner of discussing affairs, and the display of real sympathy with others, will be a source of pleasure to parents and to companions, and afterwards to a husband; and will animate the social circle of every house in which exists a real family life.

While the husband and father feels care, both within and without the house, it almost never leaves the wife and mother, who does her duty; and often increases with advancing years, with every increase of household and family. With reference to this state of things, piety, which gives resignation and faith, is infinitely valuable.

Even an unbeliever respects real religion in a woman; for it often moderates the impatience and anger of a husband, gives that meek and quiet spirit (I. Peter, iii; 4,) which is of great price not only before God, but before man; and which is so often able to avert even the stormy violence of wrath and passion.

Such religion, if only it remains free from devotion for mere show, and from metaphysical speculation or that visionary exultation which is often nothing but disguised over-sensibility, is a most valuable possession, which parents can not be too early solicitous to secure to their children, and which they may perhaps be able also to hand down to their grandchildren, and to render a permanent family trait.

But if irreligionsness gets possession of women, the prospects for the education of their children are much obscured.

NIEMEYER.

For girls, domestic education should be as stringently insisted on, as public education for boys.

Girls' schools are the very worst means; only to be used in case of absolute necessity, and when private education within the family is quite impossible.

When it becomes absolutely necessary that part of the education of girls should be given outside of the family, this external education ought not to have any influence upon the development of the disposition.

This portion of the education should proceed, for girls, wholly within the family; so that any education to manual skill, given outside of the family, should not occupy too much space, for fear of making some unde-

sirable impressions, which may weaken the influence of the family on the disposition.

SCHLEIERMACHER.

Errors and failures in the education of girls can only be made up for with great difficulty.

The independent power of the masculine mind can regain its purity, after error; but the more sensitive and plant-like nature of girls loses its proper growth forever by one injury.

Hence arises the educational rule, with boys to seek to strengthen their power of independent exertion for the struggle with the world; but with girls, to preserve their susceptible natures from evil impressions, and the pure tone of their minds from being untuned.

Therefore fathers and educators should avoid all coarseness, harshness and rudeness in the presence of female pupils; and to give no shocks to those feelings which pertain to the department of exterior observances, in which it is the special privilege of the female sex to govern, and to exercise a very stringent dominion.

BAUR.

For house and family, the husband is everything.

But within the house, within the family, the wife is all; she is the inspiring, embellishing and controlling power.

Man acts in the outer world.

But for woman, the representation of that world on the stage is a recreation in her moments of leisure.

Home is the central point for all the exertions of the man, how various soever in direction; for home he traverses, searches, conquers, all the world.

But the wife rules by goodness over the sanctuary for which man has exerted his powers; she is the economical preserver of the treasures which he earns.

Man, surrounded in the outer world by deceit and hatred, often forced by circumstances to conceal his real nature and to seem other than he is, finds again in the love and naturalness of woman, himself and his own natural character.

Naturalness is woman's most beautiful ornament.

Upon this depends her wise attractiveness, and her tender love of family life.

Everything assumed, forced, artificial, displeases; is dead outside paint; and indicates that something disgusting is behind it.

As the child pleases by innocence and truthfulness, so does the maiden, the wife, the matron, by simple, modest, loving, cheerful, childlikeness.

Though her exterior changes, yet her soul shall preserve everlasting youth.

Nature has taught her to love; has taught her the duties of wife and of mother.

She will always remain a true pupil of nature, down to the latest times.

What is foreign to her real destiny, she must remove as unnatural.

But it is the chief fault of female education, that girls are even more than boys, educated to untruthfulness, pretences, and dissimulation.

We seek to root out of them the natural, unpretending simplicity and loftiness of their innocence, and to supply its place with a feigned nature.

ZSCHOKKE.

Loveliness belongs to women.

Even its bodily manifestation is the glory of womanhood.

Only the delicate mental character of woman can cherish the feelings, impulses and tendencies, which exist in her, and the beautiful appropriateness of the numerous phases of her character; and only her delicate

INTUITIONAL AND SPEAKING EXERCISES.

[Translated from Diesterweg's "Teachers' Guide" for the American Journal of Education.]

"UNFOLDED is the world only to the observing mind; the only avenues to the mind are the senses."
L. FEUERBACH.

BASEDOW and VON ROCHOW, in the last third of the last century, contemplated the deplorable condition of the German people in regard to their intellectual development, and were led to ascribe one of its causes to the low state of the public schools. These philanthropic men earnestly endeavored to devise some method for ameliorating a condition so fraught, on every hand, with lamentable consequences. Rochow asked himself the questions, "Why are the common people so frequently imposed upon by quacks, pettifoggers, and other designing men into whose hands they fall? Why is it that they injure themselves by false measures, that they are so indifferent to the best advice, and seem unable to comprehend the disinterested counsel of their superiors? Why do they give credence to supernatural influences, ghosts, hobgoblins, and superstition in general?" These questions, which have certainly occupied the attention of every philanthropist, only in an altered color or form, according to the age in which he lived, can not be solved on the principle of self-love—that impulse of self-preservation in the prevalent disposition of the human heart toward bettering its own condition. Rochow believed that they might be explained through stupidity and the absence of judgment among the people, or, in other words, through the deficiency of all true illumination and development of the understanding. If he would therefore improve the social and intellectual condition of the people, he must bring some remedy to bear on this cancerous evil. The same sagacity which enabled him to probe and measure it, provided the means for its medication. This was nothing less than bringing the vivifying influence of truth, to bear directly upon the intellectual faculties of every mind, by the general diffusion of knowledge among the masses. No one who understands the condition of the German people at the close of the seven year's war, can mistake the beneficence of this effort and its peculiar adaptation to that age. In contrast with the former superstition and prejudice, mental illu-

mination*—this attractive and intrinsic idea—became the watchword of the patriots of that time, and the standard under which all, who sympathized with the movement, enrolled themselves. Basedow† in his active inspiring nature, became the principal leader of all those who desired to exterminate the very root of the old evil, by bringing the rising generation under the influence of mental culture. Large sums of money flowed in from all sides, proving that his effort coincided with the tendency of his noble cotemporaries. To enlighten mankind in the proper and original meaning of the term—to lead them to a clear insight into their condition and to the comprehension of their destiny—to make them thinking, sensible beings, has ever been, and will ever be, one of the noblest aspirations of the soul. The possible or really false or one-sided tendencies which such an effort can attain, are not to be considered. We view it in its natural light and its peculiar adaptation to the necessities of the age; and we must rejoice in the salutary and blessed results, which we can better appreciate, when we compare the present state of the German people with their condition fifty or seventy years ago; and comprehend the improved condition of our public schools, through these insights and efforts.

The methodical culture of the understanding from the elementary school upwards was the object toward which these men directed their efforts. This they sought to accomplish by mental exercises, which at a later date were sometimes called *pure* or *direct exercises* to denote that their special aim was the unfolding of the thinking faculties, regardless of the possible profit in material knowledge; the latter being considered, at least, a secondary, if not quite an indifferent matter. The opposite of these so called *pure exercises* are those termed *practical*; *i. e.*, such as are performed on certain positive material of instruction, as number, form, language, &c. In that early period of educational excitement, the people did not believe that the intellect could be sufficiently exercised upon the ordinary topics in the public schools, or, if indeed possible, that it would be of any available benefit. The method of instruction was yet immature, and the

* True enlightening is enlightening by truth.—*Eberhard von Rochow.*

† He had, as is yet to be seen in his valuable historical elementary work, (3 vols., Dessau, 1774,) the maxim: "He who can not perceive, can not comprehend." Therefore he sought to teach his pupils first seeing, and *not first believing*. Partially in consequence of this there were charges made against him, *hinc illae lacrymae*. The following paragraph occurs in the same work, Part I., page 56: "Care must be taken that the pupil improves the opportunity for observation in the following manner: in company with his teacher he must spend fourteen days in a camp, fourteen days in a mine, fourteen days in a seaport where lie men-of-war, fourteen days in the counting-room of a merchant, fourteen days as an auditor in the classes of a city school, as well as with a clergyman of a large orphan asylum, and in winter four weeks in the court."

subjects presented were so buried in the dead forms of mechanism and common routine, that the people could not be convinced that every subject, even instruction in technical practices, could be treated in a manner improving to the intellect. That we, even now, have reached this stage of progress we are chiefly indebted to Pestalozzi, that philanthropic soul, to whose memory posterity will pay the tribute of an immortal fame. To its more perfect realization, however, the philanthropists, and the philanthropic, or as I would term them the philanthropinist, schools,* have ever been foremost to impart a vigorous impulse. The evident necessity of a reformation in the public schools, met with recognition and sympathy from all classes; the new plans of instruction received the hearty recommendation of the government, which, seized by the new impulse of the age, began now to make the cultivation of the people the object of its solicitude, and to employ only the most competent teachers. In this manner exercises in thinking and speaking were introduced into the schools; and from this date, especially in north Germany, they appeared on a plan of lessons, as an established subject of instruction. We may find the same state of affairs, in part, at present, after the expiration of three-fourths of a century; during which time the European people, as well as the public schools, have made such gigantic strides as must inevitably tend to revolutionize the entire theory of education throughout the world. At present the pure thinking exercises are used in many schools, on account of their formal advantage; others have never adopted them; while by some they have been entirely abandoned. The latter can be accounted for, from the fact that the old forms, in the meantime, were supplanted by new and improved methods.

The cultivation of the intellect alone, which, however, is only partial culture, and dead mechanism of method in the remaining material instruction, could not long remain side by side. As man generally, according to the necessity of his nature, extends gradually the culture and insight which he has gained in one direction upon every field of his activity, so every subject of school instruction was sought to be elaborated and refined for the quickening of every faculty and the enriching of the understanding. A light was thus enkindled whose reflected radiance influenced every part, from the antithesis of pure formal culture on the one side, to the material dressing, or actual knowledge on the other; and resulted in the reciprocal penetration and unity of both; that is, in the conviction that the isolated culture of the intellect was in itself deficient; nay, that it was abso-

* For the aims and methods of this school of educators see "*American Journal of Education*," Vol. V. p. 489, &c.

lutely injurious, or might become so; and that as, in the rational experience of mature life, man does not circumscribe or limit his observation to any one direction, so in the school also, the intellect is to preserve its equipoise by exercise on the common objects of instruction in all their relations, connections, and dependencies. But this important idea could not be carried into execution, until further progress had been made in the systematic arrangement of the subjects of instruction. At present we undeniably stand on this higher point of view, both in theory and in practice, as is evident from the condition of the better public schools: a condition worthy of our praise and acknowledgment. We have already said, that the tendency of the intellectual culture, together with the lifeless mechanical procedure in the remaining material instruction, was one-sided, and that this tendency might become injurious; and in the subsequent use of this system, which was tested by the ablest teachers in this department, it was seen that the exercises in thinking, which neglected the material worth, or practical understanding of the facts, could lead to a hollow formalism, and drive the pupil into vague and indeterminate incongruities, could create a mania for criticism, and has contributed largely to the unequal development of the faculties. Thus this endeavor, so laudable in itself, soon degenerated into an empty play with forms and ideas; and afterwards, when intellect was exalted to the throne as supreme arbiter of thought and action, led to the rejection of all that could not be comprehended or proved; and consequently, sometimes to the denial of all that is deepest and noblest in the sphere of feeling and religious life. For this reason, the conflict with this partial or unequal development was a most praiseworthy effort. We dare not, however, go so far as to reject the originally good, nay, necessary influence, which inspired the noblest hearts, and bore most glorious fruits; not to throw away the child with the bath water, as the Germans say. We are not to be induced to judge unjustly of that period, to which we are indebted for a movement, small indeed in its beginning, but the goings forth of which will touch infinity.

But the isolated exercises *in thinking** are no longer needed, since

* That which I greatly missed in my elementary juvenile culture, at least so far as my active observation reaches, was an adequate unfolding of the natural power of intuition, the proper exercising of the senses, the habit of observation, in order to place the world, which surrounds the scholar and his faculty of thinking and judging, in a reciprocal relation. I observe that the scholar brings from our preparatory schools to the higher departments of education a certain amount of ready attainments, taken up by the memory, and perhaps too with some talent of discrimination and application. But these acquirements do not extend beyond a certain sphere. They are limited to the field of abstract exercises in thinking, by means of which it is hoped to attain a developed self-consciousness, as desired by Pestalozzi, and, I add, as desired by nature and reason. They are an artificial product, something studied and

improvements have been made in every department of instruction, through the Pestalozzian school and those who have coöperated with it; and the improved method demands that every object shall be examined in all its bearings, or all-sided, as the Pestalozzian school are pleased to express it, in order that justice may be done to every subject and its happiest influence on the culture of youth be secured. This is our fundamental view of the present condition of this method of instruction. If the same is not introduced into all the schools of the German nation, so far as its theoretical establishment and practical carrying through in courses of instruction is allowed and required, the reason lies not in the thing itself, but in some transient, local, or personal hindrance, which will gradually disappear to make room for that which is acknowledged to be better. By this is not only granted, but made evident, that it would be unwise to at once unceremoniously banish from all schools the pure exercises in thinking, as an established system of instruction; but to advocate, on the contrary, their universal introduction, would be a marked retrogression. It has been proven in many teachers' seminaries and schools, where all subjects of instruction are treated in a thorough and comprehensive manner, and their influence on the culture of youth fully tested, as well in a material as a formal, or technical respect, that these exercises are superfluous and are rendered objectionable on account of the time they consume. From this principle we reject all tendency to the preferred cultivation of a single faculty or talent in man; and we may add, that such faculty is not sufficiently viewed in the light of its unity in the mind, but rather in its abstract or imagined dismemberment, not agreeable to truth, but as if the mind consisted of an aggre-

useless; and instead of stimulating the mental economy to the digestion of all that is new and attractive, they press upon the soul like lead upon the stomach. I will illustrate by an example. The scholar has learned in the school to add to the idea horse every predicate possible; he knows that the horse moves, runs, trots, jumps, prances, &c. If I should now place a horse before him, would he have such a lively intuition of these actions that, when I question him, he could give me their distinguishing properties? Not at all. Perhaps he could scarcely give me a correct description of the outer figure of the horse, his color, &c. He can not characterize pace, trot, gallop, or other modifications of his motion; in short, a breach exists between his idea and the object. He is not exercised on the lively appearance of the animal, but solely on the unperceived abstraction, and however much he may have retained in this way from those thinking exercises, it is in reality of no use to him. A single walk with his teacher would have procured for him proportionably more solid and profitable knowledge than a score of such lessons.

How now! must we take walks with the children instead of *teaching school*? Occasionally, perhaps, for a change, but neither always nor for an express pedagogical purpose; which, at all events, would be a pedantry, an affectation, which posts placards to education by which people are informed what can be had in the show for good money—a merely external, affected training; which nevertheless is impressed for a lifetime, and engenders blind servility that can never be removed.

All culture that fails to improve nature in a natural manner, is injurious.—Director Weber, in "*Mager's Review*," 1843, July No., p. 13.

gate of single talents or faculties. On account of this principle therefore, we declare ourselves against the one-sided, isolated management of the exercises of the intellect, as well as those for memorizing.* It

* 1. To exercise memory as a separate faculty is to use the intellectual powers as machines, and to use the contents of the soul as mechanical material. In this way man comes to dead knowledge, whereby his nature dries up.—*R. Niederer*.

2. The motives which Schweitzer advocates for separate exercises in memory and direct exercises in intellect, in his "*Method for Teachers of Elementary Schools*," the former of which he denies in the second edition, prove only that the memory and understanding in general, must be disciplined; but they do not prove what they were intended to prove, that for this separate lessons are requisite, and that they must be raised to standing subjects of instruction. "He who can remember nothing has but feebly apprehended. It is shallow receptivity, without intellectual self-activity. In the precise measure in which man has contemplative attentiveness, *i. e.*, self-acting, self-appropriating, or making his own, will his memory and thinking faculties grow." (Fichte in his philosophical work: "*On antithesis, turning point, and aim of Modern Philosophy*") This is just our view. Direct exercises in memory are not needed, they are injurious; a conviction acknowledged by many others. Separate exercises in intellect, separate exercises in memory—why not also exercises in wit, in imagination, in feeling—every thing separate, and pure abstract spirit. "He who intends to make hare ragout, must first find a hare."—*Mager*.

Under direct exercises of memory, in order to please certain critics, I place the learning by heart such pieces, songs, poems, &c., which do not belong to the regular order of recitations; not those, which pertain to the continuous course of instruction, as scriptural history, and that of the German nation, &c.; but those, which from time to time are assigned to the pupil by the teacher for the supposed purpose of strengthening the memory. This is a manifold mistake. The materials themselves on which the lesson is founded are to be remembered—there are plenty of them. But this learning by heart is not explained, and as it is not continually rehearsed will be forgotten. Every thing a scholar learns and forgets, affects injuriously.

It might be proper here, as the opportunity may not again occur, to say a word about this *learning by heart*: a practice, even now, by no means uncommon.

On Saturday a task is assigned the children of a song, catechism, &c.; on Monday they repeat the words. Are both right? 1. The former is not, if the pupil does not thoroughly understand the nature of the lesson. What is to be learned must be well understood. Therefore during the hours of study, the teacher should accurately examine the lesson with the children, and explain and illustrate all that is indistinct. The learning by heart is done likewise, indeed principally, on account of the contents of the subject.

2. The latter, evidently not, because the repeating of what is learned by heart, as usually practiced, is good for nothing. It injures the mind, and the language of children renders the whole affair disagreeable, and is a crying sin against their nature. The scholars ought not to repeat the words they have committed to memory, because the ideas are strange, the word sounds of which are only apprehended. What they have acquired they should deliver, not in a declamatory manner and with gesticulation, but euphonicallly and logically correct, and with full accent, so that it may be clearly perceived that they have fully apprehended the subject. This is impossible, unless the children perfectly understand what they have learned. Only then can we require them to intrust it to memory's keeping. Where the teacher leaves the matter entirely to the pupil, a disagreeable and disgraceful recitation follows; and is such because the requirement has not been complied with, as Philo says, a *dies irae*. It is but half learned and imperfectly comprehended. Can the teacher account for this?

Therefore there should first be understanding; second, careful reading; third, learning; fourth, delivery; the latter singly and in concert. If it be read correctly, singly, and in concert, it will be delivered in concert as if by one voice. This in some studies and by judicious management on the part of the teacher, may be made an agreeable, and not unfrequently a very impressive exercise. The fifth part, in accordance with the above arrangement, is repeating so that nothing may be forgotten. The memory is not less exercised, and experiences no more loss in the absence of separate exercises for memorizing in the modern schools, than the understanding does where the pure intellectual exercises have disappeared.

We add a few sentences on this subject from and according to "*Mager's Review*," 1842, August number:—

Learning has two sides; apprehension—understanding and comprehending—and remem-

is an admitted fact, that it needs them both no more than it needs a separate culture of the feeling, the volition, the wit, the sagacity, &c.

bering. Apprehension in itself is not sufficient, the things themselves must be perceived. There are two ways of remembering: 1. Judicious memorizing, when the object is perceived without retaining the precise words; second, verbal memorizing. Of the latter there are also two kinds: 1. Without intuition, dead, perverted, unintelligent, of the middle ages, a real learning outwardly, or by heart. 2. A verbal, yet, at the same time, an inward learning, a learning *par-cœur*.* The former is to be absolutely rejected, the latter to be zealously adhered to and practiced. The former is to be rejected even if the substance is afterwards explained. The learning by heart of the middle ages, the offensiveness of which caused even a hatred for the catechism, can not even be called a mechanical learning, because it lacked the indispensable element which exists in every mechanism. It ought to be called, *sit venia verbo*, the brutish learning, as it is nothing more than an artificial training. A being designed to reason will by this be degraded to a brute. Its unnaturalness is discovered in the aversion with which children regard it. The adoption of such a course outside of the school-room, would never be thought of. It is an acquirement which can be exhibited but not used; it separates the idea from the word; the idea must always be first, the word which is the sign dare only be given and remembered in connection with the idea. This lively true memorizing, is the changing of a mere possession into legitimate property. The memory then has only to retain what was previously comprehended, which causes no vexations.

Every thing that can be used as an impetus in the following instruction must be practiced till it works like a machine. The moment an idea is apprehended, it must be properly considered. He who every moment would think of every thing at once, will never be able to reason. What at first seems difficult must by practice become a habit, a mechanism. The mechanism which is not preceded by knowledge, is false; the true has thought as a stimulant within itself.

Still one more example of wrong doing: A boy of 8 years was by his teacher assigned the task of learning by heart three stanzas of the hymn, "How great the goodness of the Lord." The boy studied on the first stanza one half hour in vain. I heard him, in the adjacent room, repeat the word ten times in a drawling manner without vigor or accent, "H-o-w-g-r-e-a-t t-h-e-g-o-o-d-n-e-s-s-o-f-t-h-e L-o-r-d." It was like the rumbling of a waterfall by which one may fall asleep. I pitied him. The hymn had not been interpreted to the pupil by the teacher. I explained to him the meaning from sentence to sentence. In twenty minutes he recited the lesson with expression. "If children," says Lichtenberg, "could only be brought to that point where every thing indistinct would be wholly unintelligible." "The greatest distinctness was ever to me the greatest beauty," says Lessing. All teaching should be rational, as is every arrangement, every operation in life. We know thoroughly and lastingly only that of which we have a vivid perception of the rational process by which we acquired it. Thus, the art of learning in general is attained and practiced, readiness developed toward infinity—onward and onwards; and thus, every thing else is easily and accurately learned at pleasure; by this adepts in learning are made; the first and exclusive condition of the practical artistic use of the sciences in life; by this artistic schools are formed for the scientific use of the intellect. Fichte's "*Deduced Plan*," &c., Stuttgart, 1817.

He who can not be prevailed upon by these aphoristical remarks to abandon the abstract and incorrect learning by heart, must consider the emphatic truths by Beneke: "There is

* "The French, who have in other matters not a rich and at this time not a deep meaning language, have preserved a paragraph from a more favorable period of their history, on what by the Germans is called learning by heart, which I may appropriately give here to simplify my view on a frequently exacted exercise of youth. *Apprendre par cœur*, say they, learn with the heart, or also, *savoir par cœur*, to know from the heart, or to know in the heart, *i. e.* to take up with the mind and the soul at the same time, and thus fix it for time and eternity. The German expression for learning by heart, or outward learning (*auswendiglernen*.) on the contrary, is only a substitute for outward forms. Thus the most indifferent things are learned by heart; alas, there is frequently, voluntarily or involuntarily, too much learned of this injurious and insignificant trash! Whose brain has not at times buzzed and been disquieted, without wishing that he might rid himself of the like. But what should be received into the heart and pass out from it, is easily and readily perceived to be the election between that which is worth knowing and that which is not worth knowing."—*Autobiography of Baron de la Fouque*, p 45.

Each subject of instruction offers sufficient inducement to memory and thought in its own material. Each should be treated skillfully and judiciously, and every thing worthy of being remembered should be retained in the memory. One material will incline more to the memory, and another more to the understanding, according to the peculiarities of its nature. Historical subjects stimulate the memory, mathematical the reason. Thus the demand for an equal development is supplied by the subjects of instruction themselves without the necessity of multiplying independent varieties of culture. The entire system of juvenile instruction, according to the present understanding of its design, assumes the task of laying the foundation for self-activity in every member of the people; and this design of the development of the force or dynamical direction ought to predominate, not the humanism* of olden times, nor the philanthropism of a later day, but the well balanced cultivation of mankind, the unfettering of every talent, the invigorating of every faculty; not abstract Basedow-Rochowianism, not formal Pestalozzianism, according to its strict observance, but just as little of the material-real as of the philological-humanism; not the exclusive cultivation of the intellect, but the universal culture—which has its foundation in the public schools.

Reasoning from the above we must reject the exercises for the intellect as a standing subject of instruction in our public schools; yet it is not our intention to exclude all exercises of a similar nature, but limit them to the lower classes, and designate them by the term, *Exercises in Intuition and Speaking*—of which we will speak hereafter.

All instruction in elementary schools, as shown above, must rest upon real intuition. We consequently limit the intuitional exercises to the lower classes, otherwise, it is to be feared, a hollow formalism

no general or universal culture of memory; he who learns to remember words, learns to remember words and nothing more, on each individual fact of the subject the memory is exercised," &c. Compare his "*Theory of Education*," vol. i., p. 81, 127, &c.

3 Wackernagel's "*Instruction in German*," Fourth Part of Reading Book. Stuttgart, 1843, p. 97.

The mere learning by heart destroys feeling and intellect. Only the love for the subject, the love which goes out from it, which I only can return, its beauty, unites me to it; this inner union can not be learned by heart. This beauty one retains as property, a thing directly comprehended; an attempt to learn it by heart estranges it. I hold it possible to utterly destroy all taste for poetry in a boy by requiring him to learn poems by heart. There can be no exercises exclusively in memory and exclusively in intellect for an attentive sprightly child; this we seem to recognize from his very genius. But there is another question, what will become of such a child through these exercises? He will probably approach nearer and nearer that condition in which every thing will be to him mere memory, or mere intellect. I have nothing against *knowing* by heart, I only oppose *learning by heart*. I know many men who have learned but little by heart and yet know a great deal by heart. He who knows a thing inwardly, knows it also easily outwardly. To read and hear any thing with pleasure, to read and re-read it, loving to labor with it—this leads to true knowledge, which, if need be, lives ever in the memory.

* Classical learning.—*Trans.*

would be inouced not indeed so empty as that produced by the pure intellectual exercises, but calculated to lead the teacher to treat one lesson intuitively and another abstractly, unless he views the instruction from the highest stand-point. As the intellectual practices invented in 1770, &c., were manifestly a progress in school instruction, so also were the intuitional exercises which were introduced in the beginning of the present century, in the first two decennials. Both form in relation to the existing method, a fitting and instructive parallelism. We have passed them both; they have become periods in the history of pedagogy; they form epochs. They join those venerable names, Rochow and Pestalozzi, and their faithful followers, Bruns and Wilberg, Laspé and Ramsauer.

If at the age of five or six the child enters school, he is generally in an intellectual condition which must be matured for the proper instruction. His attentiveness is to be awakened, his power of expression untrammelled, for on both of these especially depends the success of the method. His vacancy of mind must be filled, his attention concentrated and energized upon its object, and his ideas find ready expression in words. Thus exercises in intuition and speaking, or the first grade of instruction seek these important ends. These are exercises in intuition because the faculty of intuition is the basis of all intellectual culture; they are exercises in speaking because we can not be sure that the children have conceived the right ideas before they have expressed their ideas and thoughts; and the distinct thought arises only with the word. These two aims do not lie side by side, but one within the other. The former, forms the substance; the latter, the form of the exercises; substance and form exist together in every true method of instruction; hence the exercises in intuition and speaking form the foundation for universal elementary instruction.

The faculty of intuition has two sides. One is turned toward the outer, and the other toward the inner world of the mind. The former is first unfolded and leads to the development of the latter. Hence, the child in the school, as in the natural world, must open his senses to outward impressions, in order that the qualities and objects of the outward world may be reflected in pictures upon his mental retina and become to inner intuitions, the foundation of all later mental culture. In course of time the power awakened by outward intuitions must be turned toward the inner world of the spirit, to which other subjects of instruction will offer an inducement. Here we have to deal especially with outward intuitions, and we therefore take the material of the exercises from the outer world which surrounds the child.

These school intuitions do not indemnify the direct intuition and life of the child in the world. We suppose the child to have lived in the world six years of this life. He brings with him an endless number of intuitions. These we join closely together, refer to them and others which will be formed, and raise what is contemplated to clear consciousness. The instruction is here a reminding* and clothing of ideas in appropriate words and sentences.

In this respect a country child has manifold advantages over one of a city, especially one of a large city. The former has seen the natural world by which he is surrounded, and its thousand occurrences, the remarkable periodicity of the seasons—the sowing, planting, growing, &c.; while the latter, poor child, knows nothing but the rooms, the houses, and the streets. The first, for example, has observed the birds, how they fly, eat, build nests, feed their young, &c.; the latter knows, perhaps, the canary bird in its cage, and the birds which are sold in market. Nature's child possesses real practical knowledge, the town child can readily say this, or that, of what he has seen. Consequently the country child is more thoughtful, the town child more voluble. An untold advantage favors the former, and the difference will never be obliterated. The inhabitant of the city, by his volubility and cleverness, thinks to surpass the inhabitant of the village or country. But let them be examined in things of practical life, in the practical capacity of judging correctly. In consequence of this men are selected from the immediate practical walks of life to preside in the courts of large cities, in order to secure real experience and practical views in the highest tribunals of the country. The most advantageous relations will be formed for a child, who is to have the benefit of higher culture, by changing his country life at the age of twelve years, for that of the town or city.

Therefore—whenever it is possible, there should first be observation of life and nature, and afterwards reflection till every perception is brought into the realm of a clear consciousness. In school we make up, as far as possible, what was neglected in life.†

* It is the usual delusion of the reflection, arrogating all wisdom to itself, that it thinks to have discovered something by speculation, or to have demonstrated something new, when in fact it has only developed it, or at the most brought it to consciousness. Fichte, "*The idea of personality*," 1834, p. 112.

† "There is only one learning, one hearing and perception, one producing and one reproducing, one illumination and one illustrating, one having and being, one life, cultivation, existence, and experience, and that is life in childhood."

"A nail, a young sparrow and its beating heart in my hand, a fish taken out of the net and touched—taken hold of at any price with all ten fingers, with twenty, provided we had that number; that was a magnetism, it gave a clear perception."

The above quotations are from Goltz's valuable book, page 156. In the same work, page 138, is found, a poem of "Hay and Straw," from the experience of childhood. He is to be

Real objects will be presented to the senses of the younger children. They will be looked upon and contemplated, and what is looked upon and contemplated will be talked about. The teacher directs the attention of the children, he makes use of interrogatory instruction, and the children reply in a clear, precise manner, in single sentences, and with correct accent. Seeing, hearing, and speaking are united. The untrammeling of the speech is the principal thing outwardly. For this reason, incompleteness of expression, inarticulate enunciation, answering in a suppressed voice, or in single words, should not be tolerated. Marks or signs which the pupils do not understand, will be made known to them after they have acquired the lively direct intuition of them in the complexity of their uses. First, the idea, then the word expressing it. Speaking singly and speaking in concert, or by divisions, may occur alternately. Each sentence is to be repeated by a single scholar until it is perfectly and completely expressed, when it may again be repeated in concert. The logical object word must be rendered distinctly prominent. It is well to make use of signals, on the principle that all unnecessary speaking be dispensed with. The teacher of course should always have every pupil in sight. The first name pronounced, (Fred!) designates the pupil who is to answer a question which was addressed to the entire school. Each pupil prepared for answering, raises his index finger. The raising of the same finger by the teacher is a sign that the scholar is to repeat the answer on account of inarticulate expression, or some other defect. A semicircular motion with the finger is the signal for a class to speak, and a circular movement, the sign for all the pupils to speak, *non-commissioned officer like*.

It is said that we are indebted for these useful exercises to the Pestalozzian school. Pestalozzi himself chose for the material of intuition the living human body, from which he composed his known "*Book for Mothers*," so called because he wished to introduce these exercises to the sitting room. We must differ from this; we can

called happy who in his youth received impressions such as this man did, and for which he is indebted to life in the country and his own peculiar nature, hence, mostly to nature. Such an unconscious, direct, rich life, prepares the soil for most productive harvests. "It is nothing according to the ideas of grown up people. But children feel and perceive with heavenly instinct the world at every point and in every moment as *one whole*, and God in it as in his own personality. Here I found the elementary material in abundance for which my nature so yearningly longed. There were on account of the Baltic Sea, near by, hasty changes in the weather and heavenly metamorphoses all the year, which greatly exalted my imagination and influenced my destiny. This was life to me!" Goltz, p. 157.

"Such deep intuitional life, such immediateness¹ Or shall we laboriously change the clear gold of intuition for the paper currency of book definitions, and gain in life's length what we lose in its depth? Heine's "*Scenes of Travels*," II., p. 126.

not, according to the precedence of other pedagogues and from nearly related surrounding principles, approve of the exclusive selection of the human body. It is more agreeable to the purpose to choose the objects to be contemplated from the surroundings of school and every day life. Hence we seek the unity of the exercises, not in the unity or uniformity of the object, but in the unity of the end, in the unity of the method of treating and of varying the multiplied and produced materials. Modern authors in this department choose either regularly shaped bodies, or a house, or a model of a house, or objects of the school-room, or of its adjacent surroundings; plants, animals, objects of art, pictures, &c. The principal end may be attained through every one of these objects. Absolute necessity exists not in the materials.

More important than all means of instruction, is the apprehending and accomplishing; a view, which vindicates itself ever more and more, that all instruction, without exception, must be based on intuition. This heretofore presented thought deserves to be again recommended *most impressively* to teachers. He misapprehends who is of the opinion that, when with beginners he has used pictures and employed speaking lessons, he has fully satisfied the intrinsic demand of intuitional exercises. It is a principle in the instruction of youth, in universal instruction, also in every activity of the educator, that every thing which is to be actively and impressively felt, known, and wished, must have certain events and experiences, and an immediateness for its foundation.* Shallow perception, that which is heard, learned, and perceived according to words, answers not, develops not; but injures, produces a meager school knowledge, empty notions, a work of words, saps life, and injures the vitality and soundness of the soul.

That so much instruction remains without fruit up to this hour, is chiefly owing to its wholly unintuitive nature. Think only of the character of much of the instruction in language and religion! In the former the pupil is tormented with empty forms, and in the latter with hollow ideas. Exercises of this character are very deleterious. Few men ever again return to a fresh green life, after being driven into the world of abstract ideas by their youthful training. Nowhere is this danger greater than in the German nation. Only look around

* 1 "What sensation is to the will, namely, basis and source, *direct source* of the true, the good, and the beautiful, that is the intuition, the intuitive, direct recognizing to the intellect." Hoffmeister in his "*Schiller*," III., p. 100.

2. "Only that is *real, objective thinking*, which designates and ratifies itself through sentient intuition. That thinking is true and corresponds to the nature of the reality which is awakened by intuition." L. Fenerbach, "*Philosophy of the Future*," p. 74.

you and seek the explanation of much of the transcendental phenomena of our day.* But we continue the subject.

All religious instruction must begin with what is already known to the child, experienced by him, with what is immediate. And if *it* must begin here, surely all other teaching should be based upon the same principle. A life-awakening religious instruction joins piety and the relations which exist in the lively emotions of the child with the parent; also joins faith toward God with faith toward the parent, love to God with love to the parent; sin against the commandments of God with the consciousness of the child that he has not always obeyed the will of his parent; justification before God with repentance and improvement toward the parent, and forgiveness on those conditions, &c. These and similar experiences induce reflection; one's own life is rendered more intelligible. It is then impossible for us to be lost in the desert of school ideas. Some extracts from Beneke are here appropriate.

"The truthfulness, intuitiveness, and efficaciousness of a universal rule, originate only from self-experienced or, at least, clearly represented and impressively felt individual incidents. If from the beginning it be *only abstractly* formed, it will lack harmony and proportion, and tend at best to make us self-conceited, to be vain of a knowledge of which in truth we know nothing, and of which we can only arrogantly and audaciously prate. But where it concerns the application to special relations it will leave us in a dilemma."

"The child can associate with words only that of which he has an ideal. So long therefore as he fails to apprehend his intellectual activities, his sensibilities, the endeavors of his will, and his opinions, the words referring to them will be mere empty sounds. If his attention is frequently directed to words only, he will acquire the habit either of thoughtlessness, or an incorrect use of them, because he im-

* The newest philosophy of the fifth decennium of the nineteenth century agrees with elementary pedagogical science; that discovers now the truths, to which this has already devoted itself for half a century. Feuerbach, in 1843, advances this thesis:

"The essential instruments, organs of philosophy, are the head, the source of activity, of liberty, of metaphysical infinity, of idealism; and the heart the seat of suffering, of finitude, of necessity, of sensualism; theoretically expressed, thinking and intuition; for thinking is the requisite of the head; intuition the sense, the necessity of the heart. Thinking is the principle of the school, of system; intuition, the principle of life. In intuition I am determined by objects, in thinking I determine the object; in thinking I am *I*, in intuition not *I*. The true objective thought, the true objective philosophy, produces itself only from the negation of all thinking, from the being determined by the object. from the passion, from the source of all joy and need. Intuition gives that only which *is* immediately identical with existence, thinking gives the intervening condition through discrimination and abstraction from existence, therefore there is life and truth only where the condition is united with the existence, the thinking with the intuition, the activity with the passivity, the scholastic phlegm of German metaphysics with the anti-scholastic sanguine principle of the French sensualism and materialism."

properly refers the words to the outward which accidentally are connected with the intellectual; the first of which, indeed, is all he can comprehend up to this period. Such abstract exercises are exceedingly dangerous."

The danger consists in leading the pupil to regard the dry and abstract world of ideas instead of the real contents of intelligence; and to adjudicate to the intellect the supremacy in life as well as in science, and accordingly to reject all that can not be incorporated into ideas.

This was the sad result in the schools at the time when the almost exclusive culture of the intellect prevailed. This stand-point, for readily conceived reasons, we have passed in science farther than in life. The time has also passed when it was believed that the only success through the activity of the teacher rested in the skill by which he developed ideas, or in the so called art of catechising. The extreme opponents of this opinion and tendency, believe that we need no catechising, no development of ideas. In opposition to this, we say, every development is important, indeed the chief ability of the teacher consists in developing and therefore also in catechising;* but not in developing ideas, but intuitions and in his efficiency to awaken lively intuitions in the pupils. The teacher who would meet the demands of the present, must direct his efforts toward this end. Hence, not Dinter, or Pestalozzi, but Pestalozzi and Dinter!

Two questions are yet to be answered. 1. By what is instruction to be illustrated and enlivened, how is it to be learned? 2. Which or what different intuitions are to be called forth in the scholar, from what field do we take them?

First question. Very many teachers think the illustrations can be learned from books. But what are books? They in themselves furnish nothing more than a guidance to the treatment of the intuitions, where then are the intuitions themselves? These are not in lifeless books, but only in life. To this then we must refer the teacher. Look into life, into nature, into society, into the world of small and great men, into yourself; "keep your eyes open!" "Non scholae sed vitae," said the old teachers, and mostly the humanists. It was a phrase blindly submitted to the tyrant "custom," in a dry abstract time. It was of no avail. The agitators themselves served the abstract knowledge, the dead learning, and, what they least anticipated (still considering it an offence,) materialism. Their business

* "He who banishes this method, catechising and examining, from the school, takes the sun from the world." Trozendorf, in Puhkopf's "History of the Condition of Schools and Education, (*Geschichte des Schul-und Erziehungswesens*)," by Bremen, 1794.

was to educate renowned men, renowned lawyers, renowned philosophers, renowned theologians, renowned philologists. *Renowned-learned*—this gives the key.

Teacher, do you desire therefore to teach for the life? Then sink yourself into the life, into the life of the present, not into the past which was and has perished. Let the active life enter into you, expose yourself to its effects, retire from the study and take part in the drama of life as multilaterally as possible, gaining therefrom acquisitions for your purposes in life and in your profession. You are the man, you are the intuition of your scholars, by your lively intuitions you will learn to illustrate. Books can show you the instructive method, but can not give you the intuitions themselves. No book can supply the (missing) life.* Goethe teaches this when he says, "What I have not learned from books, I have acquired by traveling. That which has been carefully observed can afterwards be reflected upon and judged. A decided exercise of the eye is necessary, and there must first be an observation in order to call forth an inquiry. I must bring it thus far, that every thing may become intuitive knowledge, and nothing remain traditional and nominal. I, too, am for the truth, but for the truth of the five senses. I am a mortal enemy of word sounds. Nature, indeed, is the only book that offers intrinsic merit on every page, &c."

Second question. What kind of intuitions? Which should you awaken, and from what field? Whence have you to take them? Let us consider the different kinds and enumerate them:

1. *Sentient intuitions*; not only mediated by the senses, but given through them directly—outward intuitions.

2. *Mathematical*; ideas of space, time, number, and motion—also belonging to the outer world, not given directly by the senses, but mediated by them.

* "It is very remarkable. Every body insists that the teacher should educate for the life, not for the school. Hence he must know the life and consequently reflect upon it, &c. And yet every body is allowed to express an opinion concerning life rather than the teacher. But we vindicate for him what Rosenkrantz claims for philosophers. The philosopher, especially, must not concern himself about every absurdity that would not only contest his right to have an opinion about public affairs, but also to openly express it. The philosopher may not be informed in a thousand details which belong to the special departments of knowledge; but this must not deter him from exercising the *Critic of Pure Reason* in regard to universal laws. Among the old philosophers it was considered right, when they not only concerned themselves about the theory of the state in which they lived, but also about its practical workings. And for this they are still commended; these thinkers were not abstract cosmopolitans, but real patriots. But are modern philosophers no longer allowed to be patriots? Has not Schelling, however, recently declared to the welcome surprise of all his auditors, that time and philosophy have advanced to you questions of life, to which no one is permitted, nay, it is not possible for any one to be indifferent." Rosenkrantz, "*Sketches of Koenigsberg*," Danzig, 1842, I., p. 11.

3. *Moral* ; arising to mankind by the appearance of virtuous life.

4. *Religious* ; those arising in man when he directs his mind toward God.

5. *Æsthetical* ; from the beautiful and sublime appearance in nature and in the life of man, presentations of art.

6. *Pure human* ; those referring to the nobler individual relations of mankind—in love, fidelity, friendship, &c.

7. *Social* ; that which represents the associations of mankind as a unit—in corporations, in communities, and in states.

The school can not furnish all these intuitions according to their varied difference and full extent. It can not supplant life, it presupposes it, joins itself to life and leads toward it. But the school attracts whatever objects fall within the range of its influence, engages itself with them, and through this versatility lays the foundation of all intelligence.

1. The sentient intuitions refer to the material world and the changes in it. The pupil should as much as possible see and hear for himself, should use all his senses in seeking for the peculiarities of objects, on, in, or above the earth ; minerals, plants, beasts ; man and his works ; sun, moon, and stars ; physical phenomena, &c.

2. Mathematical intuitions unfold themselves from the sensual through easy and nearly related abstractions ; the idea of extensions in space on all sides, of extensions of time succeeding each other, the idea of number, how much, the idea of motion, the idea of changes in space, and the passing through the same. The simplest of these ideas is that of space, the others, therefore, can be illustrated by this in using points, lines, and surfaces. The means for illustrating instruction in numbers, are points, lines and their parts, and bodies and their parts.

3. The moral intuitions are obtained by the scholar, through mankind, through life with its relations, through playmates and teacher in school. These of course are inner intuitions, which, however, incorporate themselves in the countenance, in the eye, and in the language. The main point here, as elsewhere, is the individual experience of the pupil. Happy is the child that is surrounded by only pure moral men, whose characters mold the moral foundation of his own life. Moral deeds from history may be vividly and impressively presented by the teacher through the living word of the eloquent tongue and the affected heart.

4. Religious intuitions are attained by contemplating nature, its beneficent influences and phenomena, by the piety and prayers of parents, by the holy meditations of the congregation in public wor-

ship, by sacred songs in school, by religious instruction in school and church, by religiously disposed teachers and faithful clergymen, by scriptural history, &c.

5. The æsthetical intuitions are awakened by viewing the sublime and beautiful in nature; flowers, trees, crystals, stars, the heavens, the ocean, rock and mountain; landscapes, storm and tempest; objects of art; statues, pictures, paintings, edifices, and productions of poetical and oratorical art. In the classification of the moral, æsthetical, &c., their specific difference may be disputed. But I consider it better to arrange them under a special category. The stern, moral law applying uniformly to all men, does not embrace them all in its province, for they can not absolutely be required. The contents of the æsthetical belong to the beautiful, free, human development which is dependent on conditions unsuited to the tastes of every one.

6. The so called pure human intuitions* refer to a noble formed life of individual men, the character of which surpasses the strictest idea of morals and duty, and relates to sympathetic inclinations, as friendship and love, sympathy and participation, and other excellent characteristics of the elevated human life as they are met with in the refined development and culture of eminent pure men. Well for the child who shares these! If the family accomplishes nothing in this direction, it will be difficult to supply the deficiency. The teacher should do his utmost to remedy this defect, by his deportment in the school-room and by his general appearance.

7. The social intuitions, that is, those of the social condition outside of the family, come to the child through the phenomena of social intercourse in school, in church, in public meetings, and at public festivities; and afterwards through history, by which the living intuitions of the teacher, from the associations of states, people, and wars, impress the pupils with the most lively representations and images of larger corporations. Our earlier, so familiar private life, renders difficult the source of these important, yet uncommon, intuitions. How can he who has no experience understand history? How can he who has never seen people possess a living image of them and of their

* Their special difference can be disputed, considering them under the heads of the moral, æsthetical, &c. But, I deem it more correct, to make a particular category of them, for the reason that greater attention will be paid to their nature. The severe moral law applicable to all mankind, in an equal degree, does not embrace them in its department, they can not be implicitly required of every body. They belong to the free, beautiful, human development, and are entirely dependent upon conditions not agreeable to every one's tastes—thus however showing the divinity in mankind. "The universal human nature in the pure human intuitions in the formation of a noble family life which finds sympathy in every pure heart, whether adorned by star or badge, or covered by the coarsest and plainest garment, is divine. The origin of every human being is divine." Egbert in, "*Traits of Character*," &c. From Frederick Wilhelm, III., p. 481.

life? Small republics have infinite preferences in this respect, and also in relation to the intuitions of a public life and for patriotic sentiment. Language, even the most eloquent, gives only a vague and unsatisfactory substitute for these intuitions. The year 1848 disclosed in Germany, a present and prospective progress in this direction.

From all this is made manifest the importance of the life, the intelligence, the stand-point, and the character of the teacher for the founding of living intuitions in the soul, in the intellect, and in the heart of his pupils. We can never awaken to a lively intuition in another that which is not a living intuition in ourselves. Therefore it is of the greatest importance that the teacher himself has seen, observed, experienced, investigated, lived, and thought as much as possible; and erected for himself an ideal in moral, in religious, in æsthetical, in purely human, and in social relations. Just as much as he is, just so much is the worth of his instruction. *He himself is to the scholar the most instructive, the most impressive object of intuition.*

It is the business of the teacher to introduce and to found the relation of the scholar to the subject of instruction. He is the mediating person between both, which were originally strangers to each other. The scholar should self-actively appropriate the intuitions to himself. This presupposes that the teacher from whom originates every thing, is able to awaken self-activity. He can accomplish this, only to the extent of his ability to awaken in the scholar an active desire for learning. The respect, affections, and obedience of pupils are won by the teacher's love for them and for his profession, remaining knowledge of the subject and methodical powers presupposed; and through these the pupils' disposition to submit to his guidance the tendency toward the object of instruction, is secured. In this manner attentiveness and the love of knowledge, the first condition of a successful progress, is attained; and the remaining conditions, the most important of which is the awakening of self-activity in the pupil, will follow of themselves through methodical treatment by the teacher.

INSTRUCTION IN GERMAN.*

BY RUDOLF VON RAUMER.

PREFACE TO THE FIRST AND SECOND EDITIONS.

WHEN my father requested me to write upon the subject of instruction in German, and its history, I did not foresee the great difficulties which would stand in the way of such an undertaking. Instruction in the native language, like that in religion, is given in all grades and kinds of schools; which is alone enough to make its discussion within a limited space difficult. But there are other obstacles of a quite peculiar nature. Instruction in German deals with a subject which is constantly changing with the course of time. Not only does our knowledge of the subject change, and our mode of dealing with it, but the subject itself changes. The written German language, which is that now taught in our schools, has become what it is during the last three or four centuries; and thus the history of instruction in German can not be disjoined from that of written German. And this becomes still less possible when we consider how great and how obvious is the influence which that instruction has had upon the written German. Still, no one will expect here a comprehensive and universal history of the written German. What is required is, an account of the mutual influence of the living German language and the method in which it has been taught. The records of this influence are the works on German grammar. But as my subject is instruction in German, the discussion of language proper must occupy a subordinate place, and that of the methods used in teaching it, must become proportionately prominent. This is no easy task; both by reason of the great extent of the subject and of the small knowledge of it which I possessed. I had also to treat my subject in such a manner as to be intelligible to a reader who could not refer to the books I might quote. For a large proportion of the works to which I was obliged to refer were such as would be familiar to but few of my readers. Of the most important of these I have given the titles in full; not so much for the sake of the literary man, who could find the book in a large library from a much shorter title, as for the sake of the majority of my readers who probably may never see the book itself, and to whom the titles, as characteristic of its form and matter, will be of great value.

The kindness of friends in Berlin, Göttingen, Leipzig and Munich, has enabled me to use at Erlangen books from the libraries at those places. During a stay of several weeks at Berlin, the liberality of Chief Librarian Pertz, and the great kindness of Dr. Pinder, to whom I would offer in return my most sincere thanks, opened to me the rich treasures of the Royal Library there, notwithstanding that it was a season of vacation. Bibliographical researches, pro-

* Translated for Barnard's "*American Journal of Education*" from Raumer's "*History of Pedagogy*," 4th edition.

perly so called, were of course not within the limits of my field of labor. I trust that the close connection will be recognized that exists between the few materials of this nature which I have inserted, and the subject of the work. I have mentioned the places where I have found books not easily attainable everywhere; which will doubtless be a convenience to many persons.

The statement of my views upon the present condition of affairs has often thrown me into antagonism with very wide-spread opinions. But upon a subject so important, I have thought it my duty to state my convictions without any concealment. If any one should feel injured by any thing which I have said, I desire to assure him that I have never attacked persons, but opinions only. And I think I have sufficiently demonstrated this, by sometimes most fully coinciding with the views of those whom I have in other points opposed.

I have felt obliged to refrain from entering into details, except in speaking of the common schools and the gymnasia. My reason for not entering into the question of instruction in German in the Higher Burgher Schools is, that views upon this recent and important class of institutions are still so unsettled, that it would be requisite to ascertain the general principles involved, before dealing with any single subject of instruction; a preliminary which would lead me into an entirely different field. Upon many points, the observations on the gymnasia express my views on the higher burgher schools, of course; that is, with the proper modifications. Upon other points I should have been glad to submit my opinions to some experienced judge. Such is the case especially respecting the study of the Old German; which seems to me quite as important for the higher burgher schools as for the gymnasium, though to a different extent. That is, I think that the learned education which the gymnasium gives, renders it indispensable to go back to the Gothic and Old High German; while I believe it correct to go no further, in the higher burgher schools, than the Middle High German; and that this dialect should be studied, in those schools, about in the manner and to the extent indicated in Philip Wackernagel's "*Gems of German Poetry and Wisdom*."*

But I will not seek to anticipate what can only be intelligible when my whole book is read. I will conclude by expressing the wish that my work may contribute something to the promotion of a healthy sentiment of patriotism.

ERLANGEN, *October 10th*, 1851.

PREFACE TO THE THIRD EDITION.

The title of this edition indicates that it is "enlarged and improved." These enlargements and improvements will be found not so much in the first as in the second book of this work. There was of course an abundance of materials for the enlargement of the historical part of it. But the same reasons which induced me, in the first edition, to limit the historical portion of my work within the narrowest possible space, for fear of diminishing the intelligibility of the main portion of my discussion, have still prevented me from enlarging that part of the work. But in the second book, on the other hand, more than one passage required amplification. I hope that I have succeeded, without interfering with that brevity which the character of the work requires, in rendering many parts of it more intelligible and correct than in the previous editions.

I have already more than once said that I did not pretend to decide by my

* "*Edelsteinen deutscher Dichtung und Weisheit*."

now single authority the innumerable practical questions which this vast field includes; and that I would on the contrary thankfully receive any intelligent advice. And I feel myself under obligations to return my sincere thanks for the profound and instructive observations which have already reached me from the most various quarters since the appearance of my previous editions; whether through public channels, by letter, or orally. Of these observations I could of course make use only so far as I found myself convinced by them. I have endeavored to "try all things;" whether I have been able to "hold fast that which is good" only, I can not say.

The mass of works on German grammar, reading, style, &c., has become an almost unbounded flood. While employed upon my first edition I examined a great number of such books; and have industriously endeavored to make myself acquainted with the best which have appeared since. But although I myself possess a respectable number of books in this department, and have also had the use of several good school libraries, I am still far from pretending to a complete knowledge of my materials. Nor do I believe that it is practicable to attain it. For it will be found no very trifling task to examine carefully even the best of the German school grammars alone; as I can testify from experience. In obtaining a general view of the subject, I have received much aid from the periodicals devoted to it; such as the "*New Year-book of Philology and Pedagogy*,"* "*Mützell's Journal of the Gymnasia*,"† the "*Gazette for the Austrian Gymnasia*,"‡ "*Herrig's Archives for the Study of the Modern Languages*,"§ and many others. But even if all this mass of materials had been gone through, would this render the student a master of them? Would not the authors of the books in question say that mere reading will not test a school-book; that nothing but practical experiment with it in a school can decide upon its value? It must be allowed that there is some truth in the claim. But the very impossibility of doing this—for who could use all the German school grammars?—shows that in order to pronounce a sound practical opinion on the subjects in question, even the most thorough apprehension of its principles will not suffice without aid from the experience of others.

I have in this edition endeavored to go somewhat more into detail on some practical points. The only difficulty in doing so is, that it is necessary to handle them in a general manner, while in practice the principles have to be applied to an infinite variety of cases. This is peculiarly true of a subject which ramifies within all the departments of life so universally as instruction in the native language. For example, what I say of German grammar in the common schools, will in practice require the most various limitations and expansions. The special purpose of each individual school must decide how much is to be done by mere practice, and how much by discussions on grammatical subjects. It must not be supposed that the mere distinction between city schools and country schools will here suffice. For the differences between different city schools are very various. Nor can any general rule on the point be applied to country schools either. In these, every thing depends on the situation and needs of each particular district. In like manner, important distinctions must be observed be-

* "*Neues Jahrbuch für Philologie und Pædagogik*,"

† "*Mützell's Zeitschrift für das Gymnasialwesen*."

‡ "*Zeitschrift für die österreichischen Gymnasien*."

§ "*Herrig's Archiv für das Studium der neueren Sprache*."

tween the modes of teaching their native language to boys and to girls. All these questions I have considered from a few principal points of view, leaving their further development to the reader.

I may venture to hope that it will not be forgotten that in the second book, each chapter presupposes a knowledge of what has been said in the previous ones. Such portions, therefore, as that on the later provisions for studying German in the teachers' seminaries, and that on the higher burgher schools, ought not to be read out of their connection; for both of them presuppose a knowledge of the chapters before them.

But I must provide against an error much more important than this; for which I have given no occasion, but to which a strong tendency prevails at the present day. The German language is a subject dealt with throughout all institutions of instruction, from the lowest to the highest. It is this which makes it so important a study. But it would be an error to suppose that, because it is taught everywhere, it must be treated in the same way everywhere. The method, and also the extent, of instruction in it, must be adapted to the attainments of the scholar. This of course makes it necessary to consider what are the proper purposes of the lower, middle, and higher grades of schools; although it has been reckoned a degradation to those of the lower grade, that they have not been permitted to interfere with those departments of instruction which are appropriate to the higher. But this notion is the consequence of wrong ideas of the essential nature of real culture, and of the moral value of human employments. True culture is not to be promoted by superficial study of subjects too difficult, prematurely and at the wrong place; but by studying appropriate things in the right way. And in like manner, the dignity of the teacher does not depend upon the subject which he teaches, but upon the conscientiousness with which he teaches it. No intelligent teacher, therefore, will feel himself undervalued by a proper discussion of the question what studies are and what are not suitable to the age and the attainments of his pupils. And those very teachers whose vocation it is to labor in the very highest departments of human culture, will be most deeply penetrated with a conviction of the immeasurable importance of universal popular instruction.

I have also given special attention, in the present edition, to instruction in German at the gymnasia. The German language is the tie which connects the learned classes with the remainder of the people; and this is the reason that the mode in which it is taught at the gymnasium and the university is so important.

For the learned classes are the standard which determines the extent and method of instruction in it, in all grades of institutions. We shall always, therefore, in considering the subject find ourselves brought back to the institutions of learning, properly so called, however highly we may value the unquestionably important object of the improvement of the education of our laboring classes.

RUDOLF VON RAUMER.

ERLANGEN, *March 2, 1857.*

NOTE.

The relations of instruction in German to other studies has often been referred to in the previous volumes of Raumer's "*Pedagogy*;" while the nature of their contents did not permit a detailed account of the methods pursued in teaching that language; as such an account must be very closely connected with the history of German grammar. The present chapter is intended to sketch the most important points of that history.

L HISTORY OF GERMAN GRAMMAR, WITH REFERENCE TO SCHOOL INSTRUCTION
IN GERMAN, FROM THE END OF THE FIFTEENTH CENTURY.

CHAPTER I.—SIXTEENTH CENTURY.

Latin and German, A. D. 1500.

The grammatical treatment of the German language did not grow up, as did that of the Greek, exclusively upon its native soil, and from native roots. As in so many other departments, the Germans have made use in that of grammar also, of the rich inheritance which they received from classical antiquity. The Greeks had discovered the grammatical categories of their language, its most important distinctions, the inflections of its words, a thousand years before the study of grammar was thought of in Germany. The discoveries of the Greeks were industriously and perseveringly applied by the Romans to their language; and thus it happened that they descended, along with the Latin language, in the grammatical writers of the perishing classical ages, to the Germanic nations.

The grammatical knowledge thus acquired, was at first, however, not used as a means of investigating the German language. The Latin grammarians were employed only in studying the Latin language. For many centuries, Latin was, in Germany, the peculiar language of members of the learned professions. First, the church took measures to make Latin, already the language of religion, of the Vulgate, and of the Romish See, that also of the whole clergy.* And when the use of the vulgar tongue began to force itself more and more into religious affairs, the learned men endeavored in their turn to extend the domain of the language of ancient Latium, and to exclude the vulgar tongue, if possible, from the sphere of higher education. This second period of the universal authority of the Latin coincides with the beginning of the modern era of German grammar.† The rise and progress of the latter during the sixteenth century can not therefore be understood without a previous view of the Latin learning of that period.‡

It was the openly expressed intention of the schoolmen of that

* See R. von Raumer. "*Influence of Christianity on the Old High German*" (*Einwirkung des Christenthums auf die Althochdeutsche Sprache*)." Stuttgart, 1845, p. 201.

† I do not here delay to refer to the labors bestowed on the German language at an earlier period, especially by Abbot Notker of St. Gall, who died about A. D. 1022.

‡ The reader may find in the first volume of this history, especially in the chapter upon Johannes Sturm, a clear account of the Latin school instruction of the sixteenth century.

day, entirely to exclude the German language from the schools and from learning. They meant Latin to be the only received language of schools, if possible even in the very lowest classes. But since, to the great disgust of many excellent rectors of schools, the children had some intercourse with the world, not in the school, but at home, they continued as before to learn their native language first. And in order to make them understand it was necessary to degrade one's self to the point of talking German with them. The strenuous endeavors of many teachers to drive German out of even the lower classes, while the German children kept coming into them all the time, reminds us of the countryman in Horace, waiting on the bank of the river until it shall run down; "*at ille labitur, et labetur in omne volubilis ævum.*"

However great the care taken to make school-boys disuse as quickly as possible the despised and hated German, still new pupils must first be furnished with the Latin phrases most necessary for ordinary conversation. A clear conception of the mode in which this was done may be gathered from the elementary school books of the end of the fifteenth century. A volume in the Scheurl library at Nuremberg contains several such books. One of them is entitled "*A Method of Latinity (Modus Latinitatis).*" It has at the end this colophon: "The end of a new grammar, adapting in the most elegant manner the Latin equivalents to the vulgar tongue; with various selections (*flosculis*) of words and sentences, and important differences of idiom (*differentiis notatu dignis*). Put forth by that venerable and acute man Udalric Ebrardt. Anno 1488."* The author evidently addresses boys already able to speak Latin; for he begins by saying to the boys that his design is to correct for them, who seem almost rather infants without speech, than competent to talk, the very vulgar barbarisms which he hears them using in their ordinary familiar conversation; such as saying *mulus* (a barbarous Latinized form of the old *mûl*, modern German *maul*, mouth) for *os*, and so on. But at the same time he deals with his subject so as to make the book useful to the teacher, as well as to the tyro. The work is not really a grammar, but a German-Latin phrase book, with the German forms first, and the Latin equivalents following. At the beginning are the simplest salutations: "Good day. *Bona dies*. Or perhaps more elegantly, *Bonus dies*. For, &c. Good evening. *Bonum sero*. Or rather, more elegantly, *Bonum vesper*. For, &c."† "Your very best

* The date is given in words, followed by "Praise to the most merciful God (*Laus Deo clementissimo*)." Then follows a single leaf with miscellaneous Latin rules.

† I can not bestow much space on this material, and therefore only add in passing that the

health. *Salus plurima.*" And so on. Then come the simplest questions and answers: "How old are you?" &c., proceeding to more extended phrases, but still such as are used in common conversation. In a second part, the author arranges phrases of a higher grade, classified by their meaning, in thirteen parts, the German, as before, standing first, and the Latin after it. For instance: "Virgil is not comparable to Homer. *Virgilius cum homero non comparandus est. Non puto homero poete huic clarissimo virgilium parem esse, etc.;*" and so on, down to the colophon already given.

The volume in the Scheurl library contains several such books. One, beginning "*Ad patrem, to the father,*" consists of examples on the Latin prepositions, with the German words printed over the Latin. One is entitled "*Small grammar for the instruction of the young, with a German translation.*"* Notwithstanding its title, however, this is still not a grammar, but, as more correctly designated in the second title, "Tract called *grammatellus*, containing facetious sayings, and by reason of the obtuseness of young pupils (*ob scolari-colorumque hebetatem*) put beneath a German translation." Another work in the same volume, entitled "*Rudiments of grammar for boys. Most carefully selected from Remigius, Donatus and Alexander,*"† is without any German translation; and another, called "*Juvenile exercises on Donatus,*"‡ contains but a few German words.

I have enumerated more in detail the contents of this collected volume, because it gives us so very satisfactory an account of the literary helps by means of which its first owner, the celebrated Christoph Scheurl, (born 1481,) when a boy, exchanged his native German for the Latin. The next step to these books was, the insertion in the Latin Grammars proper, of an interlinear German version. This also became the practice during the fifteenth century; when it became usual to print, above the very much altered text of Donatus, § a *verbatim* German translation.¶

author however makes a defence for his *Bonum sero*. And compare on this point Rudolf Agricola, in this History, Vol. I., p. 82, (of the German).

* *Grammatellus pro iuuenum eruditione cum glosa almanica.*

† *Rudimenta grammaticæ ad pueros. De Remigio Donato Alexandroque studiosissime lecta.*

‡ *Puerilia super donatum. Nürmberge Per Marcum ayrer.*

§ Compare the text of "*Donatus' Latin Grammar (Donati ars grammatica)*" in Lindemann's "*Collection of Latin Grammars (Corpus Grammaticorum Latinorum)*," Leipsic, 1831, with that even of the Donatus of Glareanus, Augsburg, 1547 or 1550.

¶ Panzer (*Annales typographici*), enumerates four such Donatuses, with a German translation, viz.,—1. Ulm, 1497. (*Annales*, iii, 510.) 2. Without place, by J. S., 1497. (*Ann.*, iv, 67.) 3. *Per Fryder. Kreuzner Nürmbergæ incolam.* Without date. (*Ann.*, iv, 388.) 4. Without place or date. (*Ann.*, iv, 123.) But numbers 1 and 2, seem to be the same. A rare little book which W. Grimm loaned me from his private library, indicates that this mode of printing a German interlinear version over the Latin text of Donatus was long practiced.

But the distance was greater, from such an interlinear version as this, merely intended to render the text of the Latin grammarians more comprehensible, to an intelligent use of the German mother tongue, with the design of making the Latin Grammar itself better understood. The first step in this direction was taken by Aventinus, in his Latin Grammar; a work which is for this reason often mentioned as the first instance of a German grammar.* The celebrated Bavarian historical writer, Johannes Thurnmeyer, surnamed Aventinus from Abensberg in Bavaria, his birthplace (b. 1466, d. 1534), was in 1512 appointed tutor of the Bavarian princes Ludwig and Ernst, brothers of Duke Wilhelm IV. A thorough scholar, yet a zealous lover of his native country, he had no hesitation in introducing the German language even into the instruction which he gave in Latin Grammar. He had observed, as he himself says,† that a single German word will often make clear to a beginner, what the Latin circumlocutions only made more and more obscure. Under this method, his noble pupils had learned as much of the Latin Grammar in eight months, as they could otherwise scarcely have gained in three years. Still, he felt obliged to make some excuses for his undertaking, when he published his Grammar, with German text intermingled with the Latin. He says in his preface, "I did not feel ashamed to make use of the vernacular tongue, since I had seen the same thing done by the most learned of the Italians;" and he then goes on to allege the practical reasons already alluded to. Thus Aventinus was the first of the humanists of Germany who dared do thus; or at any rate, if he had any predecessors, he was unconscious of it, or he would not have thus relied upon the example of the Italians. It is a noticeable fact that in this particular also it was the Italians who gave an impulse to the Germans. What were the Latin-Italian grammars which Aventinus had in view, we may learn from a work of the kind published in Venice, A. D. 1499, of which a copy exists in the Scheurl library at Nuremberg.‡ The mixture of Italian with the Latin Grammar in this instance, is about half-way between that of the actual inter-

This is "*The Elements of Ælii Donatus, after the text of Henricus Glareanus; with a German translation (Ælii Donati elementa, ad collationem Henrici Glareani, una cum traductione Germanica).*" M. D. L. At the end it has, "*Augustue Viudelicorum, in aedibus Valentini Othmari, excusum mense Martio, Anno M.D.XLVII.*"

* Thus, in the very full list of Modern High German Grammars, by H. Hoffmann, in "*The German Philology (Die Deutsche Philologie)*," Breslau, 1836. p. 138.

† Aventinus' "*Grammar (Grammatik)*," (published 1512.) p. 2.

‡ Beginning: "*I am the door for the ignorant (Janua sum rudibus).*" Ending: "*Impresum Venetis, impensis Joannis Baptistae de Sessa Mediolanensi. Anno salutis nostrae. M.CCCCXCIX. Die vero. XX Julii. Foeliciter.*" This is in a bound volume, which begins with the "*Quaesto Sie Uno Libro*" &c.; an Italian-German "*Vocabulista.*"

linear version, and the circumspect use made of the German by Aventinus.

The Latin Grammar of Aventinus appeared at Augsburg in 1512, with the title, "*New rudimentary grammar, most useful to the young,*" &c.* Its arrangement is, in general, similar to that of the editions of Donatus then in common use. The text proper is Latin. The following examples may show how far, nevertheless, this work of Aventinus included a beginning of the grammatical treatment of the vernacular. Thus, on p. 3, we have, "*Dictio. A word. Illa dictio est nomen cui in nostra lingua potest addi a, ut homo, a man. equus, a horse.*" And p. 38, "*De verbo. Illa dictio est verbum cui in nostra lingua potest addi, I, thou, he.*" This is in truth a very trifling beginning; and far the greater part of the German matter contained in the work of Aventinus, consists merely in German translations of the Latin examples. But the grammar of Aventinus was nevertheless entitled to a place, even in this brief sketch, because he was the first who made use of German for the explanation of the Latin grammar.

The German Orthographists.

The books thus far referred to relate primarily to Latin, and used the German for explaining that language. These constitute one of the sources to which we must look for information relating to the original beginnings of a German grammar. The other of these sources consists of a class of books which are in a certain sense quite opposite in character to them; namely, the introductions to the reading and writing of German, intended for pupils unacquainted with Latin. This class of books includes two varieties. Those of one were intended as an introduction to German written composition. After a few rules and observations on orthography and grammar, they pass on to formulas for letters, legal contracts, addresses, and titles. Those of the other class originated in the necessity for acquainting the uneducated laity with German books; and in particular with the German Bible. Among books of the first description, should first of all be named the work of Fabian Frangk, entitled "*The method and qualities of the German tongue. Orthography, or the right way to spell in German. New Chancery, or current practical and correct directory for properly preparing formal communications and letters to all persons. In the most condensed form. M [agister] Fabian Frangk.*"† The work appeared at Frankfurt on the Maine in

* "*Grammatica nova fundamentalis iuuenibus utilissima*" &c.

† "*Teutscher Sprach Art und Eygenschaft. Orthographia, Gerecht Buochstaebig* (in the original with the *o* over the *u*, the over the *a*, &c.) *Teutsch zuschreiben. Neue*

1531;* and deserves attention for more than one reason. The author was from Asslaw in Silesia; a Master of Arts (*Freier Kunste Magister*); and a burgher of Buntzlaw. Frangk's preface describes the scope of his work. His primary object, he says, is to provide that those who employ such persons as have mastered his work and who are employed in writing, chancery business, and writing titles, shall meet with no disappointment." But although this comparatively subordinate object was that chiefly contemplated by the author, he still urges that at some time or other an actual exclusive German grammar should be written, as has been done for the Greek, Latin, and other languages. For, he says, "our own noble tongue is as agreeable, useful and powerful, in proportion to its extent, as any other whatever;" and there are "among us unlearned laics, (neither practiced in the learned tongues nor acquainted with them), who place as high a value upon it as upon any other."

Frangk's book is divided into two parts: orthography, (leaves 2—11), and the "Chancery-book," (leaves 11—44). But the remarkable point about it is, the decided and clear distinction it makes between the written High Grammar, and the dialects. Frangk had listened with an attentive ear in his travels about the Empire, and had carefully observed the peculiarities of the Franconians, Bavarians, Silesians, "Meichssners," Oberländer and Niederländer. The result to which he thus came was, that the written language was spoken nowhere. Thus he observes of the vowels, "The German language, if properly spoken, contains, as has been shown, six pure, three double, and three half-double vowels. But there is no country nor nation which pronounces all these correctly; which does not in some way interchange or modify them."† Frangk himself, he says, used the Oberland dialect. But "although this is in itself correct and clear, still it is in many points and parts not in agreement with the High German. For there is no country whatever where it has been so entirely pure and correct both as first spoken and as used since, that something needing correction or improvement can not now and then be traced in it."‡ The question, "How to learn German correctly and purely," Frangk answers as follows: "But he who would avoid such errors, and would write or speak German correctly, must speak German according to the mode and usage of some one country, and must not vary it after other dialectic forms. It will be useful and

Cantzlei, ietz braeuchiger, gerechter Practick, Formliche Missiuen und Schrifften an ieder Personen rechtmessig zustellen, auff's kurtzst begriffen. M. Fabian Frangk."

* A MS. note in the copy in the Meusebach Library (which I have used) mentions another edition, at Strasburg, without date.

† P. 9.

‡ P. 2.

good for such a person to know the dialects of many countries, with their errors, so that he can avoid them. But that which is most eminently profitable and serviceable to this end is, to take good examples, that is, good German books and legal obligations, either manuscript or printed, to read them diligently, and to imitate whatever in them is proper and correct. Among materials of this kind are documents from the chancery of the beloved emperor Maximilian (of most praiseworthy memory); and of cotemporary writings, those of Doctor Luther; the most uncorrupted, amended, and correct copies of them that can be found."

Thus writes Fabian Frangk, about A. D. 1531. We shall see how correctly he had designated the direction of the future progress of the written High German, and of its management as a study. Frangk himself only gives nine leaves to the subject of German orthography. He then proceeds to his principal subject, the book of forms; and treats in detail of letters, titles, superscriptions, &c.*

The other species of introductions to the reading and writing of German were intended to instruct the laity in reading German books, especially the Bible. How directly this religious intention was aimed at, will appear even from the title of the oldest of them. It is, "*Encheiridion. That is, manual to write and read correctly German orthography and the High German language; together with a register to the whole Bible, by which quotations and concordances in the New Testament may be referred to by the text, and also by Latin words. Also, how to understand figures and German numeration. Made by Johannes Kolross, teacher of German at Basle.*"† This book was in all probability published in 1529.‡ In his preface, the author explains his design still more fully. "Since," he begins, "it has pleased Almighty God in these latter times, to cause the Holy Scriptures (his divine word) to come by means of printing into the hands of the simple lay people, for their good and encouragement, in intelligible native speech, they show no little desire to have their children, who

* I cite from among all the numerous books of forms, rhetorics, &c., only this of Frangk's. This class of works constitutes quite a literature in itself, during the latter part of the fifteenth century and the sixteenth. Of a large number of others which I looked through in the library at Berlin, I shall name only two, viz:—

‡ Friedrich Rieder, "*Rhetorical Mirror (Rhetorischer Spiegel)*" (*sic, at end*), 1493. folio; and

Meichssner, "*Manual (Handbuechlin)*," Tübingen, 1550. Svo.

† "*Encheiridion. Das ist, handbüchlin teutscher Orthographi, Hochdeutsche spraach, artlich zeschreyben vnd lesen, sampt einem Registerlein über die gantze Bibel, wie man die Allegationes vnnnd Concordantias, So im Newen Testament, neben den Text vnd sonst, mit halben Latinischen Worten verzeichnet. Auch wie man die Ziffer vnd teutsche zaul verstehn soll. Durch Johannem Kolross. Teutsch Lesermaystern zuo Basel Gemachte.*"

‡ See the number 1529, given by Kolross, folio 36, as an example in numeration.

are quite unable to study the original tongues of the holy Biblical writings, Hebrew and Greek, and even Latin, educated in the German school and learning." It is for this purpose that the book is prepared. It treats, first, of the distinctions of the letters; then of doubling them, then of abbreviations, punctuation marks, &c., and "At the last follows a little register explaining the order of the books of the Bible, together with the figures and ordinary numeration."

After the time of Fabian Frangk and Johannes Kolross, a great number of such introductions to German orthography appeared; some, like Frangk's, on the plan of teaching secular forms, &c., and some like Kolross', chiefly with reference to learning to read, and to religious books.

Ickelsamer.

Although the labors of Aventinus, as one of those who assisted in the transition from the exclusive use of Latin in instruction, to that of German, must not be passed by without mention, still a grammar of the Latin language with a few remarks in German here and there inserted, can not be termed a German Grammar. The credit, accordingly, of having made the first attempt to prepare a German grammar, belongs to another; to Valentin Ickelsamer.

Ickelsamer was a cotemporary of Luther, studied at Wittenberg, and was a zealous adherent of the German reformation. When however the difference between Luther and Karlstadt became an open controversy, Ickelsamer took part with Karlstadt, went with him to Tauber at Rottenburg, and put forth there a passionate controversial publication against Luther. At a subsequent period he withdrew again from Karlstadt's party, in 1527 came to a full understanding with Luther,* and lived at Erfurt, employing himself with teaching school and grammatical labors.

Having previously published a book on the right method of learning to read,† he put forth his German grammar in 1531, or shortly after.‡ It appeared at first without place or date, with the title

* Luther's letter to Justus Menius. De Wette, vol. 3, p. 190

† This appears from Ickelsamer's own introduction to his Grammar, p. 10.

‡ Opinions differ as to the time when this first edition of Ickelsamer's grammar appeared. As the point is of some interest, relating to the very first German grammar, I shall go a little more into detail upon it. Some authorities fix the date of the first edition in 1522; as, among others, Hoffmann, "*German Philology (Deutsche Philologie)*," p. 139; Koberstein, "*History of German National Literature (Geschichte der deutschen National Litteratur)*," 4th ed., 1845, p. 460; Eittmüller, "*History of German Literature (Deutsche Litteraturgeschichte)*," p. 323. Pischon, in his "*Guide (Leiffaden)*," gives 1527, as the year of publication; Eitner, in his "*Tables (Tabellen)*," 1525. I think I can show that the Grammar which we have by Ickelsamer can not have been written before 1531. A citation from one of Luther's letters, respecting the date 1527, (De Wette, vol. 3, p. 190), which has been relied on, is not conclusive. For if we read, with Beesenmeyer, "*grammatica sua*" instead of "*tua*" (good Latin-

"German Grammar, from which one may learn to read by himself; with all that pertains to a knowledge of reading German, its orthography, its defects and superfluities, and much more also. Also something concerning the right method and etymology of the German language and words, and how German words should be divided into their syllables and spelled together. Valentin Ickelsamer."* It was reprinted a little later, by Johann Petreius, at Nuremberg, in 1537. It is a small book, not filling more than five small octavo sheets (pp. 80);† but its contents are in the highest degree remarkable and interesting. The author proves himself familiar with the Latin language, and

ity requires the word to be *ejus*), the reference becomes necessarily to Ickelsamer's earlier grammar, mentioned by himself. But the positive reason for claiming that the grammar of which I am speaking can not have been written before 1531, is this. Ickelsamer says, on p. 57 of the 1st ed., "As the learned Beatus Rhenanus, who was well acquainted with this subject, shows by an instance in his 'Geographia, or Description of some places in Germany;' to wit, that the locality rightly and not arbitrarily named the Concorssberg, is called in German the Kochelssberg." (Ickelsamer's edition of 1537, more correct both here and in many other places, reads "Kocherssberg") I know of no work of Beatus Rhenanus with the title of "Geographia." Nor does Rotermund, in his continuation of Jücher (Vol. 6, No. 1946) mention such a title. Ickelsamer's quotation is however from the learned work of Beatus Rhenanus, "*Rerum Germanicarum libri tres*," Basle, 1531; in which we find (p. 163), the following: "I believe the fortress of Cochesperg (*Cochespergiam arcem*) to have been another citadel originally called Concordia; and that the Germans gradually modified the name Concordia, which was an unknown and unmeaning word to them, until they had turned it to a word meaning a quiver. Any one who understands German will know what I mean."

Ickelsamer refers several times to the same work. Thus in his strange etymology of *Weihnacht* (Christmas), pp. 58, 59, he says, "as in the case, amongst many others, of the word *Weinnacht*, which Rhenanus also explains; the word is derived from 'a night of wine' (*ainer weynige nacht*), spent in wine drinking; a description which does not ill suit Christmas night, which we call *Weinnacht*, and which we pass in drinking and feasting, in the honor of the great God. The name has undoubtedly descended to us from a heathen one; for they were accustomed to honor their gods in that manner." Compare now the following from Beatus Rhenanus, "*Rer. Germ.*," p. 7: "They (*viz.* the ancient Germans) were in the habit of sometimes passing not only the day but the night also, in carousing; for it is no disgrace with them, says Tacitus, to continue drinking day and night. From which custom the names of some of our own festivals have been derived; such as that at the calends of January, on which, by the custom of Christians, we celebrate the nativity of our Saviour; which is called *Vuinnacht*, an ancient word, undoubtedly handed down from heathen observances, and referring to wine and conviviality."

Besides these undeniable citations, there are others, not so direct. Thus, Ickelsamer says, p. 56, "And that no language whatever, the German especially, is entirely pure, but that they are all mingled up together." Compare with this Beatus Rhenanus. *Rer. Germ.*, p. 110: "For I consider that at the present day all languages are mingled with some others; and that none of them are pure." If it is thus proved that Ickelsamer cited the "*Rerum Germanicum libri tres*" of Beatus Rhenanus, it is also proved that his grammar can not have been written before 1531. For Rhenanus' book first appeared in that year; as it is proved that there can not have been any previous edition, now lost, by the fact that the dedication of it to Ferdinand, the brother of Charles V., is dated "*Selestudii, Calendis Martiis. (Anno MDXXXI).*"

* "*Teutsche Grammatica Daraus ainer von jm selbs mag lesen lernen, mit allem dem, so zum Teutschen Lesen vnnnd desselben Orthographiam mangel vnd überfluss, auch andern vil mehr, zuo wissen gehoert. Auch ettwas von der rechten art vnd Etymologia der teutschen sprach vnd woerter, vnd wie man die Teutschen woerter in ire silben taylen, vnd zuosamen Buchstaben soll.* Valentin Ickelsamer."

† The kindness of Wilhelm Grimm procured me the use of the first edition, from the Berlin Library, and Prof. Bertheau obtained me the second edition from the library at Göttingen.

somewhat acquainted with Greek and Hebrew.* He cites Quintilian a number of times, and appositely; and is evidently thoroughly trained in the whole of Latin grammar. But that which gives its chief value to the work is, its close connection with the whole intellectual tendency of that great era at which it appeared. Notwithstanding his having once been a victim of the visionary views of Carlstadt, Ickelsamer had retained the true portion of those views whose misunderstanding occasioned the horrors of the Peasants' War. He recognized the profound depths of human nature, and had feelings for the common people.

Ickelsamer's little work is injured by a superfluity of materials; for the author did not confine himself to his own proper design, which, as will readily be seen, is a very simple one, but more than once strays into a field quite foreign to it. He sets up in the beginning a very high ideal of what a German grammar should be. "There has been," he says, "for a long time, no German grammar existing or written, except such as were made by taking a Latin grammar and translating it; as I know by my own experience. But this seems great labor and little profit to one who undertakes to teach German, as it should be said and spoken, in such forms as *der Hans, des Hansen, &c.*; *Ich schreib, ich hab geschriben, &c.* Such inflections will be much better learned from the mother of a child, than from a grammar." But what should be done is, "to set forth clearly and in German, the eight parts of speech and their nature;" and thus give a good German syntax. But this should not be done as "in the common Donatuses for children,"† but by illustrating their correct use in German idioms. Ickelsamer cites the German participle as an instance in point, and repeats his views of the high value of such a German grammar as he describes;‡ and then suddenly ending the discussion, closes his preface, with the words: "This portion of grammar, which is treated of in this my little book, I have considered the best and most useful, and have therefore with pleasure devoted my small powers to it. God grant that all that I have done may be to his glory. Amen." The part of grammar thus

* That he was not very profoundly acquainted with the Greek appears from his remarks on *Xps*, pp. 38, 39; and from the fact of his not mentioning the Greek combinations $\gamma\gamma$, $\gamma\kappa$, on p. 40. Compare the observations of Kolross on *Xps*, Encheridion, folio 16.

† See, on Donatus, above, p. 397.

‡ Ickelsamer is particularly full at p. 61, in explaining his high demands upon German schoolmasters. It would be very wrong for them to be able or willing to teach only reading, writing, and arithmetic. They should be thoroughly acquainted with the whole of German grammar; and the pupil should learn this grammar before proceeding to any foreign language. I confine myself to this brief allusion in a note to these views, certainly surprising ones for A. D. 1531, as Ickelsamer himself has not set them forth at all in detail, but has limited himself to the "best and most useful part of them."

alluded to, is that indicated in the words of the title, "To learn to read German, and German orthography."

If we agree with Ickelsamer's estimate of the importance of the art of reading, we shall with him recognize it as the "best and most useful part" of grammar. "It is without doubt," he says, "that scarcely any one work or creature on earth has been more used at once to the honor and dishonor of God, than the art of reading, through the writing of many good and evil books. And every one who shall understand and come to the right mode of learning to read, which this book shows, will confess that it is an excellent gift of God, whether he be a wood cutter or a shepherd in the field; and every one may learn by his own labor, without schoolmasters and books. Let him pray to God, as I do."* "I have already printed something concerning the right mode of learning to read, but not so thoroughly and clearly as in this present little book; and nothing else has moved me thereto except of love and pleasure in its subtle art, which I would fain communicate to every man; for it is a holy gift of God, which men ought to use for his divine honor, in humility and fear of heart, and to teach to others. And this reading is such an art that one may learn it in one day, if need be."† "And how well should I reckon this my labor to be repaid, if a single God-fearing person, who perhaps has no place of abode here for any long time (for real Christians are uncertain whether they will abide long in this world,) shall learn it so quickly, and to good purpose, and shall thereafter use it to the honor of God."‡ Ickelsamer wrote his book about 1531. Luther's New Testament appeared in 1522. A book of the Old Testament appeared almost every year afterwards, until at last the first complete edition of Luther's masterpiece appeared in 1534. In such a period, the teacher of reading might well feel himself an instrument in the hands of God.

The new method by which Ickelsamer expected so much to lighten the labor of learning to read, was a sort of method by sounds (*Lautirmethode*). He divided the words into their sounds, arranged and described the sounds, in a mode on the whole accurate and vivid, and lays down the principle that in instructing, a difference should be made between the name of the letter and its sound. We name the letters "Be, ce, de, ef, ge," &c.; so that one letter will no longer serve to designate these words or syllables. For the single letters themselves are too subtle to name, and § can not all be named, but

* P. 7. I quote always from the oldest edition. Both editions are without numbered pages.

† P. 10.

‡ P. 11.

§ This word (*und*, and), is spelled *vnnnd* in the 1st edition. Although (p. 68), Ickelsamer ex-

all that can be done is, to show how they are prepared in the mouth with the natural organs, though no sound is heard. But if used word or syllable-wise, the letters are more hindrance than help in learning to read.*

The second subject which Ickelsamer promises in his title to treat more in detail, is German orthography. For this he lays down two principal rules. "The first is, that he who would read or write a word, must give diligent attention to the meaning and composition of that word."† "The second, that he say over the word, or its parts, that is, the letters, with his mouth, and ask his tongue how it sounds."‡ The mode of applying this second rule in detail had already been impliedly explained in Ickelsamer's phonic (*Lautir*) method for teaching reading. In applying the first rule, however, he digresses into etymological discussions, sometimes profound, but sometimes very wrong headed. But he has the good sense to recommend, in a special paragraph, "not to desert a passably good common usage in words or speech," for the sake of orthography or etymology.§

Oelinger.

In 1573, Albert Oelinger, public notary at Strasburg, published a German grammar, with the title: "*Instruction in the High German language; Grammar, or institution of the correct German tongue, in which etymology, syntax, and the other portions are briefly treated, each in its order. Written some years ago, chiefly for the use of French youth, but now published at the instance of sundry persons, and not less useful than necessary to most of the neighboring nations. With the opinion of Master Johann Sturm, respecting the knowledge and practice of the tongues of the present day. By Albert Oelinger, notary public at Strasburg. Strasburg, printed by Nicholas Wyriot, 1573.*" 8o.||

I have given this title in full, as very clearly expressing the pur-

pressly forbids the double *n* in the word, he has left many *vnnds* in the book. Even after his repudiation of it at p. 68, I counted no less than sixteen of them, to the end. But it is remarkable that in the "reading manual," viz., pp. 71-74, the correction has been accurately made; so that there is no *vnnd* on those pages.

* P. 13.

† P. 24.

‡ P. 25.

§ P. 62, et seq.

|| "*Underricht der Hoch Teutschen Spraach; Grammatica seu Institutio Verae Germanicae linguae, in qua Etymologia, Syntaxis, et reliquae partes omnes suo ordine breviter tractantur. In usum juventutis maxime Gallicae, ante annos aliquot conscripta, nunc autem quorundam instinctu in lucem edita, plerisque vicinis nationibus, non minus utilis quam necessaria. Cum D. Joan. Sturmij sententia, de cognitione et exercitatione linguarum nostri saeculi. Alberto Oelingero Argent. Notario publico Auctore. Argentorati, excudebat Nicolaus Wyriot. 1573.*"

Hoffman, ("*German Philology*," p. 139.) gives 1574 as the imprint. This is however wrong, unless there was a second edition. The copy from the Munich library, which I have used, has 1573, both in the title and at the end.

pose and contents of the book. Oelinger wrote it as a book for foreigners to learn German from. In his epistle dedicatory to the duke of Lorraine, he states this design still more plainly. Poles, Bohemians, Hungarians, Italians, Frenchmen, Englishmen, Scotchmen, Danes and others, he says, need a knowledge of the German tongue, in part by reason of their intercourse with that nation, in part on account of the important matters which have taken place in Germany, and have been commemorated in the German language. But, he continues, the German language can no more be learned correctly without a grammar, than the Greek or Latin. He therefore looked about among the booksellers, in order if possible to find a German grammar which would answer his requirements. But the bookseller had no such for sale, and usually said that they were altogether doubtful whether the German language could easily enough be brought under definite grammatical rules; and thus it has happened that although some grammars of our language have been elsewhere published, they have been as wide of correct German, as the Doric Alpha from the Ionic Ita.* For these reasons he had concluded to supply this want.

With regard to the "*dialectus*," and "*idioma*," which he himself uses, Oelinger says, at the conclusion of his grammar, "The idiom which we have used is that common to all the people of Upper Germany; and in like manner we chiefly recommend such books as are printed in the same; as at Frankfurt, Mentz, Basle, Leipzig, Nuremberg, Strasburg, Augsburg, Ingolstadt and Wittenberg.† The text of Oelinger's grammar is Latin, and its arrangement is in general similar to that of the ancient grammar. It does not however slavishly follow the Latin grammars, but agrees with the Greek, where the latter language is more like German than the former is.‡ The book treats successively of teaching the letters and sounds, then of the eight parts of speech, article noun, pronoun, verb, &c., all with full paradigms. Then come very brief portions on syntax and prosody.

If it is remembered that Oelinger had to construct his whole system from the unarranged materials of the German language, with no help except what he could obtain from a classical grammar, we shall readily acknowledge the merits of this first effort.§

An especial interest is given to Oelinger's book by the fact that

* Reuchlin's pronunciation of *eta*.

† P. 200.

‡ See *e. g.*, p. 23, on the eight parts of speech.

§ Oelinger, for example, avoids the easy path of many later writers, who recognize the "weak conjugation" as the only regular one, and call the "strong conjugation" anomalous. He admits four regular forms of conjugation in German, giving the strong verbs to the three former, and the weak ones to the latter. (P. 96, &c.) He has many facts of interest for the history of the language, which we have not here space to consider. Thus, he gives the end-

Johann Sturm, in his time so eminent as an educator, prefixed a particular recommendation to it.* In this opinion, which is addressed to Conrad Preslansky, secretary of the kingdom of Poland, he considers Oelinger's German grammar as the first which has appeared in Germany; and lays down the dictum that modern foreign languages ought to be learned and used, not only with earnest study, but according to the rules of art. This, he says, is particularly necessary for those concerned in embassies; of whom those always succeed best who can use the language of those to whom they are sent. The languages of the Greeks and Romans, are no doubt exceedingly excellent in words and in thoughts, "but if they are not understood, what power for conviction can they have.†

Clajus.

It will not have escaped the attention of the reader, that we have hitherto only very cursorily alluded to one of the most important questions which can be asked respecting a German grammar, viz., What phase of the German language—what dialect—did the Ger-

ing *en* for the genitive and dative singular of some feminines (as *frauen*); but the form of the nominative (*fraue*) for the accusative singular.

* For Sturm's views on the exclusive use of the Latin, see this work.

† Any person who has studied the history of German grammar sufficiently to be acquainted with the title of the grammars which appeared during the sixteenth century, will perhaps wonder that I have not mentioned an often cited book, the "*German Grammar or Art of Language, A most certain method. &c., (Deutsch Grammatik oder Sprach-Kunst. Certissima ratio.) &c.*," by Laurentius Albertus Ostrofrancus. Augsburg, 1573. 8vo. But it was not my intention to notice all the books on the subject, of the sixteenth century. And I had besides a very particular reason for omitting to speak of this Laurentius Albertus, a copy of whose work, from the Berlin library, I have used. This is, that he is in many places merely a duplicate of Oelinger. What the precise nature of the case is, I have not yet clearly ascertained; but am satisfied that at any rate either Oelinger or Laurentius Albertus copied without permission from the other. Whole sentences coincide almost word for word. See for instance, at the words "*Poloni, Boemi,*" &c., Albert, fo. 10, and Oelinger, fo. 4; Albert, fo. 11, III, and Oelinger, fo. 2; Albert, fo. 31, "*Idiona vero,*" &c., and Oelinger, p. 200. It is quite impossible to explain such coincidences as mere chance; although perhaps in such cases as the above, a sufficient excuse may be found even for a verbal transfer from another author without naming him. But there can be no such excuse for doing so with whole sections of a grammar. And that one of the two had the book of the other, or at least parts of it, before him, will not be doubted by any one who will compare what Albertus says of gender, fo. 45, &c., with Oelinger, p. 34, &c., and Albertus on declension, fo. 62, &c., with Oelinger, p. 55, &c. The question to be decided is, therefore, which of the two made this unlicensed use of the other? The *prima facie* evidence would seem to make Oelinger the delinquent; for although both books are dated 1573 on the title page, yet the dedication of Albertus (fo. 10.) is dated "*Wurtzburgi 20 Septemb., anno, 72;*" while Oelinger's is "*Argentinae pridie Nonarum Septembris., anno, 1573;*" so that the work of Albertus would thus seem to be almost a whole year older than Oelinger's. The considerations which have decided me, nevertheless, to set down Albertus for the copyist, are the following:—

1. Oelinger's book is beyond comparison better than that of Albertus, as will be easily perceived on comparing the passages above cited on declension, or indeed those on conjugation, (Albertus, fo. 77, &c., and Oelinger, fo. 96, &c.).

2. The occasion of writing Oelinger's book is clearly set forth in the dedication, and the whole work corresponds to the design there stated. This can scarcely be said of the dedication and book of Albertus.

3. The prefixed recommendation of Sturm, at that time one of the most distinguished edu-

man grammarians select to teach? We have already become acquainted with one of the pioneers of German grammar and German orthography, who answer this question with remarkable acuteness. This is Fabian Frangk, who does so by his reference to Emperor Maximilian's Chancery and to Dr. Luther. Although this same way of thinking was continually gaining ground during the sixteenth century, still the grammarians proper, seems to have reached a clear understanding on the subject, only by gradual degrees. In the present account, we have closely followed the methods of the first German grammarians themselves; and these, again, are exactly a true expression of the condition out of which, the German written language was just then, for the first time, beginning to rescue itself. Ickelsamer complains bitterly in various places, of the shameful neglect of their own orthography and grammar by the Germans.* "What encouragement," he asks, "has any one to write a grammar for the people of Germany, who neither value their language, nor have any love of it, nor pleasure in it, nor will apply any industry in learning it?"† Again he speaks of "the rescue of our common German tongue, which is now so uncultivated and corrupted."‡ In another place he admonishes not to vary from "the long accustomed use of German words,"§ and "that we ought to write and speak as the common custom directs."|| But to the

cators of Germany, is evidence of the integrity of Oelinger; whereas I have so far been unable to find any testimony of a decisive kind to the character of Albertus.

4. Oelinger's book contains more than one very intelligible hint that its matter would be stolen by some dishonest person. An epigram by the author to the book, at fo. 8, says:—

"Esse tui domini dices si forte rogabit
Lector: in apertum vulgus iture liber.
Bis tanto valeo, quam si mittaris ab ullo
Ex me, qui dedit: non docuit: sed ego."

"If the reader shall ask of thee concerning thy author, O book about to go forth amongst the community at large, reply; that you are worth twice as much as if put forth by one who had been my pupil; he would not teach, but I."

And at the end of the book, in a poem by Jacob Hartmann on the publication of Oelinger's grammar, he is exhorted to put it in print, "lest another should reap the fruit, who did not sow. But let the best prevail, and the unjust party be driven off the field." And in another poem, Jacob Meier, says, addressing the book, "Why did Oelinger keep you back from the press for nine years? Because furtive fraud was despoiling your wealth."

All this seems to give a pretty clear insight into the real state of the case. A full history of German grammar would of course discuss whatever are the real characteristics of Albertus; but I am obliged to omit doing so, at least until he is freed from the charge which I have mentioned. The fact that Albertus was a Roman Catholic, can not be supposed to have prejudiced me against him; for as all appearances indicate, he was not regarded with any special favor by the Catholic schools of the sixteenth and seventeenth centuries. (See below, under Clajus). I will add, as a hint to any one disposed to investigate this matter further, that it seems not altogether improbable that subsequently to the robbery by Albertus, Oelinger may have made some supplementary use of his book, which was printed before his own.

* P. 23.

† A very serious consideration for Ickelsamer. Comp p. 78. In my quotations from him in this chapter (on Clajus), I have substituted i and u for his j and v.

‡ P. 23.

§ P. 62.

|| P. 63

question where the "common German tongue" and the "common custom" are to be found, no answer is given. Ickelsamer knew very well how great were the differences among the High German dialects.* But he gives no directions for choosing among them in writing German. His rule to ask our own ears and tongue how a word sounds,† is no answer to this inquiry; and experience must very early have taught him that it would be far from being in one uniform way throughout Germany, that the children would "learn from their mothers how to say and speak '*Ich schreib, Ich hab geschriben.*'"‡

Oelinger thought it necessary to state, at least, at the end of his grammar, what dialect of the German language the book taught. In a paragraph already quoted, he designates the area of the High German dialects as distinguished from the Low German; and by referring to the books printed in High Germany, he makes a difference between a written dialect common to all parts of Upper Germany, and the varying spoken dialects of the country people. In order to gain a fixed rule for the German written language, the only further steps now necessary was, to make an end of the variations in the practice of authors, by fixing upon the usage of the greatest German writer, Luther, as the rule.§ This great step was taken by the grammar of Clajus.

The course of the German grammar in this process was entirely parallel with the gradual fixation of the New High German written language. Had Luther, as has been sometimes supposed, elevated one of the dialects spoken in a district to a new dignity as the written language, and by so doing, driven a previously received written language out of use, the first and most necessary step for a German grammarian would have been, of course, to explain the differences of Luther's language from that which preceded it. But the fact was far otherwise. Luther found the language which he adopted already in use in a very large part of Germany, as the language of the chanceries of the princes, and of books. Luther's own statements in the Table-talk|| are clear enough. He says, "I have no definite, peculiar German language of my own, but use the common¶ German language, so as to be understood by the High Germans and Low Germans both. I speak after the usage of the Saxon chancery, which is followed by all the princes and kings in Germany. All the imperial cities and the officers of the princes write after the usage of the Saxon

* P. 46.

† P. 25.

‡ P. 2.

§ It is not a pedantical confinement to Luther's style which is meant, such as was the rule of the Ciceronians of the sixteenth century regarding Cicero, but only that Luther's autorial delineation of the field of the language was generally accepted as correct.

|| Fo. 578, of the edition of Eisleben, 1566, in folio.

¶ Compare the citation from Ickelsamer, above, p. 155.

chancery and of our own prince. Therefore this is the most universal German language. The Emperor Maximilian, Elector Frederic,* &c., have thus established a fixed usage for the German language in the Roman Empire." The substance of this statement of Luther is confirmed not only by the papers issued from the Saxon chancery, but by those from that of the empire. And in like manner the German works printed during the fifteenth century at Nuremberg, are substantially in the German of Luther.† Luther did not adopt any distinct dialect, but the common German language as he found it, as it had developed itself from amongst the mingled dialects of central and eastern Germany, and had become established in the imperial chancery as the recognized reigning German language. But even in the localities where this authoritative German language had become the leading one, it suffered many dialectic modifications; and from this common German language, based mainly on the spoken dialects of central and eastern Germany, there had arisen both in northern and southern Germany, the most different modifications, which were employed even for printed books. In Lower (northern) Germany they were printed in Low German, in Switzerland in Swiss German. Luther unquestionably contributed much to spread the domain of the authoritative German, and often to fix it permanently in the forms which he himself used.‡ The predominance of this new written language over the

* Frederic the Wise; died 1525.

† Compare for instance the German Bible "in correct common German," "printed by Anthony Koburger, in the worthy imperial city of Nuremberg," 1483. It is not my task here to write the history of the High German dialect, but only to give a general account of the substitution of Luther's German for the Middle High German. For the relation of the New High German (Luther's) written language to the district oral dialects and to the earlier written language, see R. von Raumer, "*On the German Orthography (Ueber Deutsche Rechtschreibung)*," Vienna, 1855, p. 85, *et seq.* I will here cite a single striking instance of the struggle between the dialectic forms of south-western Germany, from which mainly was derived the Middle High German, and those of central and eastern Germany, where the New High German originated. Niclas von Wyle, born at Bremgarten in the Aargau (see his "*Translations*," 1st ed., fo. 243), secretary of the council at Nuremberg, (*ib.* fo. 4), afterwards city clerk at Esslingen, (fo. 71), and finally chancellor of Count Ulrich of Wirtemberg, (fo. 3), published in 1478 a number of translations and epistles. Although his dialect has evidently felt the influence of the language used in the chanceries of the day, still he uses in many important cases the forms of his native locality, instead of those of central and eastern Germany. He makes *y* and *i* equivalent to the Middle High German *i*; and *v* and *u*, to its *û*. His first edition is printed in this way (but not that of Augsburg, 1536); and this was evidently the author's own dialect, as appears from his own remarks at fo. 243; for there he distinguishes *minn* from *min* by doubling them. Such were the forms used by Niclas von Wyle, while city clerk of Esslingen, about the middle of the fifteenth century. With his writings may be compared the decrees of the Diet of Worms, *anno* 1495, as printed immediately after it by the imperial cities for private use, and issued from the archives of Esslingen itself. (Datt, "*De pace publica*," Ulm, 1698, p. 825; Schmauss, "*Corpus Juris*," Leipzig, 1759, p. 56. It will then be easily seen what is the precise force of Luther's words just quoted, about the Emperor Maximilian.

‡ On the progress of the written New High German independently of Luther's influence, see also Friedr. Zarncke, in his edition of Sebastian Brant's "*Ship of Fools (Narrenschiff)*," Leipzig, 1854, p. 276. The character of the New High German was no doubt the chief cause

separate dialects is of course connected with its growth out of the eight hundred years' written development of the Middle and Old High German, but it owed its new impulses of power and feeling to the spirit which the great reformer breathed into it.

Ickelsamer was conscious of the existence of a "common German tongue," but was unable to give any clear account of it. Oelinger recognized the language of the books of Upper Germany as the subject of his instructions. But Clajus established the doctrine that Luther's German was the standard written German.*

Johannes Clajus was born A. D. 1533, at Herzberg, a town on the Black Elster, some six miles† from Wittenberg. He attended school at Grimma, studied theology at Leipzig, taught music, poetry and Greek at Goldberg, from 1560 (?) to 1569, and was then for a short time rector at Frankenstein in Silesia. Becoming weary of his labors in the school, he went to Wittenberg, and took a master's degree there in 1570; but in the same year again accepted a school appointment, as rector of the city school at Nordhausen. In 1572 he resigned this place, and in 1573 became minister at Bendeleben, a village in the bailiwick of Weissensee in Thuringia, where he died in 1592.‡ In a series of published writings, he showed himself a learned and accomplished scholar in Latin, Greek and Hebrew. Among these works we find "*Three books of Latin, Greek and Hebrew Prosody*;"§ six books of Greek poems; a Hebrew grammar; German poems, &c. Far the most important of his works, however, was his German grammar, upon which, by his own account, he had labored

of its obtaining the prominent place which it already held before Luther. See my essays on German orthography, p. 93, *et seq.* But the powerful influence which Luther exercised, more especially upon the intellectual development of the new language, can not be overlooked.

* Of the grammarians of the sixteenth century whom we mention here, no one recognized quite accurately the real nature of the New High German written dialect. Fabian Frank came nearest to doing so. The imperial chancery was mentioned as offering a proper standard for a common written German by the learned philologist and educator Hieronymus Wolf, in a work "*De Orthographia Germanica*," whose second edition appeared as an appendix to the "*Institutionum grammaticarum Joannis Rivii libri octo*," Augsburg, 1578. (Hoffmann, in his "*Outline of German Philology [Die deutsche Philologie im Grundriss]*" mentions a previous ed. of 1556.) But Wolf was not capable of making a proper use of his conception. (Compare my essay in Pfeiffer's "*Germania*," 1856, II, p. 160, *et seq.*) Appeals to the German of the imperial court and of the imperial chamber of justice at Spire may be found down to a late period in the seventeenth century. (See W. Wackernagel, "*History of German Literature*," p. 309.) But the importance of Luther's influence on the language is shown by the very fact that notwithstanding this, his writings have been far more extensively appealed to as the fixed standard for German grammar.

† About twenty-five English miles.

‡ Jördens, "*Lexicon of German Poets and Prosemen (Lexicon deutscher Dichter und Prosaisten)*," I, 302. Clajus, "*Grammatica Germanae linguae*," preface.

§ "*Libri tres prosodiae Latinae, Graecae et Ebraicae*." Thus cited by Clajus himself in his preface to his German Grammar. The full title was somewhat longer. It appeared at Wittenberg, 1573, 8vo.

more than twenty years.* He published this work in 1578, at Leipzig, with the title; "*Grammar of the German language, by Master Johannes Clajus of Herzberg. Compiled from the German Bible, and other writings of Luther.*"† In his preface, he expresses himself like a true German, and also as a zealous Protestant and enthusiastic admirer of Luther. To the Germans, he says, appertain the kingdom and the priesthood (*ius regni et sacerdotii*); for the power of the fourth monarchy (of prophecy) has descended from the Romans to the Germans, whose princes choose the Emperor. "And the true priesthood," he continues, "which consists in preaching the evangel of the true sacrifice of Christ, is taken from the unbelief of heathen worship and of popish darkness, and by God's special goodness intrusted to us; so that the saving truth of the justification of men, can now be learned, no longer exclusively by learned men out of the Hebrew and Greek of the prophets and apostles, but by the German people, out of the clear stream of Luther." And to these two benefits is added a third, that besides the knowledge of these holy things that pertain to our salvation, which are so clearly and fully set down in Luther's writings, one may from the same writings obtain also the most surprising and complete knowledge of the German tongue, useful and necessary both to that nation and to foreigners. "This knowledge," he adds, "I have in this book set forth in grammatical rules, collected from the Bible and other works of Luther. For I hold his writings to be not so much the work of a man as of the Holy Spirit of God, speaking through a man, and am entirely convinced that the Holy Ghost, who spoke pure Hebrew through Moses and the other prophets, and Greek through the Apostles, also spoke good German through his chosen instrument, Luther." For otherwise he considers that it would have been impossible for a single man to have spoken such pure, forcible, and elegant German without instruction or help from any person.

These extracts clearly show the spirit in which Clajus wrote. But it would be an error to expect from his grammar the same that we should now require of a grammar of Luther's German. He only undertakes to lay down in his unpretending book, the most important outlines of the German written language, as used by Luther, in order that, as he expresses it,‡ foreigners may more easily learn to speak German, and our own people to speak more elegantly and write more

* Preface to the Grammar.

† "*Grammatica Germanicæ linguæ M. Johannis Clajj Hirtzbergensis; Ex Bibliis Lutheri Germanicis et aliis eius libris collecta.*

‡ P. 1.

correctly. He then proceeds to set forth the different parts of grammar in the method of the Latin grammars of the day, as, 1. Orthography; 2. Prosody; 3. Etymology, with very full paradigms; and 4. Syntax. There are also two more chapters, on the ancient poetical methods of the Germans, and on the imitation of the ancient metres in German. However much the rules of Clajus may fall short of our present knowledge of German, still we can not deny to his book the possession of a good share of merit for those times, for industry, correct observation,* and above all, practical usefulness. One of its most objectionable characteristics, though one very easily explained, is its almost slavish adherence to the Latin grammar. Thus he calls the German direct praeterite "*imperfectum*;" and imitates the Latin tenses by cumbrous German circumlocutions, as, "*wir werden geliebet haben; wir werden geliebet sein worden; werden geschrieben werden, scriptum iri*;" and so on. Clajus writes throughout not for children who are just beginning to learn to read and write, but for those who have already some knowledge of Latin, Greek and Hebrew. This is evident not only from the whole character of the work, but also both from the fact that it is written in Latin, and from the examples given here and there from Greek and Hebrew, by way of additional illustration. He expressly declines considering the numerous dialects of German.† His adherence to Luther's authority is left as a thing supposed of course, after his declarations in the title and preface; and he gives quotations from Luther only in a few individual instances, chiefly doubtful points.‡

The extensive circulation of Clajus' grammar, and its consequent great influence is shown not only by the number of its editions and the duration of its reputation, but still more by one very noticeable circumstance. This is, that it was received with favor not only by the Protestant part of Germany, but, although expressly based on Luther's writings, by the Roman Catholic part of it also, and with a favor both prompt and lasting. The Royal Library at Munich possesses a copy of the first edition which affords a very remarkable evidence of

* Clajus also reckons both strong and weak verbs among the regular ones. (See his grammar, pp. 141 and 177). But his classification (p. 144) of verbs by their last syllables is a great mistake. He contains much that is very instructive. See *e. g.*, his rule for the imperfect, p. 143. "In the imperfect the first and third persons singular are alike, and all the other persons have the same vowels and diphthongs; as, *Ich sang*, I was singing, *er sang*, *du sungest*, *wir sungen*," &c. This rule is also given for the third class of verbs (in Gothic, *ei, ai, i, i*): see p. 115, *Ich schreib*, *du schriebest*, *er schreib*, *Wir schrieben*, &c. And comp. pp. 145, 161. See also, on this point, on one hand, the well-known Old High German and Middle High German rule, and on the other, Schottelius, "*Complete System of the leading German dialect, (Ausf. Arbeit Von der Deutschen Haupt Sprache)*," Brunswick, 1662, p. 578 *et seq.*

† P. 3.

‡ *E. g.*, p. 31, on words of doubtful gender; and p. 247, on the construction of "*jenseit*."

this. It has written on the outer cover of the binding the words, "Liber Collegii Societatis JESU Monachii Catalogo inscriptus. Anno, 1595." In the title, the words "Ex Bibliis Lutheri" are strongly lined out, and the preface, from which I quoted the enthusiastic expressions about Luther, is carefully cut out.* But they behaved very liberally in the body of the book, where very bad things have been left untouched; such as not only the first stanza of Luther's "A mighty tower is our God," at p. 270, but the stanza given at p. 266, as an example of the "Dimeter acatalecticis constans syllabis octo;" "O Lord, uphold us by thy word, and check the crimes of Pope and Turks." The Jesuits were strongly opposed, no doubt, to the introduction of the common language into the schools;† but that acute order was far too practical to lose those advantages which Luther and his fellows had gained by their employment of the German language.‡ Many of the writings issued for the common people by the defenders of the Roman Catholic church in the second half of the sixteenth century, show how much of useful material they gathered from the study of Luther's writings.§ We need not therefore wonder to find them seeking advantage from the use of a grammar based on "Luther's Bible and his other writings."

The history of Clajus' book shows how deeply seated was its reputation, and how widely spread, even in Catholic Germany. It went through no less than eleven editions from 1578 to 1720; a number far beyond that reached by any German grammar of the sixteenth or seventeenth centuries. And an especially remarkable circumstance is, that it is clear that the editors constantly paid increasing attention to the circulation of the book in Catholic countries. Thus we find omitted, especially in the later editions, all the portions struck out or cut out by the Jesuits in the Munich copy. The fourth edition, (Eisleben, 1604)||, at any rate omits from the title the obnoxious words "From the German Bible of Luther and his other works," and substitutes "Collected from all the best authors." But it still retains

* Compare the Apostolical Letter of Gregory XIII, A. D. 1575, in the "*Institutes of the Society of Jesus (Institutus Societatis Jesu)*," Prague, 1757, vol. i., p. 43.

† See History of Pedagogy, vol. i., p. 335. The case was not very different in the classical schools of the Protestants. *Ib.*, i., 218, 299, 315.

‡ Compare, among other authorities, the "*Institutes of the Society of Jesus*," vol. i., p. 390.

§ Compare, for example, the "*Explanation and confirmation of Christian and Catholic belief, by the saints, (Erklärung vnd beuestigung Christlicher vnd Catholischer bekantnus, von den Heyligen)*," prefixed to the German Church Calender of Adam Walasser and Peter Canisius, Dillingen, 1504, p. 4.

|| In the Royal Library at Berlin, I have thus far been unable to find the second and third editions, which must have appeared between 1578 and 1604. But they could make no material change in the statements of the text.

the author's preface, with its enthusiasm for Luther. In the eighth edition (Jena and Leipzig, 1651,*) the preface also is omitted, so that the contents of the book correspond exactly with those of the copy in the Jesuits' College at Munich. But the obnoxious passages within the book itself, which as we have seen were left untouched by the censorship of the Jesuits, remain here also, as they do in the tenth edition (Frankfurt on the Maine, 1689).† The eleventh edition, which appeared at Nuremberg and Prague in 1720,‡ goes one step further, omitting the worst of the citations, that referring to the Pope and Turks, and substituting "O Lord, thou great in grace and faith, give ear when unto thee I call."§ But other citations from Luther including "A mighty tower," remain.

Thus the German of Luther had become the written language both of Catholics and Protestants, as early as 1600. The little grammar of Clajus did not of itself produce this great effect. To assert that would be ascribing far too much importance to grammar in general, and to that of Clajus in particular. It would be much nearer the truth to say that the mind whose power in language had thus subjected Germany, was that of Luther. But still, the unobtrusive book of the pastor of Bendeleben is of no little interest, both as the external sign, and as the agent, of the spread of Luther's German.||

CHAPTER II.—SEVENTEENTH CENTURY AND FIRST HALF OF EIGHTEENTH.

Review of the German in the Schools of the Sixteenth Century.

We have shown in the course of the history of German grammar, the parallel which existed during the sixteenth century between the progress of the fixation of the New High German written language, and the progress of the labor devoted upon the elaboration and diffusion of it. It is only after such a delineation as this of some of the separate facts of the grammatical treatment of the German language, that we can now proceed to inquire into the relation of these efforts, to the schools and to instruction. The first thing that strikes us is

* In the Royal Library at Berlin.

† In the town council library at Leipzig.

‡ Royal Library, Berlin.

§ I have already shown how Luther availed himself of the Imperial dialect already existing. I have shown, in my work on the influence of Christianity on the Old High German, how his modes of expression are based, not only in general, but also by the closest dependence, upon the progress of the middle ages in Germany. The importance of the influence of the German theologians and mystics upon Luther's language, will the more clearly appear, as Franz Pfeiffer's critical editions of those important writers are further diffused. But no one can deny that all this material was worked over in Luther's mind, reshaped, inspired with new life, and thus made far more efficient for the common benefit of the German people.

|| P. 293.

their isolated and disconnected character. We find but the very remotest allusions to the relation between instruction in German and general culture.* Generally speaking, educators proceeded on the ground that every one had of course a satisfactory knowledge of German; and it was fortunate if they did not—as many of the most influential of them did—exert themselves deliberately for the suppression of German. Notwithstanding, however, the necessity of some instruction in German made itself evident in very many ways, and at the most various points in the line of educational development; but without any conscious coöperation amongst them. Thus we find on one hand, German A B C-books and introductions to reading and writing for beginners; and on the other, grammars of German written in Latin, for those already possessed of more or less acquaintance with Latin, Greek, and even Hebrew. But although there was no conscious connection between these scattered endeavors, it is not difficult to ascertain and state the bond which did in fact connect them all together. It is writing, and the written language, to which all these means of instruction point, whether like the reading manuals they lay open the first entrance into the world of German books, or, like the grammars written in Latin, they teach the right use of the High German language. It was reading and writing which necessitated the teaching of the native language in the schools; and accordingly, we see this department of instruction going forward equally with the fixation of the written language in the chanceries and in literature. How close was the connection between the regular giving of instruction in German, and its written use, is shown in the case of an individual who belonged to the transition period of the language in the fifteenth century. Niclas von Wyle, chancellor of Count Ulrich of Wirtemberg, about 1478,† relates of himself, that on previous occasions, many well educated youths, children of respectable and pious people, some of them having taken a bachelor's degree, had been sent to board with him from many places, to be instructed and trained in the art of writing and of drawing papers.‡ For these pupils he first made his "translations" from the Latin; and in the same work he gives a treatise with directions for them in the correct mode of drawing up titles and headings, with occasional remarks upon the proper orthography for chanceries.

* See above, p. 405, on Ickelsamer.

† See above, p. 407, note 2.

‡ From his *Translations*, 1st ed., fo. 4, "Drawing papers" is "dichtens;" etymologically related to the Latin *dictare*, dictate, but by usage now meaning to write poetry. Compare Frankg, *Orthographia*, Franckfort, 1531, fo. 12; "to train skillful writers of papers (*geulten-schreibern des gedichts*), for chanceries and other public offices."

Like the mode of instruction in the use of German in the chanceries, so the A B C-books and spelling-books, were of course most closely connected with the written use of the German language. We have already seen that these books began to appear before the beginning of the new period. But their real importance and diffusion first took place in consequence of the two great occurrences of the fifteenth and sixteenth centuries; the invention of printing and the Reformation. The former of these first rendered practicable the general diffusion of the art of reading; and the latter, and above all Luther's Bible, rendered that art a necessity to the people. For these reasons it is that we see the common schools, properly so called, prospering after the Reformation to an extent unknown in any previous period. The school law of Duke Christoph of Wirtemberg, of the year 1559, designates the "German schools" as the lowest grade; in which boys and girls, separate, are to learn reading, writing, arithmetic, and singing;* and these German schools are to be also "in the little villages and hamlets."† Similar provisions are found in the school law of Elector Augustus of Saxony, of A. D. 1580.‡ It was for these schools and for their teachers, that the A B C-books and the instructions in teaching reading which we have mentioned, were respectively intended.§ These little elementary books stood at one end, and the German grammars written in Latin at the other, of a course of instruction in the correct mode of using German in formal papers, oral addresses, and books. But the attempt to include all this in one system, and to determine a fixed and important position in the whole system of instruction, belongs to the beginning of the seventeenth century. This important and influential step was taken by Ratichius and his associates.

Ratichius and his Associates.

Wolfgang Ratichius, born at Wilster, in Holstein, in 1571, and who died in 1635, belonged to that remarkable class of men who, feeling a well-grounded impulse to become reformers, and not deficient in gifts or in just perceptions, yet, after a laborious and unstable life, fail to attain the end which they propose, for the reason that they lack modesty to define properly their own mission, and not to overestimate the importance of their reform and the measure of their abilities. The fate of such men commonly is, in the beginning of their career, to enlist the greatest interest and most zealous assistance

* "Attempt at a History of Classical Education in Wirtemberg (*Versuch einer Geschichte des gelehrten Unterrichtwesens in Württemberg*)," by Dr. Karl Pfaff, Ulm, 1842. "History of Pedagogy," i., 312. Barnard's "American Journal of Education," vol. vi., p. 426.

† "History of Pedagogy," i., 312. Barnard's "Amer. Jour. of Education," vol. vi., p. 426.

‡ *Ib.*, i., 431.

§ See above, pp. 401, 404.

of their cotemporaries; but if they fail to fulfill the great promises which they make in advance of any experiment, then to find themselves at once forgotten by the majority, while their enemies' assertions are believed, that their whole enterprise from the beginning was only a juggling trick. Thus they are quite forgotten until a less partial posterity again directs attention to them, and shows how many correct and even fruitful seeds were hidden under the chaff of their fancies and obscurities.

It is my present business to discuss the new methods of Ratichius only so far as they relate to instruction in German, and the place of that language in a course of education.* Ratichius and his associates were the first to undertake to make the German language the basis of all subsequent instruction of whatever grade. This they did in two separate ways; and they can not be denied the credit of having in one of these begun a career of improvement which attained its full development only in a later age; although in the other one, they originated many errors by a mixture of right and wrong. The first of these modes was the unconditional assertion that the German language was the instrument which the schools must use, in order to proceed to the mastery of other language. They considered the native German of the pupils not, like many of their predecessors, as a necessary evil, which was to be got rid of as soon as possible, but as the most efficient and appropriate instrument for the communication of other knowledge. Their second proceeding, however, was not merely to consider the German language as the innate and coexistent instrument of the pupil, but also to commence their instruction in language with a grammatical dissection of German; and Ratichius laid much the greatest stress upon this second principle.† "When the boy is put to school," says he, "in his sixth or seventh year, he should first be instructed in the German language."‡ The teachers of the lowest class are to use an A B C-book, and a manual of reading. After this, the pupil is to proceed to the study of German upon the universal method which Ratichius had devised for the learning of all languages. The text-books chosen was Luther's translation of the Bible, which was to be used for reading, extracting, arranging, and

* On the life and labors of Ratichius collectively, see "*History of Pedagogy*," ii., 10-44, and 479-489. Barnard's "*American Journal of Education*," vol. v., p. 245.

† Ratichius' method by its own nature imposed very definite limits to the application of his first principle.

‡ "*The new and desirable Ratichian method of teaching the tongues speedily and skillfully. Communicated to his friends by the author himself, but now made the property of the public for the sake of studious youth. (Desiderata methodus nova Ratichiana, linguas compendiose et artificiose discendi Ab Autore ipso amicis communicata, nunc vere in gratiam studiosae Inventutis Juris publici facta).*" Halle, 1615, p. 56.

applying principles, until the whole Bible has thus been used.* At the same time, the forenoon is to be devoted to the rules of the grammar, and at other hours the letters of Luther, or of the chancellor Pontanus (Bruck) and Schurff, are to be dictated and corrected by the rules of German grammar, as a practice in writing orthographically. "When the German grammar, which is as it were an introduction to all languages, is well understood," the teacher is next to instruct them, as far as circumstances permit, in the rudiments of other studies. He is to acquaint them with the rules of logic and rhetoric "in this language." Then he is to proceed to arithmetic, then to music and geometry, until the pupil has reached his ninth year, if of average talent, and is thus well prepared for a more complete and detailed study of the sciences and the other languages. I have been somewhat fuller in these details, because they give the unprejudiced reader a correct view of both of the correct ideas of Ratichius and of his wrong-headed ones also. Much the most important and fruitful of all his conceptions was, his express declaration that the German language is that in which the elements of learning must be taught, and from which it is necessary to proceed to all the other languages.

Ratichius found a favorable hearing for his reforms from many powerful and influential persons of the time. In 1612 he laid before the Imperial Government, at the Diet at Frankfort, a memorial upon his method; Duchess Dorothea of Weimar, Prince Ludwig of Anhalt Köthen, the city councils of Frankfort and Augsburg, and the great Swedish chancellor Oxenstiern, took an active interest in the new system.† And what was for many reasons still more important, some of the most eminent learned men of the period upheld the views of Ratichius; and above all the acute and comprehensively learned Joachim Jungius, and Christopher Helvicus, one of the best scholars of the day in Hebrew and the related languages. Both these men were at first carried rather too far by their zeal for the new doctrine; but afterwards recovered from their over-estimation of Ratichius, without doing injustice to such of his views as were correct; and declared themselves distinctly in favor of the employment of the German language for learned purposes.‡ Jungius, besides his many

* The directions given in the "*Desiderata methodus*" for treating the German language, if we compare what is said of the "universal method," (p. 57), with the special directions about German (pp. 56-61), will coincide in the main with what is laid down from Kromayer, "*History of Pedagogy*," ii., p. 23, *et seq.* Barnard's "*American Journal*," vol. v., p. 234.

† For details see "*History of Pedagogy*," vol. 2. Barnard's "*Am. Journal*," vol. v., p. 250.

‡ "*Joachim Jungius and his times (Joachim Jungius und sein Zeitalter).*" By G. E. Guhrauer, Stuttgart and Tübingen, 1850, p. 30, 31.

other labors, occupied himself with a German grammar; and directed his efforts particularly to the object of establishing a German technical language for learning. But his scheme, like so many other similar ones, failed.* We shall however see that even in this respect, the labors of Jungius did not remain entirely without influence upon subsequent time. Helvicus, like Jungius, endeavored to clothe his own department of learning in a German garment. Unfortunately however, he was snatched away by death in 1617,† not living to see the appearance of his great work. His heirs, in accordance with his wishes, published his "*Didactic books of Universal Grammar, of Latin, Greek, Hebrew and Chaldee. Giessen, 1619.*‡ This work is nearly related to our subject; for at the same time appeared another one by Helvicus in German, entitled "*Grammar: I. Universal, including what is common to all languages; II. Latin; III. Hebrew, written in German by the late respectable and very learned Herr Christophorus Helvicus, Doctor in the Holy Scriptures, and professor in the honorable university of Giessen; and now printed for the benefit of beloved youth; with the privilege of his Roman Imperial Majesty against reprinting. Printed at Giessen by Casper Chemlin, in the year 1619.*"§ The preface, signed by "the widow and children left by the deceased author," says that "The German grammar was prepared at the gracious command and ordinance of the Landgrave Ludwig of Hesse. It thus expresses the design of the work: "Heretofore, and still, it has been and is the custom in the schools to instruct tender youth who are beginning their studies, not in their native-born mother tongue, but in Latin; which is as entirely unknown to them as Arabic or Turkish; which causes great confusion, weariness and waste of labor to the dear young people. For no grown-up intelligent man, not to mention a boy just beginning, could learn well any thing taught him in a strange unknown language. To prevent such irreparable evils, our respective husband and father|| Christophorus Helvicus, now resting in God, had set forth grammar in our German language, and in an entirely consistent harmony, with great and persevering zeal, to the injury of his health, and at no small expense."

* Guhrauer's Jungius, p. 43; p. 224, *et seq.*

† *Ib.*, p. 44.

‡ "*Libri didactici grammaticae universalis, Latinae, Graecae, Hebraicae, Chaldaicae.*" Giessen, M.DCXIX. 4to.

§ "*Sprachkünste: I. Allgemeine, welche dasjenige, so allen Sprachen gemein ist, in sich begreift, II. Lateinische, III. Hebraische, Teutsch beschrieben Durch Weyland den Ehrwürdigen vnd Hochgelahrten Herrn Christophorum Helvicum Der H. Schrift Doctorem vnd bei der loeblichen Universitaet Giessen Professorem. Vnd nunmehr der lieben Jugend zu gutem in Truck gegeben. Mit Röm. Kais. Majestaet Freyheit nicht nachzutrukken Zu Giessen getruckt durch Caspar Chemlin, in Jahr, M.DCXIX.*" 4to.

|| The widow and children sign the preface.

The general grammar in German naturally coincides in the principal points with that in Latin. It is, however, not at all a mere translation of it, but is adapted to the nature of German just as the former is to the Latin, so far as the author's knowledge admitted. The Latin terminology is translated; *nomen* is called *Naennwort*, *verbum* *Sagwort*, *casus* *Fall*, &c.; and although Helvicus would no doubt subsequently have modified many of them, still he has been by no means pedantic in their use. He retains the terms "person," "declension," and "conjugation." The chief importance of this general grammar for us, however, is its establishment on the basis of the German language. The value of some of the brief remarks of Helvicus may be indicated, for example, by those upon the conjugations;* "Conjugations differ according to the differences of languages. In German there are two: I. That which in the imperfect ends with *ete* or *te*, and in the perfect with *et*; II. That which in the imperfect changes the vowel, in the perfect ends with *en*."

To this general grammar is added a Latin one and a Hebrew one,† with separate titles, but each title containing the words "written in German."‡ A Latin grammar written in German in 1619, is a remarkable contrast to the German grammars written in Latin which we have discussed; and very few of those who have in our own times written Latin or Greek grammars in German, as Buttmann, Zumpt, and so many others, have ever reflected that to do so was once a daring undertaking.

However severely we may reprehend the errors of Ratichius and his adherents, we can not deny them the great merit of having conquered a more honorable and useful standing in the schools, for the German language; for from this time onward we shall see the Latin more and more driven out from its previous exclusive occupancy, and in its place, the German assuming a higher and higher position in the system of educational discipline.

The reason why this movement first commenced in the seventeenth century, is to be found in the history of the German language for the previous one. Before the German could fairly demand to be substituted for the Latin as a school language, it must of course have acquired a definite and universally recognized character as a written

* P. 9.

† Guhrauer (Jungius, p. 227), says "A special interest attaches to Helvich's section on the German language, which is entirely omitted by Ratich (or at least is quite left out of the copy before me, belonging to the library of the university of Breslau), and which is entitled to a place of its own in the history of the German language and grammar." If the section here referred to is a grammar of German, other than the general grammar above described by me, it is wanting in both the copies of Helvicus in the library of the university of Erlangen.

‡ "German" is "*Deutsch*" in these titles, but in the general title it is "*Teutsch*."

language. We have seen how Luther's language became predominant in virtue of these qualities, during the course of the sixteenth century. The writings of Ratichius and his associates show in innumerable places, how closely they followed Luther, and how invariably they took for granted the recognition of his language as a standard. Ratichius commences his description of the requisites of a good teacher, with the following words:* "The teacher should be of the true religion, which after the Reformation by Luther, we commonly call the Lutheran; as it is explained in the Augsburg Confession, in the "Formula of Concord," in the works of those who by comparing one part of the Scriptures with another have richly illustrated all the points of the true and correct meaning of the Holy Spirit." Luther's Bible was the principal text-book of the Ratichians, and they make constant reference to the writings and sayings of Luther.†

The Philological Societies.—The Society for Usefulness.—The Floral Orders of Pegnitz.—Harsdörffer.

The "original sin" of Germany, contemning whatever pertains to Germany and imitating whatever is foreign, was never more strongly and destructively manifested than at the period now to be spoken of. During the seventeenth century and in the beginning of the eighteenth, there seemed to be really danger that the German would become reduced to a lower class language, somewhat similar to the Esthonian of the German-Russian provinces on the Baltic; so extensively had the upper classes given themselves up to the French language and manners. If the German philological societies of the seventeenth century are considered with reference to this state of things, we shall place a high estimate on their strenuous efforts and good intentions, notwithstanding their sillinesses and extravagant estimates of themselves; and we shall at least not under estimate the results which they did actually accomplish. The same judicious prince who took such a lively interest in Ratichius, Ludwig of Anhalt Köthen, was one of the founders of the first German philological society, which was established in 1617, at Weimar, the same place where the views of Ratichius were most favorably received. This society called itself the "Society for Usefulness,"‡ and adopted as its

* *Desiderata methodus*, Halle, 1615, p. 9.

† *Desiderata methodus*, p. 6. Guhrauer, Jungius, p. 31. Johannes Girbert mentions (in his grammatical tables, more fully described hereafter), a "*Grammatica Vinariensis*," in the new method, date 1618. I have sought in vain for this grammar in several of the largest libraries of Germany. I have since been informed by Prof. Massmann, who has been for a number of years occupied in researches respecting Ratichius, that this *Grammatica Vinariensis* exists at Weimar, and was written by Kromayer.

‡ *Fruchtbringende Gesellschaft*, literally, "Fruit-producing Society."

symbol a palm-tree. The similar societies which had for a long time existed in Italy, furnished a model for these, and indeed occasioned them. The founders of the German societies set forth their purpose as being: "to establish in Germany also an association whose members should endeavor to speak and write good and pure German, and to do whatever might contribute to the elevation of the mother tongue."* This was certainly a most honorable undertaking, and at that time of great importance. But in their adherence to their Italian models, and in following the taste of their age, the members of the society fell at the very beginning into a way of trifling over names and symbols which sometimes threatened quite to smother the whole of the excellent germ of their undertaking. Each member chose a symbol, and a corresponding society name, at first selecting terms from the trades of the miller and baker, and afterwards from the whole vegetable world. Herr Kaspar von Teutleben, the principal founder of the society, called himself "The Flour-abounding" (*der Mehltreich*), and took for his symbol a sack of wheat. Prince Ludwig was called "The Nourisher;" Duke Wilhelm, of Weimar, "The Savory;" the younger prince Ludwig, of Köthen, "The Succulent," &c.† But notwithstanding these follies, we must honor princes who, in a period so troubled, devoted themselves to the best of their ability to the improvement of the German language. We shall hereafter find, in "*The Seeker*" (J. G. Schottel), and "*The Turdy*" (C. von Stieler),‡ men who applied themselves vigorously to the task of laboring upon the German language.

The Society for Usefulness, having once set the fashion, found numerous imitators during that century. A great number of similar societies arose, characterized by the same silly use of names and symbols, but some of which, notwithstanding all their extravagance, were not without usefulness. I shall refer only to one of the best known; the "Worthy Order of Shepherds and Flowers of Pegnitz."§ The founder of this society, Herr Georg Philipp Harsdörffer, an eminent patrician of Nuremberg, took the name of Strephon, and all his associates adopted similar pastoral society names. Harsdörffer had already been named "The Sportive,"|| as a member of the Society for Usefulness; and this name very well describes the character of this

* "*History of the Society for Usefulness (Geschichte der Fruchtbringenden Gesellschaft).*" By F. W. Barthold, Berlin, 1808, p. 106. I can of course only refer to the subject very cursorily in this place.

† Barthold, p. 109.

‡ Reichard's "*Attempt at a history of the German Grammar (Versuch einer Historie der deutschen Sprachkunst).*" Hamburg, 1747, p. 301.

§ *Der Wüthlich Hirten- und Blumenorden an der Pegnitz.*

|| "*Der Spielend.*" Barthold, p. 325.

Pegnitz Order of Shepherds and Flowers, which he founded in 1644.* But notwithstanding his acknowledged childish and tasteless traits, we find in Harsdörffer many sound and valuable thoughts. In his "*Specimen of German Philology*,"† he urges with great force the importance of the German language. He demands that youth should be taught the rudiments of their native language at the same time with those of the Latin.‡ He promises undying fame to that prince who shall first appoint in his university a professor of the German language.§ And finally, he expresses his conviction that the time will come, when the studious "can escape the monopoly possessed by the Latin, which is necessary only in the uppermost stages of the higher faculties, and can, so to speak, buy at first hand the other arts and sciences."|| At the same time, Harsdörffer, as the limitation in the above extract shows, is far from being wrong-headed and fanatical in his preference for the German. Although he is zealous for the avoidance of all unnecessary foreign words, he still expressly affirms that such words as Testament, sacrament, prophet, apostle, evangelist, are not to be interfered with;¶ and he also expresses himself with much more moderation than many of his cotemporaries, with respect to the innovations in German orthography. The fact that Harsdörffer, notwithstanding all his correct views, accomplished but very little for the real benefit of the German language, and that his own productions are now read only as literary curiosities, may serve as a warning to us, not to place too high an estimate upon the literary value and importance of labors bestowed upon the improvement of the German language and the mode of teaching it. Harsdörffer himself and his cotemporaries afford a striking instance of the extent to which self-deception in this respect is possible. At the close of the Latin disquisition from which the above extracts have been taken, Harsdörffer has personified the German language, proclaiming her own praises in German verses. In these he has made every effort to extol the natural capacities of the German language.

"Of sound like unto mine are all of Nature's voices,
With crackle and with gurgle each rill and stream rejoices,
And lips along the gravel with babbling splashing tone,
That seems to laugh to scorn all tongues except my own."

* I abbreviate the title. Those desirous of fuller information on this Order may find it in Amaranthe's "*Historical Account of the Origin and Progress of the Worthy Order of Shepherds and Flowers of Pegnitz (Historische Nachricht von des löbl. Hirten und Blumen-Ordens an der Pegnitz Anfang und Fortgang)*." Nuremberg, 1744, p. 18, *et seq.*

† "*G. Ph. Harsdörfferi Specimen Philologiae Germanicae*." Nuremberg, 1646, pp. 96, 97.

‡ *Ib.*, p. 92.

§ *Ib.*, p. 95.

|| *Ib.*, p. 102.

¶ *Ib.*, p. 225.

And so on, to the end of the chapter. The contemner of the German language is disposed of as follows:—

“For he has never read
What I have done before, what I have now been made,
And now my fair domain is strongly fenced about,
No longer now to feel the critic's foolish flout.”

“Filip von Zesen,” is usually quoted as a caricature of the German philological studies of the seventeenth century. And yet, even this pedantic eccentric, busy-body as he was, and driven about from one place to another, gives us an impression that, in spite of all his vanity, his intentions are good.

But in this place, we can neither stop to examine his “*Instruction in the High German*,”* and his numerous other sigular productions, nor the High German orthography of Johan Bellin and other obsolete reformers.

Christian Gueintz and Johannes Girbert.

Christian Gueintz, of Halle, stands in close connection with the labors of Ratichius on one hand, and the Society for Usefulness on the other.

As a member of that society, his title was “The Regulator (*Der Ordnend*).” In 1641, he published at Cöthen, “*Christian Gueintz's Outline of German Grammar*.”† Although Gueintz was acquainted with the grammarians of the sixteenth century, Clajus‡ and Oelinger,§ still he and his eulogizers,|| show no small pride in this new undertaking of his. One of the complimentary poems prefixed to the book says:—

“How German should be spoken, made pure, and purely writ,
This grammar doth instruct; which cometh to the day
Because our mother-tongue disused and slighted lay,
That she should thus remain all lawless was not fit.”

Gueintz himself commences his preface as follows:—“Although our mother-tongue has heretofore not been studied out of books, but received as if by nature; has not been learned of teachers, but from our nurses; not in the schools, but in the cradle, after the manner of the valiant and well-born Gracchi at Rome; still, all things must have a beginning, except that faculty which God implants originally in reasonable creatures.”¶ We may observe in these words the stress

* “*Hoch-Deutsche Sprach-uebung*.”

† *Christian Gueintzen, Deutscher Sprachlehre Entwurf*.” In the library at Berlin.

‡ *Outline*, &c., p. 68.

§ *Ib.*, pp. 8, 68.

¶ *Outline*, fo. 1.

¶ *Ib.*, fo. 4.

which was at that time laid upon the attempt to arrange a fixed and correctly regulated course of school studies in German. The intermediate efforts of Raticchius constitute the chief point of distinction between the grammarians of the sixteenth and those of the seventeenth century; for it is easy to see how immediately the grammar of the latter is connected with that of the former. Luther* is still uncontestedly the most authentic voucher for good German; and the imperial rescripts still preserve their ancient reputation.† Thus it strikes us as strange enough, when we find, added to these authorities, such others as "all the recent historical writers, Amadis, pastorals, the *Astraea*, &c., the translations from *de la Serre*."‡

The views of Gueintz were quite in harmony with those of the educational innovators of his day; as appears, among other things, from his singular terminology. His attempts to replace Latin expressions by German ones,§ is open to criticism only on the ground of being pushed too far. Many of these changes have been justified by time. His grammatical terminology, on the other hand, is a warning against arbitrary innovation. It is difficult to understand for instance, such a maxim as "*Der sonderbare zufal ist die völligkeit*;"|| or the caption of the sixth chapter of the second book; "*Von der einfächtigen endannemung des Mittelwortes*."¶

Gueintz's "*German Orthography (Deutsche Rechtschreibung)*," is an important work. It was "revised and published for consideration," by the Society for Usefulness; and appeared at Halle in 1645.**

Johannes Girbert of Jena,†† is like Gueintz, closely related to the labors of Raticchius. Although Girbert's principal grammatical work refers to the earlier writings of Schottelius, I shall still place my account of him before that of the latter, partly because Schottelius' principal work appeared after Girbert's and partly because Girbert adhered closely to the methods of the earlier grammarians. Like most of them, his first object is, a determination of the subject of orthography. His book appeared under the title, "*German orthography from the Holy Bible, set forth for the instruction of boys, by Johann Girbert, rector of the gymnasium at Mulhausen. Mulhausen, printed by Joh. Huter, 1650.*" Fol.‡‡ His mode of handling his subject is peculiar. In his preface he inquires from what sources

* Outline, pp., 4, 6.

† "*German orthography (Deutsches Rechtschreibung)*." Halle, 1645, p. 4.

‡ Outline, &c., p. 7.

§ See the list, "Outline," &c., p. 122, *et seq.*

|| Outline, p. 11.

¶ *Ib.*, p. 106.

** In the Berlin library, where are also editions of 1666 and 1684, both at Halle.

†† Girbert calls himself *Jenensis*, in the title to his "*Logica*," (Coburg, 1632, fo. 1).

‡‡ "*Teutsche Orthographi Auss der H. Bibel den Knaben zum Nachricht aufgesetzt von Johanne Girberto Gym. Mulhusini Rectore. Mulhusi Typhis, Joh. Huteri, Anno, 1650.*"

youth should be taught German orthography. "Should it be," he asks "from the Amadis, the pastorals, Jest and Earnest, Sir Pontus or Sir Gallinus, The Prison of Love, and the like?" This idea he combats with all his might. The young, he says, "look in such books for good and correct language; and find instead, abominable stuff." "They will therefore proceed on a much safer plan by having recourse to the Holy Bible." To this end, Girbert gives a large number of words whose orthography needs to be taught correctly, alphabetically arranged, and each having a verse from Luther's Bible given with it, in which it occurs.

This pioneer work was soon followed by Girbert's principal one, "*The German grammar or art of speech; compiled with the aid of the grammars heretofore printed, especially those of Johann Claius, Hertzberg, 1587; Weimar, after the new method, 1618; Christ. Gueintz, Halle, 1641, March 24; Justus Georg Schottelius, 1641, July 6; arranged in brief tables, and published in compliance with many solicitations, by Johann Girbert, gymnasiarch pro tempore. In the Holy Roman Imperial city of Mulhausen in Dueringen, 1653. With privilege from the Elector of Saxony. Printed by Johann Hüter. Grammar is the beginning and foundation of all arts.*"* Such is the long title of this small folio volume. Around it, in a separate border, are printed the words, "If our youth are well instructed in the noble and perfect German tongue, they will the more easily attain to the knowledge of the others."

All this indicates clearly enough views similar to those of Ratich, even to the characteristic fondness for tables. Girbert sets forth the whole of German grammar in seventy-eight detailed tables. Many things in these are very well, and others are singular enough. Thus, for instance, Table LXXIII, treats of "variations in arranging words." Here we are taught "how one sentence can be expressed in many different ways." As an illustration of the method given, one may take an example from Luke, xvi.; "The rich man died also." The book proceeds to say, "This might be expressed by a German, a poet especially, in other ways, with a nominative; as, 'The rich man also laid down the tabernacle of the flesh,' or 'was obliged to leave this earth.'" Thus the sentence is tortured through thirty-four examples,

* "*Die Deutsche Grammatica oder Sprachkunst, auss Denen bry dieser Zeit gedruckten Grammaticis, vornemlichen Johann's Claii, Hertzb. Anno, 1587. Vinariensis zum neuen Methodo. Anno, 1618. Christ. Gueintzii, R. Hul., Anno, 1641. 24 Mart. Justi Georg Schottelii, Anno, 1641, 6 Jul. Zusammen getragen, in kurtze Tabellen eingeschrnkt, vnd Dem vffentlichen Liecht endlichen uff mehrmahliches Anhalten vbergeben von Johanne Girberto Gymnasiarchâ, p. t. In des Heil. Roem. Reichs Stadt Mulhausen in Dueringen, Anno, 1653. Vnter Churfürstl. Sachs. Privilegio. Typis Johannis Hüteri. Grammatica ist der Anfang vnd Grund aller Kuenste.*"

for the six cases, until it is dismissed at the ablative with these variations: "The worms also ate their fill of the rich man,—The devils have had a good soup off the rich man in hell since he died." It is clear enough that there was sometimes at that day, not only method in their madness, but often also madness in their methods.

Schottelius.

The most valuable member of the Society for Usefulness, in the matter of investigating the German language, was Justus Georgius Schottelius.* He was born at Einbeck, in the then kingdom of Hanover, attended school at Hildesheim and Hamburg, studied law at Leyden, and at the same time applied himself to belles-lettres under the guidance of Daniel Heinsius. In 1638, Duke August of Wolfenbüttel, appointed him tutor to his son Anton Ulrich; and under the patronage of the patriotic and learned duke, the collector of the great Wolfenbüttel Library, Schottelius now rose from one place of honor to another. In 1645, he was made consistorial councillor; in 1646, councillor at Wolfenbüttel; and subsequently privy councillor in chancery, and of justice. He was variously employed in important affairs by his prince, and remained in high favor with him until his death, in 1676.†

In the Society for Usefulness, of which he became a member in 1642, he received the title of "The Seeker."‡ Schottelius belonged to that band of honorable men who in the midst of the greatest affliction of the German father-land, never ceased to cherish the idea of her greatness and splendor; and who endeavored to find in the elevation and improvement of the German language, some compensation for the political disgrace of their century. But while others were contenting themselves with merely praising the German language, Schottelius applied himself with most commendable industry to the improvement of its grammar. The fact that he devoted such leisure as was left him by a life of exacting duties, to such a painful labor, alone entitles him to high praise. Of the various grammatical works of Schottelius, we will at present consider particularly only two, one as being the most important of his productions, and the other on account of its value for our purpose, as having a connection with the schools. Schottelius, after having at several times published the results of his labors on German grammar,§ collected together all

* I print the name in the form used by Schottelius himself in the titles of his books.

† Reichard's "Attempt at a history of the German Grammar," p. 127, *et seq.*

‡ Barthold, p. 327.

§ "German grammar. In three books (*Teutsche Sprachkunst. Abgetheilt in Drey Bücher*)." Brunswick, 1641, 8vo. "Introduction to the German language (*Der Teutschen Sprach Einleitung*)." Lübeck, 1643, 8vo. "German grammar, published for the second

the treasures of his learning on the subject in the work of which the following is the somewhat long, but characteristic title:—

“Complete system of the proper German tongue ; in which are included accounts of its origin, antiquity, purity, peculiarities, richness, incomparability, correctness, also therewith fully set forth, the grammar and prosody of the German, and in good part of the Latin ; and likewise the reduplications, derivations, and introduction to the language ; authors on German manners and German language ; of translation into German ; also, the root words of the German language, with their explanations, and many similar important matters. Divided into five books. By Justus-Georgius Schottelius, Court and Consistorial Councilor of Brunswick and Lüneburg, and Assessor of the High Court of Justice. Not only with privilege from his Imperial Roman Majesty, but also with the special imperial approbation, as a work of general utility and eminent benefit to the German nation, as by the tenor of the Imperial Privilege here following. Brunswick, printed and sold by Christoff Friederich Zilligern, bookseller, M.D.C.LXIII.”†*

The book is a stout quarto, of which the foregoing long title also gives the contents; except that they are almost still more a mixed compilation from both new and old books, than the title is. Of its five books, the first contains ten “Eulogies of the original German language;” the second, etymology; the third, syntax; the fourth, prosody; the fifth, seven different treatises, of which the most important are, one on German proverbs, and one on “Authors who have written on German history, nationality and language.” The text of the book is German and Latin, but so arranged as rather to be supplementary to each other than to interfere with each other. The somewhat heterogeneous appearance of the book will the more easily be excused when we remember that its industrious author could devote to it only such leisure hours as his business left him.

Schottelius differs from the grammarians of the sixteenth century, in that he not only endeavors to subject the language of his day to rules, but that at the same time he includes within the field of his labors, the history of the German language. Here as elsewhere his work is not free from confusion; but he can not justly be refused

time in 1651 (Teutsche Sprachkunst Zum anderen mahle herausgegeben im Jahr, 1651),” Brunswick. (The engraved title page which precedes the above has “Printed the second time at the princely residence of Wolfenbüttel, 1651. For sale at Brunswick,” &c). 8vo. All these are in the library at Berlin.

* See the privilege itself, an interesting document, on fo. 8.

† *“Ausführliche Arbeit Von der Teutschen Haupt Sprache, . . . Ausgefertigt von Justo-Georgio Schottelio, . . . Braunschweig, . . . Christoff Friederich Zilligern, Buchhändler, Anno. M.D.C.LXIII.”*

some merit. He divides the history of the German language into five epochs. The first begins with the first beginning of the language, the second with Charlemagne, the third with Rudolph von Hapsburg, "The fourth epoch will coincide with Herr Luther, who implanted in the German language all its beauty, ornament, impetuosity and exciting thunder, relieved it of many of its rugged inelegancies, and proved to the Germans what their language was capable of, if they should so resolve. And this testimony to Luther is borne both by those who like him and those who do not; and must still be given by every one, whether he hate him or love him, in that particular of the exemplification of the German language; and may be drawn from observing how the German language has grown and become polished and enriched; as clearly appears from the writings of all kinds which are every year appearing." Schottelius' definition of the fifth epoch is very remarkable. It shows, on one hand, as do the last words of the extract just given, an excessively high estimate of his own period, but on the other hand, that Schottelius had an entirely correct appreciation of the powerful movement which was carrying him onwards, and whose permanent effects we ourselves see before our eyes at the present day. "The fifth and last period," he says, "may correspond with the years during which the German language was freed from the corrupting practice of botching the language with ragged foreign terms, and restored to its native purity, beauty and chastity; when also correct and thorough principles and a method have been laid down for it, and have gained favor; and when a complete dictionary has been prepared, by whose aid all can commodiously read and understand, the arts and sciences in their native tongue, and hear them spoken of."* While the German language as presented by Schottelius, notwithstanding the improvements just alluded to, is substantially the New High German of Luther, Schottelius still proves himself acquainted with his predecessor in the field of German grammar. He calls Ickelsamer's grammar "a good little book, but somewhat too old;"† and he knows Laurentius Albertus,‡ Oelinger,§ and Johannes Clajus.|| He is closely related to the followers of Raticius, as a pupil of Joachim Jungius at Hamburg;¶ and his coincidences with Gueintz are numerous. Thus far, therefore, Schottelius is to be considered as standing upon the shoulders of his predecessors. The most important part of the work of definitely fixing the New High German written language, had been already done by the end of the sixteenth century. But when this task had been accomplished, there

* Complete System, p. 49.

† *Ib.*, p. 19.‡ *Ib.* pp. 4, 21.§ *Ib.*, p. 4.|| *Ib.*, p. 4.

¶ Guhrauer, Jungius, p. 226.

was still wanting an accurate knowledge of the relation between the written and oral language. Approaches to this knowledge were to be made, however, by the more detailed adjustment of the written language, the decision of what was to constitute correctness and incorrectness in it, and the preparation of a more finished system of its grammar. On these subjects we find in Schottelius valuable suggestions. He has a clear perception of the fact that he is writing a grammar of the "High German language;" and that this "language" is not a mere dialect.* "The High German language" he says, "of which we are treating, and to which this book relates, is not a dialect, but the German language itself, as learned, wise, and skillful men have received and are now using it."† He expresses himself most vigorously in opposition to the assumption of the people of Meissen. "It is also," he says, "almost ridiculous to see one and another person, especially if he comes from Meissen, fancying himself entitled to be a judge and corrector of the High German language on account of his own dialect."‡ Schottelius perceives clearly and correctly, that the practical office of a grammar of the High German is precisely such as was that of the Greek and Latin grammarians, in maintaining the authority of the Attic and classical Latin, against the dialects. With reference to this point, he enters into the celebrated controversy of the ancient grammarians on analogy and anomaly; selecting for himself a man between the two, but with a decided preference for analogy.§ On all these subjects, Schottelius is entitled to the credit of speaking and deciding with learning and judgment. But this makes us only the more disinclined to follow him at times when he entirely mistakes the real character of the language, and estimates far above their real value the labors of himself and his contemporaries for the "radical correctness" of it. There is much truth in his remarks on the harm which he describes as having happened to the German language from "the uncontrolled, irregular and unconsidered uncertainty" of the German language, "so that up to this time it has never been able to fix upon any complete and recognized standard, as other languages have.|| But we feel an equal degree of displeasure where he speaks, just afterwards, with profound contempt of the "vulgar usage," and says that "the vulgar usages of language are taught even from the cradle, and come as it were of themselves; but the proper language is learned only by learned directions and the exercise of industry and reflection."¶ For such reasons, the estab-

* Complete System, dedication to Duke August.

† *Ib.*, p. 174.

‡ *Ib.*, p. 158. The remarks subsequent to this are also very worthy of attention.

§ *Ib.*, pp. 10. 11.

|| *Ib.*, p. 167.

¶ The allusion in these remarks to a saying of the Romans may perhaps modify its harsh-

lishment of the Society for Usefulness seemed to him far the most important epoch in the whole history of the German language. "The German language," he says in his address to Ludwig of Anhalt, "has only ascended in its rightful honorable road to an established and perfect state, since your princely grace first prepared, in a princely and most praiseworthy manner, the golden steps for such a career, for this most magnificent, rich, and perfect language."*

In his large work, of which we have hitherto been speaking, Schottelius had complained that the young were so little instructed in German. "But," he remarks, "the scantiness of the instruction which the young receive in it, and their consequent lack of skill in it, and of power to use their native language purely and correctly in the description of excellent, skillful or remarkable things, or to enjoy, praise and understand such skillful or useful things, sciences or virtues as are written in it, is a matter which needs not statement, but rather lamentation."† This same fact was experimentally ascertained by Schottelius' friend, Prof. Christoph Schrader of Helmstadt, general inspector of all the schools in the duchy of Brunswick. He writes to Schottelius, under date of 18th of June, 1676, with expressions of great pleasure at seeing that the latter has at last begun the work which he (Schrader) had so long been begging him to undertake; and saying that in the course of his inspection of the classical schools, he was every year observing that the written tasks of the pupils contained almost more offences against the German language than against the Latin. He therefore most earnestly thanks his friend for having undertaken in the midst of his important occupations, to attempt a remedy for this evil. He proposes during his subsequent circuits, to strongly recommend this new product of Schottelius' intellect and acuteness, to all teachers and pupils. For he entertains a fixed hope that at some future day, the pupils in the schools, however industriously they study Latin orthography, will devote themselves with equal energy to that of the German.‡ In the same year, 1676, appeared at Brunswick, "*A short and fundamental introduction to orthography and etymology in the German language. Necessary and use-*

ness. What is correct in them should not be undervalued. It is their extreme opinions which constitute their error.

* Complete System, p. 1000. The work of Schottelius shows abundant evidence of the extent to which the interests of grammatical investigation suffered from the effects of such perverted views. He includes the strong verbs among the irregular ones, and gives them in his large work (pp. 578-603), alphabetically arranged. Even in the smaller edition (of 1676), he says, "Thus, the irregular German verbs can not be reduced under any certain rules, but must each be learned separately." (P. 159).

† Complete System, fo. 7.

‡ See Schrader's Latin letter prefixed to the smaller work of Schottelius, published: 1676.

ful for youth in school and elsewhere."* The name of Schottelius is not mentioned in the title; but the matter of the volume sufficiently proves him to have been the author.† This little work deals chiefly with orthography, including however in this idea, correctness in declining and conjugating; and it draws from the author's larger work whatever is most necessary for practical use. To mention the particulars of what it contains would occupy too much space. I can only observe that one especial chapter, the fifth, contains an alphabetical list of words, "respecting which some doubt or error is liable to arise, either in respect to the sound, or the gender, or the article, or some other grammatical concord." In this place we find a very great number of orthographical distinctions yet prevailing, clearly set forth; such as *dass* (conj.) and *das* (pron.); *Mann* (man, husband) and *man* (they, in "they say."‡) The same correspondence with modern usage is found in many of Schottelius' rules. While therefore this author is very often only a collector of rules which were recognized before his day, still we must accord to him the credit of having exercised no small influence upon the more definite determination of the High German orthography. But how small is the assistance which this merit alone can give to the progress of the language, appears, in spite of himself, from Schottelius' own testimony, in the following citation from the preface to the "Introduction":§—

"As to the requisites of Poesy, or the art of poetry, or the art of rhyming, it is abundantly and clearly evident in the German language, what it is that constitutes regulated metrical composition and good German rhymes; and what should and must constitute them. In like manner, whatever regards the art of speaking or rhetoric, is now well and universally set forth throughout all Germany, and testified to by all the multitude of writings, letters and decrees issued and proclaimed from the imperial, electoral, princely and other well organized chanceries (including the numerous well-printed books); and by all their abundance, materials, transactions, circumstances and history; showing how the art of using correctly the beautiful and incomparable High German language is known throughout the whole

* The original title is repeated in German, viz: "*Brevis et fundamentalis Manuductio ad Orthographiam et Etymologiam in Lingua Germanica. Kurtze und gründliche Anleitung zu der Recht Schreibung Und zu der Wort Forschung In der Teutschen Sprache. Fur die Jugend in den Schulen, und sonst überall nützlich und dienlich.*"

† In my copy, there is the superfluous evidence of the word "Schottelii," written in an ancient hand upon the title page.

‡ Compare the opposite direction given in the orthography of Gueintz (Halle, 1645), pp. 47, 48; and the repetition of it (making *das* [conj.] and *das* [pron.] written alike), in the edition of Halle, 1684, pp. 47-8.

§ This opinion of the historian is based in part on traits in the quaint antique German style of Schottelius, which are necessarily lost in the English.—(Translator)

empire; and showing also how much of ornament, skill, power, and elegance, and also how much thunder and lightning there is in the German tongue, if there is only forthcoming a hand or a tongue which is able to develop these and set them forth."

Both the form and the substance of this extract sufficiently show that even the most genuinely respectable grammatical zeal will deceive itself about its own powers, if it attributes the prosperity of a language or a literature to its own labors. But I would also remind such as may be inclined to sneer at the oddities of this "phrase of the period of the Holy Roman Empire in the German nation,"* so much despised, was nevertheless infinitely preferable to the most elaborately adorned of the French idioms which many German statesmen would substitute for it.

Stieler.

Caspar von Stieler, born at Erfurt in 1632, led a very changeful life. First a physician, then a theologian, then a military officer, then a privy secretary and court-councilor, he finally retired to private life and devoted himself to authorship. The Society for Usefulness elected him a member in 1668, and gave him the surname of "The Spade." In 1705 the emperor Joseph conferred nobility on him and his descendants. His last years were passed at Erfurt, where he died in 1707.† Stieler's chief production is his "*Treasury of the German language*,"‡ which he published under his surname of "Tardy" at Nuremberg, in 1691. To this he subjoined a "Brief manual of the High German grammar." As Stieler has followed Schottelius in his principal doctrines, although with independent opinions of his own, I may discuss the work with brevity. His opinion on the relation between the written and spoken language are similar to those of Schottelius; although his mode of defining this relation is worth mentioning. In his address to elector Johann Georg of Saxony, to whom, along with Duke Anton Ulrich, of Brunswick, his "Treasury" is dedicated, he alludes to the cities of electoral Saxony "in which the High German language was auspiciously born, auspiciously brought up, and most auspiciously adorned and ornamented, and is even now daily receiving a renewed and increasingly beautiful polish; I mean, magnificent Dresden, sacred Wittenberg, and that sweetest of all cities, Leipzig, which from its sugary treasure of language imparts such a mollifying influence to the otherwise salty Halle, that it will

* In the German one sesquipedalian word, viz., "*Heiligenrömischenreichsteutschernationsperioden*."—(Translator.)

† Reichard's "*Attempt at a history of German grammar*," p. 299.

‡ "*Teutscher Sprachschatz*."

never have cause to be ashamed of its pupils." "These excellent cities are therefore the standard of authority for the High German language; just as Wittenberg, in particular, one hundred and seventy years ago, laid the foundation of this state of things, by the translation into German of that great book of God, the Bible."* But on the other hand, Stieler declares in his subjoined manual, with a citation of Schottelins, that the High German is not a dialect at all; since all the dialects, including even the Misnian, are not this High German, but contain erroneous variations from it.† "Therefore we set forth the German language in this book, not at all as a German dialect, but as a proper language, authoritative throughout the empire; just as heretofore was the case with the authoritative Greek language, which is not to be confused with its subordinate dialects, neither Attic nor Doric, nor Æolic nor Ionic; or as the Latin language was spoken and written within the country of Latium; or as is now the case with the French‡ court dialect, called '*la langue de la cour.*'"

Morhof.

Daniel Georg Morhof, the well-known "Polyhistor," (born at Wismar, 1639, and died at Lübeck, 1691,) holds an important place in the history of instruction in German. He was the first to endeavor to make the history of German poetry a department of school instruction; an undertaking rendered more important by his adding to it a history of the later German poetry. The book in which this task was performed bears the title "*Daniel Georg Morhof's instruction in the German language and poetry, their origin, progress, and rules. Wherein are treated also, the rhymed poetry of foreign nations, and other matters.*"§

In this book, Morhof connects himself on one hand with the important work of Martin Opitz on German poetry, which appeared in 1624, and exerted a lasting influence on all who came after him. And on the other hand, he was a precursor of the labors by which Gottsched exercised so great an influence upon his cotemporaries. Indeed, how uncouth and rude soever some of Morhof's opinions may appear, his work must still be allowed to contain the first rudiments

* Fo. 3, 4.

† The passage from which I quote is made unintelligible in the original by an error of the press. The point after "Meissnisch" must be erased.

‡ "*Französische*" in the original. See the article "*Französisch, und Französisch,*" in the "Treasury."

§ "*Daniel Georg Morhofen Unterricht Von Der Teutschen Sprache und Poesie, deren Ursprung, Fortgang und Lehrsätzen. Wobey auch von der reimenden Poeterey der Ausslaender mit mehren gehandelt wird.*" Kiel, 1682. I use the copy from the Berlin Library.

of the system afterwards carried to such perfection by Herder and his followers.

Morhof's book consists of three parts. The first treats of "The German language," its excellence, antiquity, derivation, &c. The second discusses "The origin and progress of German poetry." This is much the most important part of the whole book. In it, Morhof first gives accounts of the poetry of foreign nations, the French, Italians, Spanish, English, and Dutch. The French, he respects and over-values. "We begin," he says, "with the French; which nation may justly be preferred over others for intellect, and capacity for poetry."* He however expresses independent opinions about the poetry of other nations. But aside from this, the mere possession of so much information of the European poetry of that day gives Morhof's book an important value. Morhof is the first author, so far as is known, who mentioned the name of Shakspeare in Germany; and his reference to the greatest modern dramatist is sufficiently curious. "John Dryden," says Morhof, "has written on dramatic poetry well and learnedly. The English authors whom he quotes under this head are Shakspeare, Fletcher, Beaumont; of whose works I have seen none."† Morhof follows his account of foreign poetry with the history of that of Germany, from its earliest beginning down to his own times. This he divides into three periods. The first, includes all before Charlemagne; the second, from Charlemagne to the beginning of the seventeenth century; the third, begins with Martin Opitz; "because under the guidance of Herr Opitz, German poetry awakened again as it were out of the grave, and assumed much more splendor than before."‡

The third principal division of Morhof's book treats of "German poetry in itself considered;" and here he introduces some account of the usual chief subjects of grammatical works, orthography, etymology, and syntax, proceeding to things more strictly poetical; such as rhyme, invention, epics, odes, &c.

Bödiker.

Johann Bödiker, who was born in 1641, and who was, from 1673 until his death in 1695, conrector and afterwards rector of the Cöln Gymnasium at Berlin, published in 1690, a German school grammar, with the title "*Principles of the German language in speaking and writing.*"§ The book deservedly met with great success, especially

* P. 154.

† P. 250.

‡ P. 422.

§ "*Grund-Sätze Der Deutschen Sprachen Inn Reden und Schreiben.*" I have used the 3d edition, Berlin, 1,709, 8vo.; which, Reichard says (p. 288) is unchanged, except § 69.

in consequence of the author's historical researches. He follows Schottelius in many matters.* But his book is fuller than the small outline of Schottelius, and much more convenient than his larger work. His rules are mostly short and practical. He gives the High German the same precedence over the dialects, which Schottelius had allowed it. But the superstition about the Misnian dialect was even then very firmly fixed, as appears from his observation, (p. 211,) that "The Misnians and Upper Saxons come next to it (the High German) in purity of expression." But he says, again, on (p. 212,) "One born a Low Saxon, Marker, Pomeranian, Westphalian, Brunswicker, &c., can speak High German with purity better than those of Upper Germany." Bödiker lays special stress on syntax; saying expressly, "Syntax is the principal part of grammar."† His estimate of the German language is very high. He values it above the Greek and Latin,‡ because it is "fuller, stronger and richer."§ The other nations of Europe will scarcely agree with the letter of our grammarian's assurance that "In the last century it (viz., the German language) first assumed a proper condition; and during the present century (the seventeenth, that is,) it has been carried to the highest pitch of elegance."|| Bödiker has the utmost respect for Luther's style, however; considering it superior to all others. In recommending the reading of good German books, he urges the study of Luther, above all, upon the young. I will quote the leading sentences from the paragraph on this subject, as they are important for other reasons.¶ The passage begins, "In order to acquire a good style of reading and speaking German, it is necessary to read good German books." And the author then proceeds, in explanation, to add, "That is, those written in good, old, true, sound, strong German. And especially, as has been already said,** the German Bible is valuable for this purpose, besides innumerable other benefits. And furthermore, the writings of Herr Luther. The Imperial decrees. The observations of Goldast and of Lendorf."†† I will cite further only the following: "The good German poets will all also contribute their aid. But it is proper that youth should be warned against the fantastic dreams of

* See for instance, p. 95, *et seq.*, on regular and irregular conjugation. We find, again, on the other hand, at p. 30, the present rule given for initial capital letters; in contradiction of Schottelius' Introduction, p. 30. Bödiker, (p. 1,) calls Schottelius his predecessor.

† P. 217, Bödiker uses "*Wortfügung*" for "syntax," like Schottelius, (Complete System, pp. 691-2, *et seq.*)

‡ P. 417.

§ P. 418.

|| P. 415.

¶ P. 411.

** Referring to p. 40, where he says of Luther's Bible, "But there is no better book among those in the possession of the Germans, than the German Bible, in the translation of that deceased man of God, Herr Luther. This is a treasure above all treasures; and few nations possess a book so pure, clear, strong, wise, powerful and moving."

†† Compare what has been said before of Luther and the imperial decrees.

amorous composition, and should avoid them like poisonous herbs. Especially should Amadis, and such corrupting writings, be avoided. As to romances, I shall shortly speak of them, in the section on prosody.* I should not so frequently refer to the writings of Herr Luther if I had not found his German style better than that of any one else; not to mention, besides his language, his excellent Christian and edifying matter. The young may well consider what that excellent historian Sleidan has said to his praise in this particular: 'He both very much adorned and enriched the German language, and attained the highest reputation as a writer in it.'

That the excellent old German rector not only recommended the study of Luther to others, but also disciplined himself in it, the reader will readily gather from the plain significant style of the few extracts which I have given, if he will compare them with those from Schottelius and Stieler.

Johann Leonhard Frisch.

After Bödiker comes another Berlin rector, undoubtedly one of the most important of those who have devoted their talents to the investigation of the German language. Johann Leonhard Frisch was born in 1666, at Sulzbach, in the Upper Palatinate, attended school at Nuremberg, studied theology at Altorf, Jena, and Strasburg, and afterwards lived an adventurous life of travel through Germany, France, Italy, Hungary, Turkey, and Holland, until he was appointed, in 1698, sub-rector at the gymnasium of the Grey Friars' monastery at Berlin. In 1706, he was chosen on the recommendation of Leibnitz, whom he had instructed in Russian, member of the Royal Prussian Academy of Sciences, and, in 1726, rector of the gymnasium at Berlin. He died at an advanced age, in 1743.† Frisch was a man of a very different grade from most of those whom we have thus far mentioned. His learning in German philology was incomparably more thorough than that of Schottelius; and is especially distinguished by having labored most zealously throughout a long life in grammar and lexicology, without losing his intellectual freedom, or falling into pedantic

* I can not resist the temptation to subjoin at least the beginning of the passage here referred to. On reading romances, we find a paragraph, (p. 484,) with the heading, "Romances do the young more harm than good." The commentary which follows begins thus: "Romances have never pleased me. They are an abortion, brought forth by France, as was Amadis by Spain. There is no poetry, and no true history, in them. Incredible and impossible deeds are ascribed to their knights, and their women in knights' costume. Moreover, they must of course all be lovers; and they bring many licentious tricks to market. Then, their travels are all so confused together, as if it were always summer in all countries. The knights can talk with everybody in every country, in all languages, without any interpreter," &c.

† I take these notices from J. J. Wippel's life of Frisch, Berlin, 1744, 8vo.; and regret that I am unable to devote more space to the life of this remarkable and useful man, who applied himself with equal zeal to natural and philological science.

habits. His great work in his German-Latin dictionary, which appeared at Berlin in 1741, in two volumes large quarto, far surpassing all previous works of its kind. Our attention is however at present due more especially to Frisch's labors for German grammar for schools. I do not mean that the results of these labors were particularly extensive in his own day; but that it is remarkable to find the best philologist of his time entertaining views so sound, so wise, and still so liberal, in the best sense of the word, on the subject of school grammar. In 1723, Frisch published a new edition of Bödiker's grammar, already mentioned. Its title was:—"The principles of the German language, by Johannes Bödiker, rector of the Cologne Gynasium at Berlin; republished for the most part, and improved and enlarged with quite new remarks, and a full register of such words in the German Bible as require some explanation; also with an appendix, containing an outline and specimen of an authoritative German dictionary; by Joh. Leonh. Frisch. Berlin, Christoph Gottlieb Nicolai, 1723."* This title would indicate, at a glance, no very great undertaking. But upon a careful examination of the paragraphs, the matter will be found very frequently to be entirely new. Frisch is therefore justified in saying in his preface, "that it was intended to preserve a monument to the memory of the deceased author; for that the material of the books are such that they might well have been published under an entirely new title."† Frisch's principal subject, as with all his predecessors, is German orthography. This department of grammar, broadly considered, enters into all the other departments; and especially, it often obliges us to decide the question what is or is not to be considered as belonging to the written High German dialect. Frisch very much abridges Bödiker's explanations on this head; omitting what I have quoted from the latter on the Misnian and Low German dialects, and defining the High German as follows:—"The High German language is not the peculiar dialect of any one race or nation of the Germans, but has grown to its present perfection out of all those dialects, by the industry of learned men, and from the style adopted by the writings of learned men and by the oral usage of many eminent persons, throughout Germany."‡

* "Johannis Bödikeri, P. Gymn. Suevo-Colon. Rect. Grund-Sätze der Teutschen Sprache Meistens mit Ganz andern Anmerkungen und einem völligen Register der Wörter die in der Teutschen Uebersetzung der Bibel einige Erläuterung erfordern Auch zum Anhang mit einem Entwurff und Muster eines Teutschen Haupt-Wörter-Buchs Verbessert und vermehrt von Joh. Leonh. Frisch. Berlin, Verlegt Christoph Gottlieb Nicolai, MDCCXXIII."

† Preface, fo. 3.

‡ P. 275. The former part of the extract is Bödiker's, the latter Frisch's.

Frisch's position on the subject of orthography is as strongly opposed to the superfluities and ignorance of the innovators of his time, as to the pedantic champions of the obsolete methods. He is especially earnest in insisting that thorough historical knowledge is necessary to deal with the subject. "Any one," he says, "who has not an adequate collection of such materials* . . . should refrain from handling the subject; for he will be sure to be ranked among those unlucky philological quacks of whom a long catalogue might already be made out. For every sorry writing-master who has barely mastered calligraphy, must needs give rules for orthography; not to mention others, etymologists with privately interested motives, and vain self-appointed popes in language."† Improvements in language must be made slowly, and with caution and thorough knowledge. "One who undertakes alone to carry this point by storm," he says in another place,‡ "will be shamefully repelled by those very numerous persons who either can not or will not depart from the old beaten track. And those who would proceed by storm commonly introduce by their ignorance ten faults where they detect one. Mining is the proper mode of assault; and the best place for doing this is in the large schools; where persons of all ranks may be so trained up that they will take more pleasure in aiding to introduce a reasonable usage than to help maintain an unreasonable old one. It will suffice at first to instill a degree of indifference to pedantic writing-master's rules, and to diminish the burden which they have laid upon the young and unlearned." But it would be a mistake to suppose that Frisch argues here in favor of arbitrary changes. "Orthography," he says,§ "is the noblest pillar of any language; and therefore of the German." Such is the tenor of one of his paragraphs; and in a very carefully considered further statement of the idea he says, "The basis of this pillar is commonly the principle that the spoken sound is the rule; we must write as we speak. But because there are so many different German dialects, many of the German foundation-makers have fallen into error by concluding, each that the dialect to which he has been accustomed from birth is the only correct one. If every one were to proceed on this principle, and write as he speaks, there would be as many daughter-languages, even in the writing, as there are countries and cities in Germany. A general rule for written language has therefore been sought; and has resulted in that German language called the High German. All intelligent people

* That is, "thorough treatises on etymology, analogy, or other philological subjects, by whose means a language may be reduced to rule or illustrated."

† P. 40.

‡ Preface, fo. 4.

§ P. 33.

maintain that this is the authoritative language; and prevent and avoid all introduction of the so-called dialects."

General View of the Instruction in German, in the Seventeenth Century and first half of the Eighteenth.

The account which I have given of the German grammarians of the seventeenth and eighteenth centuries, is so drawn up that the reader can represent for himself the mode of giving instruction in German which prevailed in the schools during that period. As I began the present chapter, however, with a comprehensive retrospect of the sixteenth century, I will close it with a survey of the progress of the subsequent century and a half. At the beginning of the seventeenth century, the problem to be solved during the approaching period was already shadowed forth by Ratichius and his followers. This was, the establishment of the German language, in its proper and important place in the institutions of classical learning as well as elsewhere; and also as an organ of communication—in part at least—instead of the Latin. We find a great variety of attempts in this direction during the seventeenth century. Helvicus undertook to treat general, Latin and Hebrew grammar, in the German language. Harsdörffer, Schottelius, and many others, insisted upon the importance of instruction in German; and foretold the time when all learning should assume a German garb. The works of these authors on German grammar, especially on orthography, are in part rude and pedantic. They however fulfilled the demands of their day upon them; to establish in all its details as a written language, the High German, handed down to them by the sixteenth century in a state of substantial completion. The task of the seventeenth century in this department was not that of creative genius, like that of Luther, or of Lessing, Goethe, and their cotemporaries, two or three hundred years later; it was one of labor and drilling, painful, wearisome, often vain, but on the whole thorough and efficient.* The individual champions of this movement often make a disagreeable and sometime even ridiculous impression upon us, by their pedantic and inelegant forms of thought and expression; and their writings are frequently the more distasteful, not only because they have themselves only half escaped from the Latin straight-jacket which they are trying to get rid of, but also because they are often contaminated by the foreign French phrases which were just coming in, and against which likewise they fought manfully, according to their knowledge.

And here also we come upon a singular phenomenon, viz., that the

* Compare the position occupied by Opitz in the department of German poetry.

Germans, in order to rid themselves of an old and obsolete state of things, applied themselves to a foreign nation of the Romance race, and who had already long before taken exactly the steps which they were themselves endeavoring to take.* There is a striking instance of this in the case of one of the advocates of the establishment of German as the language of schools and learning—Johann Balthasar Schuppius, who died 1661. "Wisdom," Schuppius observes, "is not bound up in any one language; why should I not be able to learn to know, love and honor God in the German language, as well as in the Latin? Why should I not learn how I can aid a sick person in German, as well as in Greek or Arabic? The French and Italians teach and learn all the faculties and liberal arts in their native language. There is many a cardinal and many a great prelate in Italy, who can not speak Latin."† The stout German nature of the worthy Schuppius preserved him from adopting much that was French; but these remarks of his may serve to explain many phenomena which at first seem in themselves contradictory. It was the splendor of the French court and the politics of Louis XIV., which seduced the German nobility into their miserable surrender to French fashions; but it was the fact, already alluded to, that the French had preceded us in the installing of their native language in its just rights, which betrayed the greatest German philosophers of the seventeenth century, and the greatest German princes of the eighteenth, into the adoption of the French language. Leibnitz, however, although he wrote his principal philosophical works in French, was the best exponent of these labors in behalf of the German language which characterize his century. To prove this assertion, however, I should be obliged to transcribe the whole of his "*Humble suggestions respecting the practice and improvement of the German language.*"‡ When Christian Thomasius, in 1687, announced at Leipzig the first university course of lectures in German, he did so by means of a printed "Discourse, upon the fashion in which it is proper to imitate the French in ordinary life and conduct;" which he fastened upon the blackboard as his programme for the course. But after the accounts which I have given, the contents of this programme will not appear very remarkable to my reader, nor will he consider the action of Thomasius a surprisingly bold one, however great its importance may have been.

* See above, p. 398, on Aventinus, and also, more particularly, below, in the section on Gottsched.

† "The German Teacher," in the "*Instructive writings (Lehrreiche Schriften)*," of Joh. Bath. Schuppen, Franckfurt-on-the-Maine, 1684. P. 900.

‡ "*Unvorgreifliche Gedancken, betreffend die Ausübung und Verbesserung der Teutschen Sprache.*"

He merely carried out to completion an idea originated at the beginning of his century, and which had enlisted the labors of hundreds of learned men; namely, the introduction of the German language into use in the higher grades of instruction.

Toward the end of the seventeenth century, and in the former half of the eighteenth, we find the advocates for the use of German in schools and instruction increasing in number so rapidly that what was a hundred years before a bold innovation, may now be considered a predominant belief. Educators in all the countries of Germany united in the advocacy of this measure; the number of German school grammars became so great that I can refer only to a few of the more important; and the official reports upon the course of study of many classical schools shows the profound influence of these labors. Whereas it had been previously the custom to write even on German grammar in Latin, even the school grammars of Latin now began to appear more and more frequently in German.* German school comedies took the place of the previously usual Latin pieces.† Incessant practice in speaking Latin was no longer necessary, since German had replaced Latin as a school language. Even in the universities, the innovation of Thomasius rapidly grew in favor. Before the middle of the eighteenth century, the learned Johann Matthias Gesner declared that the able scholars in Latin had in part come out for the plan of teaching German, in order that the Latin language might be prevented from becoming entirely corrupted by the half-barbarous set who were defending it. "The German language," he writes, "is making rapid progress; and in a short time will be decidedly predominant. At the present time (1742) not even royal commands can prevent the practice of teaching in German."‡

I presume that these observations have sufficiently described the progress of the German in the schools during the seventeenth and eighteenth centuries. I can not of course detail the extent to which each individual classical institution adopted its use; but will conclude this chapter by a few instances of the kind, in order to give a more accurate idea of it. In Halle, the adoption of it was mainly due to the efforts of that indefatigable laborer for all grades of education, August Hermann Francke. He found that the students in theology were incredibly ignorant of German orthography. "This defect," he observes, "is commonly the fault of the schools, where only the Latin translation of the exercises is corrected, but the German not;

* See "*Journal of Education*," vol. ii., p. 371., *et seq.* I need not repeat at length what was there said.

† *Ib.*, p. 009.

‡ *Ib.*, p. 000.

so that orthography is not learned at all."* Francke induced Hieronymus Freyer, inspector of the Halle Pedagogium, to write a work which has been much used; his "*Introduction to German Orthography*," Halle, 1722.† In Brunswick, where Schottelius and Schrader‡ had already labored to promote the use of German in the schools, the excellent rector of the Catharine's school, Johann Andreas Fabricius,§ continued the enterprise. In the celebrated institution at Schulpforta, near Naumburg, associate principal Salomon Hentschel, found the German of the pupils as faulty as Francke had done at Halle. He exerted himself to remedy the evil; and hence resulted his "Fundamental rules of the High German language,"|| Naumburg, 1729. We have already become acquainted with the two most eminent German grammarians of the end of the seventeenth and beginning of the eighteenth century, who were established at Berlin—Bödiker and Frisch.¶ At Hamburg, may be mentioned Hermann Wahn, associate principal of the John's school, who published, in 1720, a German Orthography, and afterwards a whole German grammar.** Upper Saxony had already long been one of the principal seats of the labors for promoting the use of the German. I barely refer to Wittenberg, in the sixteenth century, Weimar, in the seventeenth, and Leipzig, in the eighteenth; as well as to what has already been said of Meissen,‡‡ Dresden, and Leipzig. I should here mention, as of interest with reference to the schools, the German-Latin and Latin-German Donatus published by Joh. Gottlieb Vorsatz, pastor at Zeitz, "for attaining the primary grade of knowledge in both these tongues."‡‡ The report of Rector Feuerlein, for 1690, shows what a strong foothold the German language had obtained at the school in Nuremberg.§§ In the extreme west of Germany, Johann Jacob Schatz, rector of the gymnasium at Trarbach, on the Mosel, labored efficiently as teacher and author, for the improvement of the instruction in German in the gymnasia.|||| Equal zeal for the

* See the whole passage this Journal, vol. v., p. 448, and compare Schrader's expressions to Schottelius in 1676, above, p. 429.

† "*Anweisung der Teutschen Orthographie*." See its preface, fo. 2, 3.

‡ See above, p. 433.

§ Compare, amongst other works, Amarante's "*Shepherd and Flower Orders*," pp. 827—835; and also, on Fabricius and the others here mentioned. E. G. Reichard's "*History of German Grammar*," Hamburg, 1747.

|| "*Grundregeln der Hoch-Deutschen Sprache*."

¶ See above, pp. 437, 439.

** The references in the "*History of Pedagogy*," to the Hamburg school ordinance of 1732, will be found on being compared with Sturm and Trotzendorf, to indicate rather an advance in the use of German than otherwise.

‡‡ The adjective "Misnian" has been used.—(*Translated*.)

§§ Published at Hildburghausen and Meiningen, 1745. Svo.

|||| See this Journal, vol. vii., p. 370.

|||| He published "*Thorough and easy method for enabling children, as well in public*

cause prevailed in the south-east of Germany also; and Austria contributed its contingent to the mass of German grammars and orthographies that now appeared. Of these I will name but one; the "*Imperial German Grammar*,"* of Johann Balthasar von Antesperg, which appeared at Vienna, in 1747.

CHAPTER III.—GOTTSCHED AND ADELUNG.

After the middle of the eighteenth century, the number of German grammars, introductions to German orthography, German composition, &c., increased in a degree which was matter of pleasure to many, but perhaps even of terror to many others. The favorable feature of the case was the fact of the increase of interest in the German language and German literature; the unfavorable one, that so many more unfit persons than previously were trying their fortune in this department. Were I to treat the period from 1750 to 1850, on the same scale as the previous ones, even the mere enumeration of titles of books would require more space than I can devote to the whole subject. But at the same time, even the strongest advocate of modern times can not deny that the intrinsic value of this mass of books is mostly very small. Good will must too often be called in to make up for the defects in character. Accordingly, any one who devotes himself to the task of giving full estimates of these numerous works on grammar, style, &c., will often find himself under the necessity of either passing a sentence more harsh than is deserved upon the results of a zeal which though ignorant is well-intended, or of misleading his readers by some faint commendation. And moreover, the writers of this period who are really meritorious, are in fact, known at the present day as well as they deserve, and their works are everywhere accessible. I have therefore chosen to state the principles according to which opinions should be formed in these points, in my second book; and in this place, to go no further than to say as much of Gottsched and Adelung, the two greatest names of the period in question, as may serve to introduce the reader to the great revolution in this department of learning, which has been produced by the labors of the brothers Grimm.†

schools as by private instruction, to learn in a short time and with little effort, the art of reading intelligently and writing plainly (Gründliche und leichte Methode Wie man sowohl in öffentlichen Schulen als auch durch Privat-Information denen Kindern die Kunst verständlich zu lesen und deutlich zu schreiben in Kurtzer Zeit und mit leichter Mühe beybringen möge)," &c. Bidingen, 1725. 8vo.

* "*Käyserliche Deutsche Grammatik.*"

† From the period from 1750 to 1836, many titles of books will be found in Hoffman's "*German Philology (Deutsche Philologie)*," Breslau, 1836. And compare the continuation of Reichard's work, already often referred to, in Rüdiger's "*Latest advances of German, foreign and general grammar (Neueste Zuwachs der deutschen, fremden und allgemeinen*

Of course the new impulse received by German literature since the middle of the eighteenth century, was felt in the department of the school course appropriated to the language. I do not here refer to the occasional contributions of a few eminent writers to some of the earlier favorite pursuits of German educators, especially in the department of orthography. Klopstock's writings in favor of orthographical innovations, and Hamann's humorous opposition to them, were without any lasting influence on the character of German grammar. What I mean is, the change produced by the revival of our literature upon the whole treatment of the German language in the higher and middle schools. Literary knowledge, good taste, and correct style, now assumed an important place in the schools. This new fact may be perceived in the introduction and increasing use of collections from the best German prose and poetical writers, adapted to the demands of a public possessed of some cultivation, and more particularly to the schools. In this department also, the first half of the eighteenth century affords a few pioneers, but there is a surprising difference between their labors and the vast mass of what has since been accomplished of a similar kind.

But the most striking indication of the increasing estimate placed on the German language is to be found in the school laws passed by the different German governments, during the second half of the eighteenth century.

Gottsched.

The more deeply we penetrate into the connections of different

Sprachkunde.)" Leipzig, 1785. Part 4. But I am far from intending to undervalue what is good in the labors of a more recent time. I shall hereafter have occasion to refer to the services which Becker, notwithstanding his errors, has rendered. With him should be mentioned Herling; whose "*Grund rules of German Style (Grundregeln des deutschen Stils)*," Frankfurt-on-the-Maine, 1823, preceded the works of Becker, and was republished in an enlarged form in 1832, as the second part of a "*Syntax of the German Language*." Among those who have labored to apply the investigations of Grimm to the use of the school grammar of the New High German, I would place first R. A. Hahn, "*New High German School Grammar, (Neuhochdeutsche Schulgrammatik)*," 2d ed., Clausthal, 1833; and "*New High German Elementary Grammar, (Neuhochdeutsche Elementargrammatik)*," 4th ed., Clausthal, 1856; Friedrich Koch, "*German Grammar, (Deutsche Grammatik)*," 2d ed., Jena, 1851; F. Bauer, "*Outlines of New High German Grammar, (Grundzüge der Neuhochdeutsche Grammatik)*," 3d ed., Nördlingen, 1853; and the writings of Kehrein and Vernaleken. The well known grammatical writings of J. Ch. A. Heyse, belong to a period before that of the renewal of the foundations of German grammar by the Grimms, and also before that of the reform of Becker. Heyse's labors have been materially improved by the studies of his son R. Heyse. In his own way, the deserving M. W. Göttinger rendered many services to the cause of instruction in German; and lastly, may be mentioned the small German grammar by Otto Schulze, 6th ed., Berlin, 1854. I have thus mentioned only individuals, as exponents of different methods of treating the subject. Each of them will be estimated according to the definition adopted by any one of the problem of instruction in German. On this head I refer to my second book. But however great the labor yet undone in the department of German school grammar, those who have already done good service in that field should have their due share of credit.

periods of time, the less shall we be satisfied with the sections and captions by means of which we sub-divide its current. And still, it is not only true that the reader needs some fixed divisions of time for his purposes, but also that there exist in the course of history, definite marks of the predominance of certain tendencies, although some indications of them have usually appeared in advance of the new epoch itself. These considerations come upon us with especial force, when we find ourselves obliged to recognize as the foremost man of any period, one of very moderate talents, and possessed of any qualities rather than genius and originality of conception. In such a case we do not see a creative intellect, evolving new and influential conceptions from within its depths, but merely a certain dexterity in comprehending what it is that the age demands, and in applying this knowledge to its own purposes. Thus is to be explained the position held by Gottsched in the history of German literature. And his importance as a German grammarian does not depend upon great labors, of great value in themselves, in that department, but is most closely interwoven with all his literary work. Accordingly, we shall have no occasion to busy ourselves with the details of his writings on grammar, although at the same time our purpose will lead us more carefully to consider the relation between Gottsched's grammar and his remaining writings. Without therefore plunging too deeply into German literary history, let us devote a few words to this point.

Johann Christoph Gottsched, who was born, in 1700, at Juditenkirch, in East Prussia, appointed professor at Leipzig, in 1730, and died there in 1766, enjoyed, while at the summit of his reputation, a fame whose splendor has been surpassed only by the very loftiest of our nation.* If this seems incredible now, upon a perusal of his writings, perhaps the best explanation of the phenomenon will be found in the very subject which we are now to discuss. We have already seen, in the second chapter of this essay, that the philological labors of the century preceding Gottsched, had been mainly directed to the improvement of the methods of teaching German; and that the current of these efforts had grown stronger and stronger up to the period of Gottsched's appearance. During the same period, the feeling also grew up that German literature, in order to gain an introduction into the higher circles of society, must adopt its garb more to the taste prevailing there than had been the case with most of the German authors of preceding centuries. But this prevailing

* See Danzel's "*Gottsched and his times (Gottsched und seine Zeit)*," Leipzig, 1848. Extracts from this, descriptive of Gottsched's fame in the period of his renown—certainly a short one—are in the "*Munich Literary Gazette (Münchener Gelehrten Anzeiger)*," 1848, No. 211.

taste was no other than the French taste of the seventeenth century and the beginning of the eighteenth. Now, any one who should succeed in gratifying both these demands, for improvements in German grammar, and for a French character in it, must necessarily acquire with remarkable speed a great reputation, both in the schools, which were so deeply interested in studying German, and with the "educated classes," who would find their desired French taste exhibited in German compositions; and at the same time it must be confessed that neither the one nor the other of these tasks required a remarkably high grade of talent. All that was needed was, like Gottsched, to lay hold of the undertaking with confidence and determination, to follow it up with ceaseless activity and a zeal not to be mistaken and indeed really praiseworthy, and to secure the advantages already gained, and a constant succession of new ones by the medium of newspapers, philological societies, the protection of persons of eminence, and other means.

Within this system of various effort, the grammars of Gottsched assume their proper importance. In 1748 appeared at Leipzig one of them, viz., "*Outline of a German grammar, on the models of the best writers of the present and last centuries, by Johann Christoph Gottsched.*"* This book reached a second edition in the very next year; and a sixth in 1776. Subsequently, in 1753, Gottsched published, for the special use of youth, an abridged outline. If we except the dictatorial rules which Gottsched is constantly laying down, we find much to praise in his grammar. He shows himself acquainted with the ancient authorities on our language,† refers with appreciation to his predecessors,‡ and speaks with more judgment than many would expect, of the limits of the department of the grammarian.§ His treatment of grammatical subjects does not contain much that is new. It is very characteristic that he terms the strong verbs, which Schottelius had named "unconformable" or "anomalous," in plain terms "irregular verbs." But he makes up for this oversight, by saying, "Hence it is clear, that notwithstanding all the apparent irregularities of this inflection, still there is therein a certain order, regulated by rules."|| Respecting the High German written language, Gottsched differs materially from the best of his predecessors; indeed, here is the rock upon which his poetical and grammatical dictatorship was wrecked. He can not maintain, in the face of such clear evidence,

* "*Grundlegung einer Deutschen Sprachkunst, nach der Mustern der besten Schriftsteller des vorigen und jetzigen Jahrhunderts abgefasst von Johann Christoph Gottscheden.*"

† Compare for example, pp. 9, 19, 565, *et seq.* I quote from the 4th ed., Leipzig, 1757; though I give the title from the 1st ed., of 1743.

‡ Preface, fo. 5.

§ P. 6, 10.

¶ P. 331.

that "the vulgar" used the most correct forms of expression, even in the Saxon cities;* but he still maintains with the most triumphant certainty of being right that at Meissen and its vicinity is spoken the best High German;† and that we "in Germany must without doubt conjoin to the very agreeable oral dialect of Dresden, the capital of electoral Saxony, and of the court, those grammatical rules and critical observations which were made at Leipzig many years ago, and have been applied to the written language."‡ Gottsched, like most others, thinks his own age better than those preceding it. "The period of the government of our most illustrious prince, Augustus II., of Saxony," he says,§ "well deserves to be called the golden age of our language."|| It was Gottsched's misfortune to have made this complacent statement just at the beginning of a new era which was soon to turn it into ridicule.

But all this will not so definitely distinguish Gottsched from his predecessors, as to account for the reputation which he gained. The reason is rather to be looked for in the manner in which Gottsched connected his grammar with literature. Thus it is well worth noticing, that the very title to his German grammar says, "On the models of the best writers of the *present and last centuries*"—that is, not of the sixteenth, seventeenth and eighteenth, but only of the seventeenth and eighteenth. Thus, the long series of grammarians who followed each other in the footsteps of Luther, ends with Gottsched; and in the place which he occupied with them, appears Opitz. The ancient rugged forms of the writers before Opitz, according to Gottsched, may indeed possess more strength; "but fall far below the present style of writing in agreeableness and euphony."¶ "The multitude of good writings published since the time of Opitz, and with which the eighteenth century especially has enriched almost every one of the arts and sciences, gives to our own times an undeniable privilege to prefer its own methods of syntax to the ancient German ones."** Into the direction indicated by Opitz, therefore, and into the French taste, Gottsched now desired to change the whole literature and literary opinions of Germany. The enterprise was of course doomed to shipwreck upon the opposition of those great German minds, of whose near approach Gottsched had no suspicion.

* Pp. 3, 404.

† Pp. 67, 69.

‡ P. 403.

§ That is, the period from 1694 to the middle of the eighteenth century; for it was at this latter time that these words were written.

¶ P. 19.

‡ P. 18.

** P. 401; and compare p. 575. Gottsched's praise of Luther in another place is of course not inconsistent with these views. On the close connection between Gottsched and Opitz, see the excellent observations of Gervinus, "*History of German Poetry*," vol. 3, (1838), p. 199; and vol. 4, (1840), p. 50.

But it was not without its influence upon literature; and its conjunction of literature and grammar had a very distinct influence upon the upper grades of schools. The scope of grammatical instruction in these was no longer confined merely to spelling correctly and the use of the native German language in the ordinary concerns of practical life, but special attention was now paid to good taste, to literary criticism, and frequently even to actual composition in prose and verse.*

Adelung.

The inheritor of Gottsched's fame in the field of German grammar was Johann Christoph Adelung; who was born, in 1724, at Spantekow, near Anklam in Pomerani, studied at Halle, became professor in the gymnasium at Erfurt in 1759, and taught privately at Leipzig from 1763 to 1787, when he was appointed chief librarian at Dresden. He died in 1806.† Adelung devoted the iron industry of a long life to the task of laboring upon the grammar and lexicology of German. A complete list of the titles of his works on this subject would fill several pages. I will name the most important of them. The "*Grammatical and critical dictionary of the High German language*"‡ appeared first, in 1774–86; and the second edition in 1793–1801. The "*German grammar for schools*,"§ first appeared in 1781, and its sixth edition in 1816. The "*Complete system of the German language*,"|| came out in 1782, in two large volumes. Lastly, the book "*On German style*"¶ was published in 1785, and a fourth edition in 1800. Adelung was in most of his writings a follower of Gottsched. Whatever can be said in Gottsched's praise, is applicable to Adelung in a still higher degree. As with Gottsched, so with Adelung, clearness and correctness are the qualities most sought for. Like Gottsched, Adelung lays great stress on taste; and it must be admitted that in all these particulars he surpasses his predecessor.

* At a more modern period, the late lamented Danzel endeavored to urge again the permanently valuable part of Gottsched's views. But although his book contains much that is valuable, the reader must be on his guard against its extreme ideas. See the Munich "*Literary Advertiser (Gelehrten Anzeiger)*," 1848, No. 210, 211. I believe that the introductory words of this section of my own work will secure me against such an error. Gottsched had of course predecessors even in his characteristic opinions. As early as in the philological societies of the seventeenth century, grammar and literary labor were united. We may even detect still earlier, in the sixteenth century, in Clajus and Oelinger, references to literature. Still, it is needless here to prove at length that all this is entirely distinct from that style of literary criticism which Gottsched learned from Horace and the French. The labors of Morhof, Böldiker, and others, form a transition to Gottsched.

† Jördens, "*Lexicon of German poets and prosemen (Lexikon deutscher Dichter und Prosaisten)*." I. p. 13; v. p. 700.

‡ "*Grammatisch-kritische Wörterbuch der Hochdeutschen Mundart.*"

§ "*Deutsche Sprachlehre für Schulen.*"

|| "*Umständliche Lehrgebäude der Deutschen Sprache.*"

¶ "*Ueber den deutschen Styl.*"

And moreover, Adelung, as Gottsched had done, devoted much labor to the investigation of the old German literature and language. And they both agree further in this; that there is visible throughout all their works, a consciousness either expressed or implied, of the remarkable importance and ability of their achievements. If either of them goes beyond the other in this particular of a low estimate of previous periods and labors, it is Adelung. There is one important point upon which Gottsched and Adelung apparently differ; but even here, Adelung has in fact only completed what Gottsched had begun. This point is the question, What is the High German language? Adelung himself laid great stress upon the fact that Gottsched had asserted the High German to be the result of the labors of authors, while he himself had earnestly combatted this opinion.* But although Adelung was more definite than Gottsched in asserting that language was not a production of authors, and least of all of grammarians, still expressions to the same effect are not wanting in the latter. And both agree in claiming that the Misnian dialect is the proper, authoritative, classical High German. Not, that is, the speech of the lower classes; Gottsched had perceived this:—but that of “the upper classes of Upper Saxony.”† This doctrine of course brought him into a violent opposition to the whole German literature of the new period, which was now receiving reinforcements from all parts of Germany. And Adelung misapprehended the character of the times no less, when he not only, like others of the grammatical school, looked with cautious wonder upon the great creations of Klopstock, Lessing, and Goethe, but asserted, completely possessed by his delusion, that “in respect to excellence of style, the second quarter of this century‡ was preëminently distinguished; a period during which appeared in Saxony those good writers who quickly became models for all Germany.”§

There is another important point respecting which Gottsched and Adelung are strikingly alike. This was, the effort which they both made to give greater clearness and logical consistency to German grammar, by connecting it with certain general philosophical views, which views themselves, as held by the two men, were closely related.

* See Adelung, against Voss; in the department of news, in the “*New Leipzig Gazette of Literature (Neues Leipziger Literaturzeitung)*,” March 31, 1804.

† Adelung, “On German Style,” ed. 1785, i., 58, 59, and in innumerable other places. See especially the preface of the “*Complete System*,” p. lviii. The most violent of the attacks upon this view of Adelung, was that by Joh. Heinr. Voss, in the “*Jena Universal Gazette of Literature (Jena Allgem. Literatur-Zeitung)*,” for January and February, 1804.

‡ Viz., from 1725 to 1750.

§ “On German Style,” ed. 1785, i. 23. And compare § 19, subsequently; where Adelung measures out to his cotemporaries, but grumblingly, some little praise.

Gottsched was a thorough adherent of the Wolfian philosophy, while Adelung rejected all philosophical "sectarianism," declaring in favor of the eclecticism which "preceded the prevalence of Kant's system." He says however, in 1786, "Thus, in recent times, almost every philosopher of acuteness and intellect has his own eclectic system; of which the Leibnitz-Wolfian hypothesis is more or less the basis."*

This style of philosophy is closely connected with one of the most prominent traits of Adelung's writings, viz., their clear and intelligible character. Lucidity and industry were his most valuable traits, and I designedly make this additional reference to them, for it was to them that his works owe their great influence upon the schools of the period. But a search after the higher excellences of literary composition, depth of thought and demonstrative correctness of fundamental view, would encounter in Adelung only the most discouraging shallowness. His modest and incontestably truth-loving nature told him that language was neither the work of learned men, nor was its original creation a proof of mental culture.† But instead of tracing the course of this great work of nature with that reverence which is the only means of arriving at truth, Adelung knew no better than to utter constant complaints against the original coarseness of the languages. These charges he did not restrict to the limited department of mere ideas, but extended them to grammatical principles, and to the sounds and the euphony of the language. Here, he received no aid from the monuments of ancient German literature; and no warnings from his knowledge of Greek literature and its Homer. "Coarse, uncouth, vulgar," are the terms which at every third word he applies to the language of those people who have not made that surprising progress in trade or science which distinguished his much praised second quarter of the eighteenth century. All Adelung's works show how profound an influence such errors may exert on opinions relating to subsequent periods. No one acquainted with Adelung's works will need any especial proofs of these statements. I will however cite a few of the innumerable passages in point from Adelung's writings, for the information of those less familiar with them. In speaking of the language of the Germans during the first centuries of our era, Adelung says, "A people so uncultivated could have but few ideas, and those mostly material; and their language must therefore be extremely poor. Their vocal organs were coarse and uncouth; and could therefore express the few ideas they

* "History of philosophy for amateurs (*Geschichte der philosophie für Liebhaber*)." Leipzig, 1786, vol. ii., p. 425.

† "Complete System," i., 7; "On German Style," i., 5.

had, only by rough and uncouth sounds.”* But would he not draw an opposite conclusion from the Gothic language, which had then been well-known for a long time? This is what he observes on this head, a few pages further: “As the Gothic language was then† very rough and uncouth, and destitute both of terms for abstract conceptions, and of sufficient flexibility in combining words and sentences,” &c.‡ Of the poets of the Hohenstaufen, Adelung says, “They were entirely destitute of invention, wit, enthusiasm, in short of poetical genius.”§ Nor does Luther, whom he finds other reasons for praising, escape without severe reproof from this strict judge. He did, it is true, take great pains in polishing; and approached as nearly as his opportunities admitted, to the strictly Misnian dialect. But if he had only enjoyed more leisure for the purpose, “he would have made further progress, both in orthography and in grammatical correctness. For he is not always consistent in the former; and with regard to the latter, very many faults and incorrectnesses have escaped his observation, even in the German Bible; which must therefore be considered any thing rather than a classic.”||

CHAPTER IV.—THE BROTHERS GRIMM.

A more complete contradiction can scarcely be imagined, than that between the labors of the brothers Grimm and the views of Adelung. As the latter adopted as a basis for his grammatical labors the second quarter of the eighteenth century, viz., the years 1725–50, so the writings of the brothers Grimm may be considered as holding a similar relation to that outburst of real poetry which was inaugurated by Goethe and his friends in 1760–70. The Grimms did not, it is true, endeavor to establish the literature of that period as an infallible standard of language, as Adelung did those of 1725–50; but there is a relation between their principles and those which prevailed in the literature spoken of, which justifies the parallel.

Jacob Grimm was born at Hanau, in 1785; and in the spring of 1802, entered the university of Marburg, and studied law under Savigny, the importance of whose influence upon Grimm’s studies is mentioned in the graceful dedication of his Grammar to Savigny. In 1804, Jacob’s younger brother Wilhelm, born at Hanau in 1786, also came to Marburg, also to study jurisprudence under Savigny. The brothers pursued their professional studies with pleasure and zeal,

* “Complete System,” i., 18.

† Viz., in the time of Ulfilas.

‡ “Complete System,” i., 23. There is no difficulty in recognizing the truth contained in these expressions; but the unintelligent nature of their views, as taken in connection with other expressions by Adelung, is none the less.

§ *Ib.*, i., 54.

|| *Ib.*, i., 66.

but even at this early period found themselves attracted toward the task of their lives, the investigation of the German language and antiquities. After completing their studies at the university, the brothers resided in Cassel, most of the time together; their union being however interrupted by the important affairs which took Jacob Grimm to Vienna and Paris, during the years 1814-15-16. Since, however, Jacob was appointed second librarian of the library at Cassel, where Wilhelm had already become secretary to the library in 1814, they have resided together almost uninterruptedly. In 1829, an honorable appointment brought them to Göttingen, where, however, they were deprived of their places eight years afterwards, for adhering to the constitution to which they had taken an oath. In 1841, the king of Prussia invited them to Berlin.

I shall not here enumerate all the works of the brothers Grimm. These have partly been produced by them both together, and partly by one of them individually. By both, are the "*Children's and Home Stories*," the "*German Legends*," and the "*German Dictionary*;" by Jacob alone, the "*German Grammar*," "*Legal Antiquities*," "*Mythology*," and "*History of the German Language*;" and by Wilhelm alone, the "*Ancient Danish Heroic Ballads*," and the "*German Heroic Legends*."

A full description of what the brothers Grimm have done and attempted, would carry us into very various departments of knowledge, and which we can not discuss in this place without quite losing sight of our immediate theme. And yet, there is no one in whose works it is less possible to wholly separate any one phase of occupation from the others. My simplest mode of stating the necessary description, and one which I believe will satisfy many of my readers, is to say, that the brothers Grimm belong to the historical school, in opposition to Ferdinand Becker, who is of the philosophical school. But though this distinction is correct enough, still it does not give much information; for it does not decide the question what is meant by the two terms, historical and philosophical; terms with which an endless number of misconceptions have been connected. It is possible that I may more nearly obtain the desired result by citing from the brothers Grimm themselves, some of the most definite of the statements which they have given of their views and methods of investigating.

The leading traits in the character of the brothers Grimm are reverence for history, keen poetic sensibilities, and a warm love for all that is German and patriotic. This respect for history, which characterizes all the productions of the brothers, is thus expressed in Jacob Grimm's dedication of his greatest work to Savigny; "I am already

certain that you will do justice to my attempt to commence an investigation of our German antiquity from this direction, and will approve of my idea of proving that grammar also establishes the inviolableness and necessity of history."* A feeling for poetry is almost more characteristic of the brothers Grimm, in distinction from Gottsched, Adelung, and their school, even than these views respecting history. Instead of like them, everywhere deifying conventionalities, and regarding every thing that is good in language and poetry as only an evidence of refined culture, the Grimms are constantly disposed to favor what is original, natural, and the immediate result of native mental action. These tendencies of course implied the direct opposite of Adelung's unintelligent opinions on German antiquity and the ancient German poetry. This should not however be taken to signify that the Grimms had that mistaken kind of patriotism which over-estimated every thing that is modern and German, or underrated the excellence of the classical productions of antiquity. They have expressed views precisely the opposite of these in many places and in the clearest manner. Jacob Grimm, in the dedication already quoted, has most gracefully expressed his sense of the value of native compositions. "Real poetry," he says, "is like a man who finds a thousand sources of pleasure in seeing leaves and grass grow, and the sun rise and set; false, like one who travels in foreign lands, and fancies that he is improving himself on the mountains of Switzerland, or under the sky, or on the sea of Italy; but although he is there, his pleasure is probably far from being as great as that of him who remains at home, and watches the apple trees blossom every year in his garden, and the finches pecking at them."† The Grimms have preserved a true appreciation of history, and for all natural developments from real life, instead of the foolish contempt which superficial men have displayed toward the institutions and manners of ancient times. They have contributed more than any one else toward a just and affectionate estimate of the Middle Ages; although they have quite preserved themselves from the absurdity of undertaking to transplant those ages bodily into our own times. Wilhelm Grimm observes with much justice on this point in his brief account of his life, "Only the narrowest mind could undertake to investigate mediæval history with the intention of transplanting it into the present; but it would indicate equal folly of an opposite kind, to

* Grammar i., p. 4.

† Grammar i., p. 7. I believe I have not injured the meaning of the quotation by giving only its positive part, and omitting the polemic reference to Ariosto. The relations between nature and cultivation will be discussed, so far as they belong to instruction in language, in my second book.

endeavor to ignore the influence which the middle ages must exert upon our comprehension and proper treatment of the present.”*

As a grammarian, Jacob Grimm is exactly opposed to Gottsched, Adelung and their school, by not undertaking to lay down laws for the use of the German language. His labors are directed to the object of investigating laws already established. The remarkable discoveries to which this method has led, are well known. Grimm's pioneers in his labors must not therefore be taken to be the grammarians of whom I have given some account, and whose excellence lies in quite another field. The materials for his investigations were found to some extent, though not great, prepared, in the works of those who had before him pursued the study of the existing monuments of the Gothic, Anglo-Saxon, and ancient Scandinavian and German languages. The history of these studies, which belongs to Iceland, Denmark, Sweden, Norway, and England, as well as Germany, is of course often connected with that of the series of grammarians of which I am treating. At the same time, however, it also constitutes a separate department of learning, not properly to be introduced in a history of instruction in German. Grimm has at all times acknowledged whatever was valuable in the works of his philological predecessors; but as to the relations between him and the average of German grammarians, he thus expresses himself in the preface to his grammar:—

“From the first grammatical treatment of the German language down to Adelung, a good number of books were written on the subject; from Adelung to the present time, a still greater number. But as I do not desire to be ranked with these, but on the contrary to be quite separated from them, I must at the outset declare why I consider objectionable, and even foolish, the usual methods and ideals of the theories of German, especially those put forth and received during the last half century. It has gradually become the practice to make these books manuals of instruction in all the schools; and to recommend them even to adults, for the culture and development of their powers of language: an excessively pedantical proceeding, and one which it would require great exertions even to make intelligible to a Greek or a Roman, could he now be raised from the dead. Most of our cotemporary nations have been wiser than we, in that they have not so seriously set about making their own language a subject of in-

* Wilhelm Grimm's autobiography; in the *“Beginning of a History of the literati, authors and artists of Hesse, from 1806 to 1830, (Grundlage zu einer Hessischen Gelehrten, Schriftsteller, und Künstler-Geschichte vom Jahr, 1806, bis zum Jahr, 1830),”* by K. W. Justi. Marburg, 1831. P. 173.

† Grammar i., pp. 9, 11.

struction at school. A close investigation will quickly reveal the hidden harm which such instruction, like all that is superfluous, brings with it. My own belief is, that it obstructs the free development of the organs of speech in children, and violates a most valuable provision of nature, that our speech shall come to us with the mother's milk, and be developed to its maturity within the precincts of home. Language, like every thing derived from nature or habit, is an unknown, inscrutable mystery, planting itself at first within the young, and adapting the organs of speech to the peculiar hard or soft tones, inflections, modulations, of the people. This habitual adaptation produces that ineradicable sense of longing which every man feels when in a foreign land, the sounds of his own tongue fall upon his ear; and it also accounts for the impossibility of learning a foreign language; that is, of learning it completely and intimately. Now, who can believe that a development rooted so deeply, and regulated by a law of nature so wisely economical, can be modified or promoted by the perverted, stupid and misconceived rules of grammar-masters; and who does not feel a sympathy for unchildlike children and youth, who speak a pure and polished language perhaps, but who when grown up can feel no home sickness for their youth? Ask a genuine poet, whose principles respecting the material, spirit and rules of language would certainly differ far from those manufactured by grammarians and dictionary-makers, what he ever learned out of Adelung; and whether he is a follower of him? Six hundred years ago—that is, was daily practicing—perfections and elegancies in German, of which our best teachers in language now-a-days do not even dream. In the poems of Wolfram von Eschenbach, or of Hartmann von Aue, who had never heard of declension and conjugation, and perhaps could not even read or write, distinctions of substantives and verbs are observed with a purity and accuracy of inflection and location, which we must now discover gradually by the methods of learned investigation, but can not now return to; for the language goes on in its unalterable course. Even if I shall fail to describe with sufficient truth the earlier peculiarities and fortunes of our German language, out of such of its early monuments as survive, still I am confident that even a more imperfect representation of what I have had in mind, would possess power enough to demonstrate the entire incompetency of all the grammatical rules which have thus far been so painfully elaborated, even in those simplest outlines upon which all the rest must depend. And if these theories of language are thus shown to be themselves all deception and error, then there will at once be furnished evidence enough of the fruits which they

must produce in our schools; and of their necessary tendency to destroy rather than to develop, the germs of the natural faculties of language. And it is an observation both undeniable and of importance here, that girls and women who have been least tormented in the schools, speak with more correctness, arrange their words more elegantly, and select them more naturally; because they follow more obediently the requirements of the nature within them. And the style of their language will keep pace in development and polish, with their mental progress, of its own accord, and of necessity. Every German who understands his own language in a plain, correct, common-sense manner—that is to say, without having been taught it by rules, is entitled to call himself, to use the striking expression of a French writer, an independent living grammar; and boldly to ignore all the rules of the grammar-masters.”

“If as these views imply there is no such thing as a grammar of the native language adapted for use at school and at home, no such thing as a dry outline of those simplest and for that very reason most wonderful elements of language, of which each has lived for an immeasurable period before arriving at its present shape;—it follows that the study of grammar can be nothing except a strictly scientific one; and either philosophical, critical, or historical, according to the method in which it is pursued.”*

* To avoid misunderstanding, I add here that I do not undertake to give a history of the study of the ancient German. Such a one would of course in this place most naturally discuss the pupils and cotemporaries of the Grimms.

PHYSICAL EDUCATION.

As Physical Training—its principles and methods—is at this time receiving more than ordinary attention from teachers and the public generally, in connection with plans of military education, we shall bring together earlier than we had intended, the suggestions of eminent writers, with accounts of systematized exercises, including juvenile and popular pastimes, in different countries, bearing on the subject.

There is much of the highest educational value in the military element in schools, including in that term all that is peculiar in studies, drill and discipline, designed to train officers and soldiers for the exigences of war, or to cultivate a military spirit and preparation among the people. But we do not believe that any number of juvenile military schools, any organization of cadet-corps, however extensive, any amount of drill or target-shooting, valuable as all these are for general or specific purposes, will cover the whole field of physical culture, which must begin far back in the home, with parents and nurses, and extend out into the daily life of every man, woman and child. Neither will these schools, and appliances, and practices be an adequate substitute for the severe scientific study and special training which the experience of every European government has found necessary, in the present condition of human affairs, for the preparation of officers both for the army or the navy.

We hope to see military drill and discipline, as well as systematic gymnastic exercises, worked into many of our schools, both public and private, under proper regulations, and well-qualified instructors, but not to supersede old-fashioned games and sports, or to diminish the amount of hard study. Under proper conditions of safety, play—free and varied as nature prompts, and all young animals delight in, affords the best exercise for little children and young scholars; and study, work, and sports, judiciously alternated, constitute our course of gymnastics for consolidating the constitution of youth and fore-ordaining a manhood of prolonged strength and usefulness. Let us have good teaching, and enough of it,—hard study and more of it, with suitable alternation of subjects and frequent infusion of exhilarating play as well as of systematic exercises,—useful work in field and shop, with less intensity in the pursuit of wealth and office, and more indulgence in outside and fireside recreation,—let us have more and better knowledge of the laws of health, more of heart culture, as well as of mental and bodily vigor, more exercise of the gentle and kindly sympathies, more of the refining enjoyments of the beautiful in nature and art, more of the ennobling perceptions of moral beauty and virtue, and the daily practice of obedience, veneration, temperance and patriotism, and we shall be a healthier and a happier people.

CATECHISM ON METHODS OF TEACHING.

TRANSLATED FROM DIESTERWEG'S "ALMANAC," (*Jahrbuch*,) FOR 1855 AND 1856,

BY DR. HERMANN WIMMER.

I. INTUITIONAL INSTRUCTION, (*Anschauungsunterricht*), BY A. DIESTERWEG.

1. *What is the object of intuitional instruction?*

To prepare the child who has just entered the primary school, for formal school instruction.

2. *What is therefore its external position in the course of instruction?*

It forms as it were the bridge from the liberty of home life to the regular discipline of the school; it is in regard to instruction, an intermediate between home and school.

3. *What is to be effected by it?*

The children are to learn to see and to hear accurately, to be attentive, to govern their imaginations, to observe, to keep quiet, and to speak distinctly and with the right emphasis.

4. *With what objects must this preparatory education deal; having in view a "formal" aim, but no acquisition of knowledge?*

Perceptible or perceived objects; hence its name. It has a two-fold meaning; real observation by the senses, especially by eye and ear,—and such management, by the teacher that the objects, their qualities and conditions, are made vivid interior perceptions.

5. *By what do we know that its end is attained?*

By the whole appearance of the children, and particularly by their correct and proper speech and pronunciation, which can not be valued too highly from the first beginning.

6. *What is the beginning of this instruction?*

After a conversation about father and mother, to gain their confidence, and after some directions concerning the mode of answering and behaving in the school-room, the first thing is to observe the room and its contents. The pupil is to be made acquainted with all around him; he must learn to see, to name, and to describe exactly, all objects in the room.

7. *What must be chiefly attended to from the first day?*

(a) A clear, emphatic statement in complete sentences. E. g. What sort of thing is this? This thing is a chair, etc.

(b) A comprehensive view of all qualities observed in an object, at the conclusion of each exercise. This is of the greatest importance in all instruction.

8. *What is the second step?*

Observation of the whole school, school-house, road, village or town, in their external qualities.

9. *The third?*

Observation of some of the animals in the place, and of man.

10. *What next?*

This depends on circumstances. In general, it may be said, that the result of this instruction may be secured by from four to six hours a week during the first year. The duller the children are, the longer it must be continued. It may be further extended to the trees and plants of the neighborhood, the trades and employments of the people in the place, clouds, weather, wind, fire, water, sun, moon, stars, etc.; in short, to all objects accessible to real observation. Accurate contemplation or description of models of mathematical bodies may also be very advantageous. The teacher should draw the streets and houses of the place before the eyes of the pupils on the blackboard; he may resort to "*Stäbchenlegen*," (laying down small sticks; see Diesterweg's *Kleinkinderschule*, (Primary School,) fifth edition, and Stangenberger's book;) he may use the picture tables; in one word, he may arrange any variety of useful exercises to attain the important end. It is least possible in this branch, to prescribe in books a regular and equal course to all.

Of the greatest importance, we may repeat, is the way in which the children speak and pronounce. A teacher who is unmindful of this, prepares trouble for his whole professional career. Instruction in teaching, if the teacher understands it, is at the same time instruction in language. It is not, however, instruction in grammar; yet it leads to the understanding of the language, and to attention to words and expressions in general. Not only the nouns, adjectives and verbs, but the prepositions and conjunctions also, should be managed without the mention of their names, but by using practical examples of them. It is not the object to explain these words, but to use them correctly by means of a variety of exercises.

The best manuals for the Intuitional Method direct such instruction, and the teacher shows his skill in the suitable choice of objects, and especially in the varied and attractive treatment of them. Less depends on the selection of what is to be discussed, than on the way in which the attention of the children is secured. If the proverb "Every way is good except the tiresome" be true any where, it is true here. As soon as the children get tired, the subject must be dropped. Success depends entirely on the activity of the children. This is true, indeed, of all teaching, but preëminently so where knowledge and technical ability are not aimed at, but only an awakening of the slumbering faculties, a "formal" end. Attention, liveliness, a desire to observe, and to answer, etc., are the measures for judging of success.

If the result is secured, i. e., if the pupil is prepared for learning, the teacher leaves this instruction and advances to study proper, which is likewise intuitional. That is, he proceeds always from facts, from real, undeniable and undisputable facts. The importance of this principle is not yet enough understood, nor has the subject been exhausted by teachers or educators.*

II. INSTRUCTION IN READING, BY HONCAMP.

Reading Writing together (Schreib-Lese-Unterricht.)

1. *Shall the first instruction in reading be begun in connection with the first instruction in writing?*

Most certainly, for reading and writing are most intimately connected.

* Harder, in his manual, (Altona, 1853,) differs from these views so far as he makes this instruction the basis of real instruction, and likewise real instruction itself. "But where matter dominates," says Kalisch, "pedagogical management and general cultivation is at an end; for to the teacher, matter is secondary."

2. Was instruction in the former separated from the latter in olden times?

From ancient times writing was accompanied by reading; but not until modern times, (since Graser,) has reading been connected with writing, in all its steps.

3. Is this method according to nature?

It is natural, because reading and writing are properly but two different sides of the same thing, i. e., of the written language.

4. But is it not easier, first to practice the one, and not to practice the other, until the greater difficulties of the former are mastered?

Quite the contrary. Reading and writing assist each other mutually, and experience teaches, that the first instruction in either, is made more efficient by their union.

5. In what way shall they be connected?

The teacher can either (analytically) view the spoken word as a sound, and then have it (synthetically) represented by the signs for the sounds, i. e., the letters, in which case writing is prior; or he may first view the written (printed) word as a representation of the sound, (analytically,) and then have it (synthetically) reproduced by pronouncing or reading—in which case reading is prior. We have, therefore, either a *Lese* (reading)-*Schreib* (writing)-*Methode*, or a *Schreib-Lese-Methode*,—(Writing-reading-method.)*

6. What may be said in favor of the reading-writing method?

Writing always precedes reading; the inventor of writing did it for reading's sake; he wrote first, and then he read. Hence, instruction in reading must be joined to instruction in writing.

7. What may be said in favor of the reading-writing-method?

In answering this question we take, not the place of the inventor of writing, but of him to whom he first communicated his invention; the inventor taught him first to read and then to write, and in like manner, according to nature, we must proceed now.

8. Which method is to be preferred?

It is nearly indifferent, either in regard to subject or result, whether we put the pupil in the more artificial place of the first inventor, or in the more natural place of the first pupil.

9. What rules must be observed in the adoption of either?

Reading and writing must always be intimately connected; the elements of the word must be found by analysis, and made the basis of study; and only such words and syllables must be read and written, as have a meaning for the pupil.

* Reading is always analytical, writing synthetical; but the method of teaching may be different. If reading be separated from writing, the proceeding may be

(1.) Synthetical; where the letter is given, and with it either (a) the name of the letter without the sound—*buchstabirmethode*, spelling method; or (b) the sound (*laut*) of the letter without the name—*lautirmethode*, phonetic method; or (c) the sound and the name of the letter, spelling and phonetic method combined, (*Wilging's*, *Kaverau's*;) or

(2.) Analytical; where the pupil reviews the written (printed) matter as a whole, that he may resolve it into its elements. The whole is (a) a proposition or sentence, (*Jacotot's* method;) (b) a word, (*Gedike's* method;) or

(3.) Analytico-synthetical; the child, to become prepared for reading, is made to resolve sentences into words, words into syllables, syllables into sounds, and then the teacher proceeds by the combined method. See *Jacobi's* book on these methods; also *Honcamp's* "*Volksschule.*" No. 10, p. 20.

In the *Schreib-Lese Methode*, (and vice versa,) it is well to give also the name of the sound and letter.

10. *Is it not requiring too much of a child, who has not yet mastered the mechanical part of reading, to ask him to think of the contents and understand what he reads?*

Not at all; for word and idea are one, and speaking and thinking are not to be disconnected. "Given the word, to think of its meaning," is not an operation which the pupil has to learn; he does it of himself and has always done it. But to speak, without joining an idea with it, the pupil has to learn, and that too in order to unlearn it afterward with much trouble.

11. *Why is it important never to read meaningless syllables and unintelligible words?*

Because the pupil will read in future as he is taught to read; therefore, he ought to get accustomed from the beginning to seek in all that he reads a proper idea. Every thing not essential, particularly all that would embarrass the first instruction, should be put off to a later time. It is not necessary to proceed from the easier sounds to the more difficult, for the child pronounces all with equal facility; but it is good to begin with the easier letters, so far as their form is concerned, for example, o, i, s, f.

Reading by itself.

Reading may be divided into (1,) mechanical; (2,) logical, (intelligent,) and (3,) æsthetical, (feeling.)

12. *Are these grades strictly to be kept asunder?*

No; reading must never be merely mechanical, without regard to the understanding; with logical reading, mechanical ability ought at the same time to be advanced; nor should reading ever be without feeling; and with æsthetical reading, both the mechanical and the logical processes should be practiced. The first belongs, in a common school, to the lowest class; the second, (logical,) to the middle, and the third to the highest class, i. e., they are preëminently to be attended to in those classes.

13. *Wherein consists the mechanical ability of reading?*

In a quick survey of the written or printed matter, and in the ability of representing a row of letters by the right sounds, syllables and words.

14. *How is this ability best acquired?*

By frequent class-reading, which must alternate with single reading, so that the former is always preceded by the latter, which must serve as a model. Single words and sentences are to be repeated, until they are readily pronounced. The teacher, by his accompanying voice, directs as to right pronunciation and accentuation.

15. *Wherein consists logical reading?*

In that the understood contents of a piece are emphasized in conformity with that understanding.

16. *When does the pupil understand the contents?*

When he knows the meaning of the words, and the meaning of their relations in the sentences.

17. *When does he understand the meaning of the words?*

When he knows the signification of the derived and compound words by the meaning of their elements, and when he well distinguishes between the proper and the figurative meanings of the same.

18. *Should the exercises in the formation of words, and such as help to understand the rhetorical figures, be practiced in the reading lesson?*

They should be combined with grammar, and occur in the reading lesson only so far as is necessary for understanding the words.

19. *When does the pupil understand the relations within the sentence?*

When he knows how one conception (of a word) refers to another; the different conceptions (words) to the speaker; one idea to another; and the different ideas to the speaker. It is sufficient for the pupil to understand these relations without having a conscious insight into them. An analysis of the conceptions and expressions belongs to the grammar, not to the reading lesson, in order not to spoil the pupil's enjoyment of the contents, etc., etc. (The rest has more particular reference to the German language.)

III. ARITHMETIC, (*Rechen-Unterricht*), BY A. DIESTERWEG.1. *What has brought arithmetic into the common school?*

The wants of daily life—material necessity. Its introduction was historically the first of those which caused a change in the organization of schools. (Rabanus Maurus, in the ninth century, recommended arithmetic and geometry, because they open mysteries, because the Bible speaks of cyphering and measuring, because we learn by it to measure the ark of Noah, etc.)

2. *Is this the only reason why the present common school teachers retain this instruction, and consider it indispensably necessary?*

Not at all. They have recognized in the right treatment of number, and of its application to daily life, an excellent discipline of the mind; the formal object is added to the material one.

3. *How do they compare in value?*

The formal object has the preference; in no case is it to be subordinate; the development of the mental powers is in every school the chief point. But they do not exclude one another; quite the contrary. The formal end is attained just so far as the matter to be understood is worked through.

4. *What motives decide on the choice and arrangement of the matter?*

First, the "formal" motive; i. e., regard to the mental nature of the children, the laws of human development; and especial regard to the individual nature of the learner; next, various external circumstances—differences of place and time, and of schools. The first motive is universally the same; it dictates the *management* of the number; the second directs the *application* of the number, or calculation.

5. *How far ought all to advance in arithmetic?*

The maximum can not be stated; nor the minimum either, at least in regard to the degree of formal development. It remains to point out the material minimum, and this requires every child to be able to solve the common problems of every day life. It is neither necessary nor possible, that all scholars should reach the same point.

6. *What is to be thought of prescribed rules and formulas?*

They are to be entirely annihilated. No operation, not understood in its reasons, should be performed, or learned. The scholar must be able not to demonstrate mechanically each operation, but to give the simple reasons which justify it to the mind. The right deductions from the nature of the number and of its relations, are to prove its correctness.

7. *Wherewith must instruction in arithmetic begin?*

With the numbering of real objects, (cubes, little rods, fingers, etc.)

8. *What inductive means are next employed, and how long is their use continued?*

The teacher next proceeds to the use of artificial means, as lines, points, cyphering rods, Pestalozzian tables, etc., and continues to practice the simple

changes of number with them, until the pupil has a perfectly clear idea of the numbers and of their quantities.

9. *What next?*

The teacher advances to the use of figures.

10. *What is the treatment of the number, with and without figures?*

The latter always precedes the former; the written or slate arithmetic every where follows mental arithmetic. Not only does the cultivating power of arithmetic lie in the insight into the relations of number, but also the wants of practical life demand preëminently skill in mental arithmetic.

11. *Upon what chiefly depends that skill?*

First on the ability in handling the decimal principle, (*Zehnergesetz*;) then on the ability to compare and analyze numbers.

12. *How do the exercises with so-called "pure," and with applied numbers, compare?*

The former always precede; application presumes ability in treating the pure number. This being attained, questions, problems and exercises follow; together with denominate numbers, and their application to life.

13. *Are the exercises with numbers from 1 to 100 to come in order after the four rules, (addition, subtraction, multiplication, division?)*

No. All operations ought to be performed successively with these numbers; the regulated uniformity of the operations comes later. (*Grube, Schweitzer, etc.*)

14. *Shall fractional arithmetic be entirely separated from instruction in whole numbers?*

No. No. 13 forbids it, and makes it impossible; even considered in itself it would be improper.

15. *Which points must be distinguished in practical problems?*

First, the understanding of the words.

Second, the relation of the question to the statement, or of the thing required to the thing given.

Third, the understanding of the way in which the unknown number depends on the number given.

Fourth, the finding of the unknown number from the given number; that is, the calculation, oral or written.

16. *What has the teacher to do in these four processes, when the pupil can not proceed of his own strength?*

In the first, the understanding of the words and things in their relations must be explained, and often directly given.

In the second, what is required must be well distinguished from what is given; the propriety of the question must be accurately considered.

The third point is to be brought out by means of questions from the teacher.

The fourth is an affair by itself, and is the pupil's concern.

An exercise is not complete and satisfactory, until the pupil is able to explain these four points, one after another, orally, and without any aid.

The teacher leads by questions, (by analysis;) the pupil proceeds by synthesis. The former proceeds from what is sought, the latter from what is given.

17. *How is talent for arithmetic to be recognized?*

Besides what has been said in No. 16,—by the independent invention of new methods of solving the problems, of peculiar processes, etc.

18. *In what way may uniformity in arithmetical instruction be gained?*

By solving each problem rationally, according to the peculiar nature of the

Numerical relations occurring in it, and consequently, without admitting any external rule or formula, which on the contrary ought to result from the subject itself. Uniformity lies in the rational, transparent treatment, and, therefore, in the mind, not in the form. Good rules, etc., are not indifferent, but they must follow the observation of the thing.

19. *Which is the most simple, natural and appropriate form of managing the problems externally?*

Not the doctrine of proportions; it is too artificial, and too difficult for the common school; nor the chain rule, etc. The best form in slate arithmetic for the common school is the so-called "*Zweisatz*," the fractional form, (*bruchform*), which every where requires reflection. (Scholz.)

20. *What is the value of the so-called "proofs" and abbreviations?*

The proofs are, with a rational method, superfluous; the latter are of little value. A well guided pupil finds them out himself, and if, in the highest class, some of them are pointed out to him, their origin, and thus their correctness, must be demonstrated at the same time.*

IV. GEOMETRY, (*Raumlehre*.) BY A. DIESTERWEG.

1. *Is geometry required in the common school?*

No doubt, for it teaches the *forms* in which every thing appears; the shape of matter and the laws of those forms; the laws of space and of extent in space; the dependence of magnitudes and forms on each other.

2. *Why is such knowledge considered as a requisite for general cultivation?*

Because the whole mass of bodies, the universe, as well as man, exists in space; because without the knowledge of the qualities of space, man would be ignorant of that appearance of things which belong to their inmost nature; because geometry teaches how to measure lines, surfaces and bodies, which knowledge is very necessary; because without it man could not divine, that the distance and size of the sun, moon and stars, could be determined; and because he would even have no idea of the extent of his own abode, and of the mathematical, i. e., fundamental qualities of the same. All this is consequently requisite for general human cultivation, not to speak of its practical value, as well for female as male education, and therefore for the common school, the school of the people. Without it, not the most indispensable part, but an essential part, of education is wanting.

3. *What elements of geometry are to be taught in the common school? and in general what parts of it may be considered there?*

Space admits of "intuitive," (*anschauliche*,) and a demonstrative, (*begriffsmaessige*,) observation.

The intuitive faculty of man perceives immediately objects in space, bodies in their qualities and forms; with the sense of touch he perceives what opposes him in space, the body and its external form; the sense of sight assists him, by determining extent and distance, and by comparing and measuring them. These are operations of *external* intuition. The intellect abstracts the *differentia* of the bodies, and fixes the pure, mathematical form; and thus aids the *interior* pure, or mathematical intuition. Moreover, the logical intellect, perceiving the

* No school can do without an arithmetical text-book. Hence it sufficed to give here the principles. These contain the measure by which we have to judge of the value of the text-book.

dependence of magnitudes on each other, their mutual conditions, the inference of the one from the other, deduces and concludes.

The intuitive part of geometry is that elementary part which is proper for the common school. But thereby is not meant, that the pupils should not learn the dependence of one thing on the other; this even can not be avoided, it comes of itself; but according to the degree of ability, quicker and deeper with one than with another, and one school will make more progress in it than another. But the power to be immediately employed is the faculty of observing—first, the exterior, and then, and preëminently, the interior. The conclusions connected with that observation result therefrom spontaneously; the intellect works without being ordered. Therefore, in geometry, as every where—a fact, ignorance of which, causes much merely repetitious and lifeless teaching, as well as intellectual dependence and immaturity—the teacher ought to lead the scholar to immediate, true and vivid perceptions.

The strict or Euclidean geometry, with its artificial proofs, is not fit for the common school, nor does it prosper there.

4. *What is more particularly the subject of geometrical instruction in the peoples' school?*

The qualities of (mathematical) lines, surfaces and solids.

5. *What method is to be pursued with it?*

The point of starting is taken in the physical body; and from this the mathematical one is as it were distilled.

The order of single precepts or propositions is, as has been said, as much as possible *genetical*. Pedantry and anxiety are here, as every where, prejudicial. The method, always intuitive, requires originality, i. e., the evolving of every thing learned from some thing preceding; aims at immediate spontaneous understanding of one thing *through* the other.

6. *What is the immediate purpose of this instruction?*

To understand the qualities of lines, plains and bodies; to measure and calculate them.

7. *What instruments are used by the pupil?*

Pen and pencil, for drawing; compass and scales, for measuring; the usual measures of lines, surfaces and bodies, for calculating.

V. NATURAL HISTORY, BY ED. HINTZE.

1. *What method should be used in teaching natural history?*

The method of instruction is the mental development of the pupil by means of the material development of the object. The method is, therefore, essentially a *process* made by the teacher. Since there can be but one such development, there can be but *one* method.

2. *Which is that true method?*

The one true method is named from the principle contained in it; it is the developing method.

3. *Wherein consists this developing method?*

In development there are three steps; observation, (*anschauung*,) conception, (*vorstellung*,) and generalization, (*begriff*,) Such is the progress of the method. Every where teaching begins with *facts*, and therefore in this case with the observation of natural objects. Of these, individual action and growth must be shown, and the general law of nature thence inferred. In this way and only in this, the pupil is taught according to nature, since he proceeds from immediate observing and knowing to perceiving and understanding.

4. *What mode of teaching is to be used?*

That one which develops by questioning, (*die fragend-entwickelnde.*)

5. *Is this mode practicable in all three courses, (set down by Hintze elsewhere with regard to the capability of the scholars)?*

In the first course, questioning is predominant; on the second, "*der vortrag,*" i. e., proper teaching and explaining must be joined with it; on the third again, questioning predominates. In all good instruction questioning is predominant, and with it conversation with the whole class.

6. *What have we to think of lecturing?*

Lecturing is no form of instruction at all; it is a rocking chair for teacher and pupils; the former has easy work, whilst the latter stare and dream.

7. *What ought to be required of the pupils?*

Their first and chief object must be to learn to *see* right; then follows right reproduction; and the necessary result is right understanding.

8. *What is the value of learning by heart?*

In all instruction nothing must occur which is not understood, and merely learnt by words. One fact well understood by observation, and well guided development, is worth a thousand times more than a thousand words and sentences learnt by heart without understanding. A well guided pupil has nothing to learn by heart particularly; what is understood, is remembered for life.

9. *Shall the pupil use a text-book?*

For natural history it is useless. The good teacher does not depend on it, the bad one has a good means to cover his inability, and the scholar has nothing but a dry skeleton.

The teacher must have mineralogical, botanical and zoölogical collections, and, if possible, a microscope.

10. *What must the pupil do at home?*

Write out and draw what has been treated in school—in proportion to his time—in a brief, concise and neat manner. Besides, the well directed pupil will voluntarily and eagerly occupy himself with nature, look with interest and intelligence at plants, stones, etc., and collect them.

11. *How does an able teacher distinguish himself in this study?*

The able teacher takes pains with his school every where, and particularly in this branch; all energy, punctuality and vivacity, must be applied here, if instruction is not to be a dead and dry mechanism.

12. *What distinguishes a painstaking (strebsamen) teacher?*

The able teacher is found out at school, the painstaking one at home. There are certain branches which are soon done with. But this is not the case with natural history; he who is devoted to it, must follow its own path of progress. The teacher must never cease to study, to make excursions, experiments, collections, etc., to search, to listen, to observe and investigate.

13. *What characterizes the inspiring (geistanregende) teacher?*

He is distinguished by a happy development of sound talents, love of study, and devotion to his vocation. By force of application every one may acquire the necessary knowledge, for nature is every where. If the able teacher shows himself at school, the painstaking teacher principally at home,—there flows from the inspiring teacher every where something that indeed can not be completely gained by study and application; but an earnest will accomplish a great deal. Besides, it is true, that as under the hands of Midas every thing was changed into gold, so in the hands of an inspiring teacher every thing

becomes enlivened. As the creative mind every where works attractively, so particularly in natural history, zeal, application, love and devotion, spring up spontaneously in the pupils.

VI. NATURAL PHILOSOPHY, BY A. DIESTERWEG.

1. *Should natural philosophy be studied in the common school?*

Certainly. Shall the children in the common school learn nothing of weather and wind, of thermometer and barometer, of the phenomena of light and air, of rain and snow, dew and hoar-frost, fog and clouds, lightning and thunder? shall they see the *aéronaut*, travel by steam, and read telegraphic news, without knowing the how and the why? Shall they remain ignorant of the constituents of food, and of the process of their stomachs and their lungs? Or is it sufficient to read of all this in the Reader? He who answers those questions in the affirmative, is either himself an *iguoramus* or a *misanthrope*, and he who affirms the last knows nothing of the way in which real knowledge is acquired.

2. *What do we begin with? and when does the proper instruction in natural philosophy commence?*

As every where, with showing single phenomena, with intuitive contemplation, with oral representation of what has been observed, and reflection thereupon.

We begin with it in the intuitional instruction of the lowest class. The instruction in geography and natural history develops further the faculty of intuition, and in the highest class the proper instruction in this branch commences.

3. *On what portions of natural philosophy are we to lay stress?*

On all such as belong to the knowledge of phenomena, within the pupil's sphere; the knowledge of the most common things is the chief point.

By this principle we make our choice; we omit, therefore, all that is remote, invisible, and incapable of being made visible; all that can be demonstrated only by mathematical proofs; and keep within the field of immediate observation, stop with those things which every one may know by observation and experience, and show such things, as are not obvious, by experiments with simple and cheap apparatus.

4. *What method is to be used?*

To say nothing of the regard for the individual quality of the pupil, the method depends on the nature of the subject, and on the way in which man naturally acquires his knowledge. Every where man is surrounded by natural phenomena; they happen before his eyes. These, therefore, must be opened, in order to observe apprehendingly, to remember what has been observed, to fix the succession of phenomena, and what is common in a series of similar ones; not only to learn the facts, but also the laws by which they happen, and finally, by reflection, to discover the hidden causes.

Natural philosophy belongs to the inductive sciences, i. e., to those which begin with the knowledge of single facts, abstract from them the law of the process, and then in inverse order, deduce the phenomena from the causes.

The way, therefore, prescribed by the nature, as well as the history of natural philosophy, is, that which proceeds from observation and experience to rule and law, if possible, advancing to the cause, (the so-called regressive method.)

5. *What is the aim of this instruction?*

The knowledge of the most essential phenomena, by which man is surrounded, and the ability to explain them, that is, to state in a simple way their causes.

Most important is the knowledge of all that refers to weather, and we expect, therefore, from a graduating pupil, correct answers to the following questions:

What is the temperature of the air in the different months of the year? Which is the maximum and minimum of heat in our country, and when do they usually occur? What is the corresponding state of temperature in other countries? What are its causes? How do the winds originate, where do they come from, and go to? What are the principal currents of air on the globe? Their causes? What weather is caused by the winds in our country? To which winds is our country chiefly exposed, and why? Origin of fogs and clouds? What is dampness? What causes rain? These and similar questions come so near home to man, that it would prove enormous dullness, if he did not ask them himself, and reflect, on answering them. No doubt that such stupidity is still frequent; but no one will doubt what is the indispensable duty of the common school in the premises.

VII. ASTRONOMY, BY A. DIESTERWEG.

1. *Is instruction about the nature of the universe about astronomy, expedient?*

Most certainly; we require the same from every man. To any one who does not admit that this is requisite, I address the following questions: Has that man an idea of the work of the Creator, and of his relation to both, who is ignorant of astronomy? or even, is he a man? No; he is like a brute confined to a narrow sphere, and has not even learned to make the right use of his upright stature, and of his sense for the universe, the eye; he has not enlarged his faculty of observing beyond the smallest compass, satisfied the inborn desire of knowledge, developed his intellect; he might be compared to a mole that closes its eyes to the light. We justly pity the poor man who has had no opportunity to learn the wonders of the starry sky; we despise him, if he has neglected an opportunity; we blame indignantly whatever would prevent his acquiring that sublime and elevating knowledge.

2. *What should every body know of the universe?*

He should know of infinite space, its laws, the qualities of the sun, the moon, and of our solar system, the relation of the planets to the sun, the position of the earth relatively to the same, its rotations and all that result therefrom, as years, seasons, day and night, in short, the substance of popular astronomy.

3. *How is the pupil to learn this?*

By observation—not by books; for from these we get empty words, hollow notions and phrases; books may at best assist the preceding instruction, but they can never replace it—ask among the “educated” people, what ideas they have in this respect, though they have heard of all and can talk of all. The true, vivid and moving ideas of the great subjects in question are exclusively acquired by an intuitive, developing instruction.

4. *What, therefore, is the teacher to do?*

He stimulates the pupil to observations; he makes him conscious of what has been observed, by illustrative questions and conversations; he draws his attention to the sublime phenomena of the sky by day and night; he talks over with him such observations as can be made daily all the year round on sun and stars; he fixes these observations in good order, and in clear, well defined propositions. This is the first step. Scientifically expressed, the pupil advances to the point of view—of what appears to the senses—of *spherical* astronomy.

This point being attained, considerably and firmly, (we must know first what *appears*, before we learn what *is*,) then reflection follows, whether the things really are such as they appear. The pupil advances from appearance to essence or nature. This step is very important, not only in astronomy, but in *all*

tnings, and astronomy, for the very reason that it furnishes the clearest and greatest example of this important progress in human education, is of inestimable value. The pupil learns the nature of the things; his perceiving is raised to knowing. Disorder becomes order, variety uniformity, and chaos rule and law. *One* power reigns in the universe, every thing obeys his laws, and every where there results order, harmony, development, life; and each heavenly body becomes a part of the universe in its infinite sublimity and brightness.

It is worth while, not only to hear or to read of that, but to know and to understand it. The pupils now advance to *theoretic* and the *physical* astronomy.

At last there commences the construction of the whole, at least of our solar system, out of the centre. From the beginning, instruction proceeds from the periphery, from the point on which the pupil stands; the individual is himself the centre, around which every thing is grouped, and to which every thing is referred; the observation is *subjective*. Afterward, it is made *objective*, and man recognizes himself, the human race and the globe, as a part of the infinite universe.

5. *What has the teacher to attend to more particularly?*

This necessary instruction being still uncommon, we may give here several suggestions:

(a) He excludes every thing that can not be brought to sight.

(b) He goes always from observation and experience over to reflection and deduction. Astronomy is an inductive science; hence teaching follows the inductive method. The teacher does not "*dociren*," (teach or lecture,) he guides; he does not say one single sentence that could not be found by the pupils themselves; for such as can not be found by them—except historical notices—are not fit for them.

(c) He fixes the results in the most definite and pregnant expressions.

(d) He brings the things observed, thought, spoken of, to view on the black-board, and directs the pupils to similar representations. But he does not begin with drawing, this is secondary to the finding of perceptions. He employs every where the pupil's imagination; astronomy is an excellent means to lead it on a sure and safe way. Drawing proves the correctness of the ideas, therefore it should not precede. If the pupil makes a correct drawing, it is the surest proof of his having viewed and reflected right.

(e) He abstains throughout from any use of models, (telluria, lunaria, etc.) They serve afterward as proof, but they may be entirely done without. Who uses them in the beginning, is wrong; who requires the pupils to transfer that which is represented by those models, to the universe, requires what is impossible; nobody succeeds. The value of models, even of the best, is very much confined. They show the apparent things better than the real; but even for the former they are not necessary. The teacher may sometimes, by means of a larger and smaller globe, a candle, etc., represent every thing needed. But the perception and representation of what is going on in space, even with shut eyes, is what is indispensable, because it is the principal thing. Whoever does not succeed so far, does not really know or understand.

He who wants to know more, may read my "*Astronomical Geography*," (*Astronomische Geographie*), fifth edition, Berlin, 1855, 1½ thaler. (We may add, that this book of Diesterweg's is universally considered as a master-piece of method.—Ed.)

VIII. GEOGRAPHY. BY ABENRODE.

1. *What are the principles on which the present methods of teaching geography are based?*

They are intimately connected with the general principles of education. Some consider it necessary to proceed from a general view of the globe, in order to gain at first a general outline,—a scaffold, by means of which the building may be gradually constructed in all its details,—and this in such a way that the pupil shall remain always conscious of the relation of the several parts to the whole, and that the latter itself shall gradually be made more and more perspicuous in all respects.

Others think that the beginner should first be led into a sphere commensurate with his faculties, near to him and capable of being surveyed by his bodily eye; and that he ought to be made familiar with it, in order to sharpen his sight and tongue for the later geographical perceptions, and the intellect for the relations more and more complicated. Then, and not before, the boundaries of this field should be gradually extended, to give his growing powers more extended exercise, until, at last, in the highest grade of his studies, the whole earth is considered in all its various relations.*

Others again are of opinion, that the mere observing, hearing and speaking of geographical matter, does not give thorough knowledge; that it is requisite to appeal to the spontaneous activity of the pupils themselves, and to cause them gradually to complete drawn or pictured representations of the localities studied. This method they say is not only in harmony with the juvenile inclination to such work, but gives an indelible knowledge of what is pictured, particularly of its relations of form and surface; which will serve as a solid basis for all further instruction.

On these three foundations rest the ideas of the geographical methods now in use,—the analytical, synthetical and constructive, (drawing,) method, each of which, in practice, admits of various modifications.

2. *What are the peculiar advantages and disadvantages of the analytical method?*

One advantage that should not be undervalued is, that it designedly keeps in view the connection of the several parts of the earth to the whole, so that, from the beginning, all discontinuance of the perceptions is avoided. It most carefully regards especially the topical and physical elements, as well as the necessity of graphic representation. It, however, has this peculiar disadvantage, that it

* Ruemer, in his "*Contributions to Pedagogy*," has a valuable chapter on teaching geography, which will be found entire in Barnard's "*American Journal of Education*," Vol. VIII, p. 111—122. He guards teachers against the too frequent or extreme application of Rousseau's suggestions, that the walks of children should supply lessons for map-drawing in the school-room, lest the scholars begin to look on themselves as peripatetic lessons, and get a dislike to geographical reading and study. He advises the use of the map of the city or town in which scholars reside, as an introduction to the understanding of maps and even the globe. He advises that special attention should be paid to oceans, mountains, and rivers, as they help to fix the great facts of history; and of cities, as the most ancient monuments of men. Their sites seldom change; and, with few exceptions, the name of a city once great and flourishing never disappears from the earth or from human history. The poetic side of this study should be cultivated; and the reading of travels, and of the news of the day, and the transactions of commerce, should be associated with it.

forces upon the pupil the perception of the whole, at a time when he is not yet able to comprehend it fully; and, in particular, not to understand the general relations of climate, soil, produce, etc. It is impossible to carry the beginner along at once in all the collateral studies, *e. g.*, in natural knowledge, so as to thoroughly acquaint him with all these elements. Many things consequently remain an undigested mass, gathered and retained merely in the hope of future understanding.

3. *By whom has the analytical method been particularly recommended?*

The "philanthropist," Guts-Muths, has, in his "Essay on methodical instruction in geography," (*Versuch einer Methodik des geographischen Unterrichts*, 1845,) exclusively advocated the analytical method, which is also used almost exclusively in scientific works. (See Berghaus, Roon, Kalkstein, Rode, Barth, Viehoff, etc.) Some have attempted to lessen the inconvenience of analysis, by dividing the material into appropriate courses.

4. *In what respect has the synthetical method of teaching geography unquestionable value.*

In that, according to correct principles of pedagogy, a small and easily comprehensible space is treated at the outset; that the most "concrete" things, easily understood by the children, form the ground-work of further instruction; that these small districts or parts are by this method made vividly distinct wholes, the gradual extension of which, and its increasing variety, are well accommodated to the gradual development of the pupil's mind. The subjects and relations thus learned are at the same time the elements of all geographical instruction. Moreover, by this method the pupil gains, within a reasonable time, and in an orderly way, a desirable familiarity with his native place and country; and in case the extent of his studies has to be curtailed, the more remote parts of the globe would be omitted, rather than those with which the scholar and his life are closely connected, and which, therefore, must be most important to him. This method, likewise, admits of laying out definite courses. However, the strict and complete carrying out of it, would lead to an improper extension of the field to be gone through, and might, by tiresome repetition, cause other disadvantages.

5. *Who advocate the synthetical method?*

Charles Ritter, (see Guts-Muths, *Bibliothek*;) Henning, "Guide to methodical instruction in geography;" (*Leitfaden zu einem methodischen unterricht in der geographie*, 1812;) Harnisch, "Geography," (*Weltkunde*;) Diesterweg, "Introduction to methodical instruction in geography," (*Anleitung zu einem methodischen unterricht in der geographie*;) and Ziemann, "Geographical instruction in the burger schools," (*Geographische unterricht in Bürgerschulen*, 1833.)

6. *What is to be thought of a combination of these two methods?*

Strict consistency in either of them leads inevitably to many inconveniences. Therefore, we must either follow one in the main and make all kinds of exceptional uses of the other, or contrive to combine them judiciously. It is a great concession made to the synthetical method by the analytical, that the latter should permit, as introductory to the proper geographical course, a preliminary one, to include observation of the neighborhood and its objects; drawing easy sketches of the school-room, house, garden, etc.; instruction in measures of length and breadth, (if possible in the open air;) experiments in sketching the neighborhood from an elevated point, with estimates of area by eye, on a small scale, (for children of 7-8 years;) and geographical instruction on the native

country, (province or state,) with an occasional exposition of the elementary geographical conceptions. Bormann, who tries to combine the best parts of the two methods, makes the first described preliminary course, (somewhat modified, and with the addition of observations of the most simple phenomena of the sky,) his *first* course; giving in the *second* a view of the globe, with instruction upon its principal imaginary lines, and the drawing of them, with a general view of Europe, and a particular one of Germany; advancing in the *third* course, to a more accurate description of Germany, followed by a view of the other European and extra-European countries. Such a combination may be considered as appropriate and practical; still it is not the only one possible.

7. *What are the advantages of the constructive, (drawing,) method?*

The drawing method proposes, by construction of maps, instruction in the elements of such construction, before all regular teaching, to furnish the basis and means of all geographical knowledge. It places especial value on the creative activity of the pupils; and upon such an impression of the pictures drawn, that this may be indelible and vivid in the pupil's mind, and form the foundation on which future geographical teaching shall rest. The accuracy and strictness which this method gives in fixing and enlarging the forms is unquestionably very valuable, for very much depends on a thorough acquaintance with these forms. A designedly and gradual advance from the most general ground-forms to the more correct contours, and filling them out afterward with details of surface, is quite correspondent with pedagogical principles. This method, however, requires far too much in the way of accurate memory of numerous localities laid down. Geography contains still many other things of essential value, for which there would scarcely remain sufficient time and interest.

8. *How is this constructive method usually carried out in detail?*

Agren, general text-book, Part 1, Physical Geography, (*Allgemeines Lehrbuch: physische Erdbeschreibung*.) Berlin, 1832, would first have the maps of the two hemispheres drawn, on a planispherical projection. Some characteristic points, (capcs, mouths of rivers, etc.,) are then to be fixed and joined by straight lines, to gain a sort of ground-plan of the area. The formation of the coast comes next, and afterward the parts of the surface are put in,—all by fixed and defined rules. This method, therefore, distinguishes between description of the coast and of the surface.

Kapp, "Course of Geographical Drawing," (*Lehrgang der Zeichnenden Erdkunde*.) Minden, 1837, takes the square form as a basis, and likewise assumes some characteristic points in the same, which he joins at first by straight lines, until successive corrections give the right representation.

Klößen rejects the gradual elaboration of the right map. According to him it must be drawn accurately from the very beginning by aid of some determining lines.

Canstein takes neither the whole geographical net of lines nor the form of a square; but any convenient geometrical figures, as triangles, rectangles, circles, etc., and uses but few meridians and parallel circles. He admits no copying, nor does he aim at strict accuracy in all determinations of boundaries and directions.

Lohse keeps to the normal directions of the rivers; has copies made from a given model-drawing, and requires a memory of what has been drawn.

Oppermann, "Guide to Geographical Instruction," (*Leitfaden zum geographischen Unterricht*), gives the pupils the right maps, ready made, in accurate contours, has these contours painted over in the succession in which the countries occur in the lessons, and then the details of the surface put in.

Klöden's method, (see above,) seems to be the best. On the plan of Bormann and Vogel, the pupils have skeleton maps, with the chief positions already marked, (see the maps of Vogel, Freihold, Holle, etc.,) and gradually draw the correct maps.

9. *To what limitations is the constructive method subject in the common schools?*

The drawing of maps, (by which must not be understood mechanical copying,) can not of course begin until the scholars have skill in drawing generally sufficient to construct a relatively correct map with some success. But geographical instruction itself can not be put off until that time; therefore, drawing maps can not be placed at the beginning, but must take its place in a higher grade. Again, unless geography is to occupy all the study and leisure time of the pupils with making neat maps, not entire atlases, but only a few maps, can be drawn, (that of the native province and country, of one or another country of Europe, of Palestine, etc.; but scarcely, with advantage, the two planispheres.) At school, there is not time to draw every thing, and if there were, it would be better used in other things, since map-drawing, an excellent aid to geographical instruction, is not that instruction itself.

10. *What is the proper introduction to teaching geography?*

It must be preceded by an acquaintance with the relations of space in the immediate neighborhood, and with the geographical objects there, as well as by an elementary knowledge of maps, and thus of elementary conceptions, for the sake of conversing on the same; else the pupil can not understand clearly nor advance successfully.

11. *What is the value of a preliminary course, (Vorcurus,) intended exclusively for explaining the fundamental conceptions?*

Those conceptions are indispensable; but to bring them all together in an especial course and to premise them to further instruction, is a pedagogical mistake, more inexcusable, in proportion as the course is more extended and abstract. In the same measure as instruction proceeds, the detail and quantity of accurate geographical notions may increase. But the beginning is sufficiently taken up by the first and most general of them, which are to be immediately applied. Excessive and premature expansion is injurious instead of useful. Much more is to be gained by actual observation of the elements of the neighboring landscape, with a view of frequent application afterward.

12. *What are the practical details requisite in geography?*

There is much to be observed, compared, understood, deduced, combined, impressed, represented. These, therefore, must be cared for, in teaching. The means of observation ought to be used in manifold ways, in order to gain the most correct image of the nature and life of the countries, and to illustrate and fix the same by all sorts of proper comparisons of the portions treated.

The teacher's statements should be clear, careful, stimulating, graphic, and definite; ought to leave the map only exceptionally; and should be adapted to fix the image in the pupil's mind. He must show how to draw conclusions from given natural conditions, to infer elements from given relations, to transfer the relations of the neighborhood to distant countries, and to combine partial

notions into a whole. So far, the teacher's work is substantially that of communication. Mere reading, or uninterrupted talking, does not in the least accomplish the right work of geographical instruction.

The next important object is drilling, by a repeated review in the same order, or by an appropriate course over similar fields, by exhibiting sufficient representations of objects which can be impressed only mechanically, by imaginary travels with or without the map, by drawing maps from memory, by written answers to principal questions, etc. Hence, it follows that teaching geography requires manifold efforts, and that the teacher must be a good geographer and an able teacher, to be very successful.

13. *What position in geographical instruction is due to reading from the map?*

At present it is no longer sufficient, with text-book in hand, to merely point on the map, what is spoken of in the book,—situation and boundaries of countries, beds of rivers, chains of mountains, places of cities, etc. The teacher must know how to read maps, and to teach them; *i. e.*, not only to describe what figures and in what order and connection they stand on the map, but to translate the map, line by line, into the real world, in order that this be faithfully impressed in the mind, to be at any time reconstructed from it. He must understand the contents and meaning of the hieroglyphics of the map, and know how to exhibit them in an orderly and appropriate way, as we read a book. In reading a book, it does not suffice to find out the letters, to comprehend the single words and their conceptions, but the whole idea must be clearly understood and reproduced. The study of the map ought to render a great deal of the usual contents of the geographical text-books quite superfluous, that the pupil may not cling slavishly to the dead letters of the text-book, but may depend on the lively picture of a good map. (See Bormann and Sydow on reading maps.)

14. *What is the value of the "comparative method" of teaching geography?*

If the material were such that all parts of it should be learnt quite separately from each other, it would not be worth while to use this method; for the gain in mental cultivation would be small. But since numerous conditions are the same or similar in many countries, it is natural, even for externally facilitating the understanding, to try, by comparing them with those of other countries, to know the nature of both countries and the effect of those conditions on nature. Situation, boundary, size, elevation, watering, climate, produce, population, means of commerce and travel, etc., and many other subjects, are suitable for comparisons. The comparison itself is an excellent introduction to the object, induces more acute observations, memory, reflection, a sagacious detection of differences, and becomes thus an efficient means of cultivating the mind. It is this which makes geography a refreshing as well as scientific exercise of the mind; since the mastering of a more or less extended scientific apparatus is both a means and an end. However, even in a small sphere and at the first beginning, these comparisons may be used, and then, as the student's horizon gradually expands, they will become more various, attractive and instructive, and will preserve the mind from that fragmentary and mechanical learning, by which the end can not be attained.

15. *What success may be expected from geographical pictures?*

Maps are but symbols of real nature: they represent by a hieroglyphic type a number of natural elements for large territories, without being able to represent correctly the real objects of small areas. But, a well-designed and sufficiently copious collection of vivid and correct pictures, on an appropriate scale, well

colored, containing mountains, valleys, plains, rivers, woods, prairies, fields, houses, bridges, ships, men, animals, etc.; or a choice collection representing the cooperating elements of nature in the most various places, in all zones, would be in a high degree instructive for the more advanced scholars. Then the eye might survey the whole landscape of natural and human life in its mutuality and connection, and would bring near the characteristics of the most distant countries; nearer than is possible by the most vivid description in words with the map only. For beginners, such pictures would be distracting; but, at an advanced period of instruction, nothing could be more useful. They would enliven the oral descriptions, and their impression would endure for life. With this conviction, some editors of maps, (see Vogel's Atlas,) have renewed the illustrations of maps, common in the middle of the past century, by no means merely for mere ornament, and have added marginal designs from the natural history of the world. Even in mathematico and physico-geographical maps, (see Berghaus' Physical Atlas,) this idea is made use of.

16. *What is the value of the so-called characteristic pictures, (CHARACTERBILDER?)*

It may be said, briefly, that the geographical *Characterbilder*, i. e., characteristic representations or descriptions of certain districts, afford a sensible view of the real life of nature, by developing, as upon a single characteristic locality of the globe, by the use of elements found elsewhere, with some modifications, the totality of this life in its various respects and relations. By a well-selected succession of such representations, the sections, as it were, of a picture of the whole earth, are given, and may afterward be joined into a whole. If they are written ably and sensibly, they have, besides their geographical importance, a great influence on æsthetic and linguistic education. It might be questioned whether near or distant countries are to be chosen, since the latter contain the greater number of unknown things; but practical teachers will prefer to begin with what lies nearest, and must, therefore, be most important for every one; as moreover this material contains enough to be learned by a beginner. (See Vogel's and Grube's "*Characterbilder*.")

17. *What position should be allowed to the geography of civilization, (culturgeographie?)*

It is not the earth, with its life, but man upon it, with his life, which is most interesting to man. The former interests us only on account of its intimate connection with the latter. To explain this connection is the difficult problem of "culture-geography;" which, for working out all the most different influences of life and nature into a transparent and ingenious whole, requires the highest degree of mental power, and has its place, if anywhere, only at the end of geographical instruction. Several movements of the human race must be discussed previously, and a satisfactory understanding of them is probably in all cases very doubtful with scholars who are not sufficiently prepared for it.

1. Guts-Muths, (*Versuch, &c.*) Weimar, 1845. See above, No. 3, analytical method.

18. *What works on methodic instruction in geography are particularly worth considering?*

2. Lüdde, "Methods in Geography," (*Die methodik der Erdkunde*,) Magdeburg, 1842. This is not confined to the wants of common schools, but gives academic instruction.

3. Zeune, "The three steps in Geography," (*Die drei stufen der erdkunde*,

Berlin, 1844, aims at laying the foundation of a strictly scientific instruction on the basis of a natural view of the earth, (in opposition to the historical;) which character also predominates in Zeune's *Gæa*.

4. Henning, "Guide to methodical instruction in geography," (*Leitfaden beim methodischen Unterricht in der geographie*,) Iferten, 1812. See *Pioneers of the synthetical method*, No. 5.

5. Ziemann. See above, No. 5.

6. Görblich, "Introduction to geographical instruction in common schools," (*Anleitung zum erdkundlichen Unterricht in der Volksschule*,) Wien, (Vienna,) 1853. A synthetical method; plain and clear.

7. Otto, "Universal method of geographical instruction," (*Allgemeine methodik des geographischen Unterrichts*,) Erfurt, 1839. Adheres to Guts-Muths, but uses the advantages of the synthetical method.

8. Agren. See above, No. 8; constructive method.

9. Kapp. See No. 8.

10. Canstein, "Attempt at a free delineation of the physical surface of the earth, by a simple method of construction," (*Anleitung, die physischen Erdräume mittelst einfacher Construction aus freier Hand zu entwerfen*,) Berlin, 1835. See No. 8.

See also, the introductions to Harnisch's "*Weltkunde*," and Diesterweg's "*Rheinprovinzen*;" the essays in Mager's pedagogical "*Revue*," 1840 and 1841; in the "*Schulblatt der provinz Brandenburg*," 1847 and 1850; in Löw's pedagogical "*Monatschrift*," 1847; in the programme of Bender's Institute, in Weinheim, 1850; in the General School Gazette of Darmstadt, 1845; (see *Finger*, "Instruction in the knowledge of the native country," (*Unterricht in der Heimathkunde*,) Leipzig, 1844;) in the pedagogical "*Jahresbericht*," of Nacke I., III., V., VIII., 1846-53. A historical exposition of geographical methodology is found in Zeune's "Views of the Earth," (*Erdansichten*,) and a compilation of the "Latest views upon geography and their application to school instruction," (*Neuesten Ansichten von der Erdkunde und ihrer Anwendung auf den Schulunterricht*,) in Lichtenstern's book with that title.

19. *What books on mathematical geography are the best?*

1. Diesterweg, "Astronomical geography and popular knowledge of the Heavens," (*Astronomische geographie und populäre Himmelskunde*,) Berlin, 1855. 5 editions. The best of all.

2. Wiegand, "Principles of mathematical geography," (*Grundriss der mathematischen geographie*,) Halle, 1853. Practical and good.

3. Brettner, "Mathematical Geography," (*Mathematische geographie*,) Breslau, 1850. Quite practical and popular.

The chapters concerning mathematical geography are excellent in Raumer's "Manual of Universal Geography," (*Lehrbuch der allgemeinen geographie*,) Leipzig, 1848; in Roon's greater geographical work, "The earth, its races and states," (*Erd, Völker, und Staaten-kunde*;) and in Berghaus' "Rudiments of Geography, in five books," (*Grundriss der geographie in fünf Büchern*,) Breslau, 1840.

Of books on popular astronomy, very good ones are Kaiser's "Starry Heavens," (*Sternenhimmel*,) very clear; Littrow's "Wonders of the Heavens," (*Wunder des Himmels*;) Stern's "Knowledge of the Heavens," (*Himmelskunde*;) Schulze's Astronomy; Mädler's Popular Astronomy; Hartmann's Urania; and Airy's and Brande's Lectures on Astronomy.

20. *What books on physical geography may be recommended?*

Berghaus, Roon, Raumer, Rougemont, Kalkstein, Guyot, Guts-Muths, Ewald, Somerville, Reuschle, K. V. Hoffmann, W. Hoffmann, Schouw; besides, the "*Characterbilder*" of Grube and Vogel, and shorter works by Viehoff, Cörnelius, Ball, Buff, Atzerödt, Gambihler, Gude, etc.

21. *What text-books on political geography are the most popular?*

The number of politico-statistical geographies is enormous. As most prominent, we may name those of Völter, Roon, Schacht; as very common, those of Bormann, Daniel, Selten, Voigt, Volger, Seydlitz, K. A. Hoffmann, Zachariæ, Steinhörschelmann; as shorter ones, those of Lüben, Stahlberg, Möbus, Ohlert, Petersen; as very good, those of Rhode and Barth; as larger ones, those of Ungewitter, Blanc, Wappaens, W. Hoffmann, etc.

The new discoveries are found in Froriep's "Almanac," (*Jahrbuch*;) in Berghaus' *Jahrbuch*; in Lüdde's "Gazette of Geography," (*Zeitschrift für Erdkunde*;) in Gumprecht's *Zeitschrift*; in Petermann's "Contributions," "Mittheilungen."

22. *What works are there upon Geography of the native country?*

Not so many as might be expected. For the geography of Prussia, Schneider, Schmidt, Uvermann, Vossnack, Natzmer; for that of Germany, Guts-Muths, Hoffmann, Winderlich, Billig, Curtmann, Vogel, Duller, etc.

23. *Which maps are the best?*

The wall-maps, (*wandkarten*;) of Sydow, Roost, K. V. Hoffmann, Stülpnagel, Grimm, Holle, Winkelmann, etc.; the hand and school-maps of Sydow, Berghaus, R. and Th. Lichtenstern, Völter, Stieler, Bauerkeller, Grimm, Kiepert, Kutscheit, Winkelmann, Roost, Glaser, Wagner, Platt, Holle, Voigt, Gross, Vogel, Schubert. For physical geography, Berghaus' *Physical Hand Atlas*, and his *Schulatlas*, are classical; and Bromme's Atlas, to Humboldt's Kosmos, very good.*

IX. HISTORY. BY ABBENRODE.

1. *What are the material conditions requisite to make history an important means of mental cultivation?*

The material ought to be selected with reference to the intellectual standing and wants of the pupil, to be formed into a well-systematized whole, and to be so used in teaching that, by its vividness and truth, as well as by its attractiveness for the juvenile mind, it may arouse and strengthen, improve morally, prepare the pupil worthily for practical life, and nourish in him a Christian spirit. Of course, the character of the nation to which the pupil belongs, is prominently to be considered.

2. *What personal conditions influence the cultivating power of the study of history?*

As the totality of the pupil's individuality requires, in historical construction, great regard, and as very much depends on the tact with which his mental powers are nourished, so the effect of history on his mind depends even more on the ability and character of the teacher. Unless he possesses, together with the requisite external skill, a sufficient knowledge of history, true piety, and a

NOTE. Especial reviews of a long number of books and maps are in Nacke's "Educational Annual," (*Pedagog. Jahresbericht*;) I., III., V., VII., and in Klöden's review of modern maps in the "School Gazette of Brandenburg," (*Schulblatt des Provinz Brandenburg*;) 1845 and 1846.

noble heart; and unless, besides being a man of veracity, he has acquired conscientious impartiality and the circumspect calmness of a clear judgment, he can not hope that his pupils will experience the cultivating power of history.

3. *What are the leading characteristics of the proper material?*

The most essential of these materials are, a, the political, under certain modifications, particularly that of the native country; b, history of civilization, under some limitations; particularly, that of the Christian church. Though the material chosen under either of these heads may be throughout kept asunder, and, in fact, has been so very often in historical works, yet an appropriate combination of the two for construction must be recommended, since they supplement one another usefully, and, in practice, admit quite well of this mutual compensation. Our German youth need, above all, the history of Germany, and where there is occasion, the attention should be fixed on the ecclesiastical, scientific, and artistical development, as well as on the formation of the character and manners of the nations. Which of the two sides, and in what proportion, is to predominate, depends on the particular wants of the pupils: still the history of the church is of especial value.

4. *What are the principles of teaching history in school?*

Historical instruction requires in all cases a narrative form. In proportion to age and ability, the narrative will have the character either of biography and monography, or will represent, in chronological order, definite groups of historical facts in their interior connection; without any exaltation of the authors of the events very high above the common level of life. In either case the teacher may choose an ethnographical, or a synchronistical order. The pragmatistical method, right and important in itself, has in most cases at school, an unsatisfactory result, even in higher schools; since even the well-prepared students of the gymnasia, (colleges,) want the maturity of life which must aid the pragmatistical understanding. Finally, the method of universal history is quite unsuitable to schools.

5. *How have those principles been practically used and expressed hitherto?*

History has been, from the most ancient times, written and taught in all forms. It has been a monumental narrative of the exploits of whole nations and privileged individuals. Each ancient people has, out of a certain necessity, written and taught its own history,—some classically,—for all time. Besides, modern nations have taken hold of the history of other countries, particularly of old Greece and Rome, and reflected them in the mirror of their own perception; they have created the representation of a history of the world,—general history. This has led to teaching general history, either connected with that of the church or separate from it. The almost exclusively “scientific” method of treating the same in writing and teaching made it suitable only for such as wanted a “scientific,” (collegiate, etc.,) education. Others neither could nor should learn it. But, since a common inclination to acquire historical knowledge has sprung up, in consequence of a more general education in better schools, it suffices no longer to confine this instruction to the disciples of science, nor to satisfy with general notices from history. The people, even in the lowest classes, will—and should—partake of it. This has led to manifold and successful attempts to find a suitable way of treating history, and to give the common school a share in its profits.

Several popular and practical methods of teaching history have arisen, which, though differing in many respects, agree very much in their fundamental ideas.

These methods may be distinguished first, as being chiefly restricted, the one to *biographical* and monographical narrations, the other to the *natural* and *temporal connection* of historical events. In the former case the chief persons and events to be spoken of are at first arranged by beginning from modern times and proceeding in a *retrograde order* to certain primary epochs, in order to review the whole afterward, from these points, more thoroughly, by descending in the natural order of time. Or, the most important phases of the development of national and political life are made the centres of an arrangement, by groups, which treats the facts and persons that are the types of that development, through all time, in definite periods, and only occasional side-looks are cast on cotemporaneous events.

In the other case, either the historical material is arranged in chronological order, and divided, according to its nature in the different ages, amongst single nations, (ethnographically,) from their rise till their fall; or, all nations are treated side by side at the same time, in periods, (synchronistically,) in order, on arriving at each new epoch, to gain a general view of the development of the whole human race.

In both cases it is either the history of the native country or the general history of civilization, or that of the Christian church, by which the point of view is regulated, and on which the chief stress is laid.

6. *What are the advantages of the biographical method?*

As long as it is of consequence to arouse the historical sense of beginners, and while these are not so far advanced as to understand the general state of a nation, since their interest for individuals preponderates, so long it is quite natural and profitable to join all history substantially with the biography of the representative chief men, at the same time with which the outlines of the chief events may be surveyed. Even at a later stage, the biographical element has a high value, since it may give, along with narratives of individual experience, especial relations of the general development of events, such as facilitate their understanding and enlarge knowledge at the same time. Even the hidden motives of facts are not laid open to the historian, until he has looked sharply into the particular life of the leading and coöperating individuals, who either receive or help to give the character of their time. We may add the general human interest excited by personal experiences of life, and the moral influence exerted on susceptible minds. Dry generalities and outlines can of course never excite such a lively interest as good biographical narrations.

7. *What are the objections to the exclusive use of the biographical method?*

A mere succession of separate biographies will never show the real course of the general development of history; they are, even the best, mere fragments and portions, but not history itself in its innermoral connection. Moreover, the description of the outward life of historical persons, as sufficient for beginners, is indeed generally not difficult; yet it is so, in a high degree, to enter into their inner life and character, whence all their actions originate. It presupposes so much knowledge of the human mind, so much self-denial and impartiality, requires such an expanded and detailed knowledge of the material for understanding motives, that it is as rare to find good biographies, as it is rare to find those conditions combined in one man. The usual biographies swarm with generalities and partial judgments.

8. *What is the value of the regressive method?*

Strictly speaking, the regressive method is the preferable one for historical

research. Facing the events, it inquires into their immediate causes, and goes back to the remoter ones, in order to reconstruct philosophically the history which has been developed according to a higher and divine plan. So far as the method of research is to be represented by the method of teaching,—as it sometimes has been required,—the regressive proceeding is correct; besides, it is formally practicable without difficulty. But it is contrary to the process of historical narration, and begins almost necessarily from characters and epochs of modern times, by far too complicated for beginners, and such as to prevent usually the combination of truth with popularity. Besides, this method could be applied only at the beginning, and would soon necessarily pass over into the chronological one.

9. *How far is the chronological method valuable?*

The historical events develop themselves in time; the natural course of the latter is, therefore, both back-ground and frame of the former, since it constitutes the thread of the narration. Time facilitates comprehension, remembrance, and comparison of historical movements; it marks best the sections and epochs of development, favors thus the rudiments of historical instruction, and, in general, is indispensable. History may be treated in the one or the other way, with beginners, or with advanced scholars; but the succession of time must be necessarily cared for.

10. *Under what circumstances is the ethnographical method suitable?*

After the primary course, which lays the foundation, (biographical and monographical,) has been finished, and a second one has led nearer the more general connection of the chief movements in history, then it may be useful to pursue the history of the prominent modern nations, ethnographically, from their first rise until their present state. In ancient history it is a matter of course to proceed chiefly in the ethnographical way, because those nations have led for a long time a separate life, and after a victorious conflict with neighboring nations have merged them in their own life.

11. *What are the difficulties of the grouping method?*

The idea of pursuing material similar, by interior connection, through all centuries, and of joining it into a whole, is in itself well enough. But, on the part of the teacher it requires an unusual knowledge of particulars in the development of nations; and, on the other hand, the problem is too hard for the juvenile mind. It may be, that many things can be omitted, or at least treated separately as a matter of secondary interest; but, it is questionable whether they would be advantageous with reference to the whole. Besides, the hard problem must be solved of connecting finally the single parts of development into a totality.

This method, even for the especial history of a nation, the German for instance, is attended with great difficulties, but these would increase, if it should be applied to all other civilized nations. For, by its nature, it lays the chief stress on the development of civilization, and displays but on such points the characteristic picture more fully, when it is desirable, from a national and patriotic point of view. The entire plan, so far as I know, has not yet been practically carried through.

12. *When has the synchronistical method its right place?*

Synchronism is not suitable for beginners. It requires an advanced standing, to view the contents of entire periods of the development of nations, and understandingly to pursue the gradual progress in it. To whoever is not able

to survey that progress in its degrees, and, when arrived at a remarkably high point, to bring afterward the different conditions of other nations to view, interweaving them with the former picture, and thus to compose a totality of those intermixed developments, to him a synchronistical treatment of history remains sterile. Therefore, scarcely even the pupils of the first class, in our higher seminaries of learning, can be considered as sufficiently prepared for it.

13. *Who has recommended the biographical method?*

It may be said the entire modern school has unanimously recognized it as the best and most suitable for beginners. For this grade, nearly all modern methodic histories contain only such material as is fit for biographical instruction. In higher schools, a biographical course has been arranged in the lowest classes, and approved everywhere by the authorities.

14. *Who has recommended the regressive method?*

Dr. Kapp, in his general work, "Scientific school instruction as a whole," (*der wissenschaftliche Schulunterricht als ein Ganzes*), Hamm, 1834, is one of the first. Dr. Jacobi has recommended it, especially for the history of the native country, "Outlines of a new method, &c.," (*Grundzüge einer neuen methode, etc.*), Nürnberg, 1839.

15. *What is the origin of the chronological method?*

From time immemorial scarcely any other method has been used in Germany than this; now joining synchronism, now following the ethnographical principle. Until this hour it prevails in the majority of schools, of classical histories, and of text-books on history. It has been modified by many competent historians and teachers, for the various purposes of elementary, burgher, and real schools, and gymnasia. Some introduce it by mythology, others by a biographical course. Some give the first place to ancient history, others to national history; others, again, attempt to suit the various wants, by a particular partition of the material, by all sorts of principles of treatment, by accommodation to the different stages of life, or by raising certain historical pictures, (*characterbilder*), above the general course of history.

16. *Who has tried to introduce the grouping method?*

Stiehl, (now privy-counselor,) has proposed, in a little book, "Instruction in the history of our country in the elementary schools," (*Der vaterländische Geschichtsunterricht in unsern Elementarschulen*), Coblenz, 1842, to promote instruction in the history of the fatherland by a vivid transfer into the midst of national life, by historical facts grouped around a national calendar, with the exclusion of systematic chronology, and by presenting the coherent material well-wrought together in one mould; besides, making the whole more fruitful by communicating important patriotic documents and like best patriotic songs.

In a different way, Dr. Haupt, in the preface to his "History of the World, on Pestalozzi's principles," (*Weltgeschichte nach Pestalozzi's grundsätzen, etc.*), Hildburghausen, 1841, recommends a grouping of the entire history after certain categories of the material, (home, society, state, nation, religion, science, and art,) in each of which the suitable material of all time is comparatively placed beside each other.

17. *What are the most recent tendencies concerning historical instruction?*

On the one hand, it is recommended to interweave classical sentences and good historical poems, in order to vivify historical instruction by dramatizing it, and so impress better the chief epochs, especially of natural history, by story and song. On the other hand, for the sake of concentration, various combinations

with geography, natural knowledge and religion, and even with the hymn book, are recommended. An endeavor has also been made, to simplify the material for common wants, by cutting off the less fertile portions, particularly of national history, and to compensate for this by entering deeper into some chief characters and events. This has fixed attention more and more on historical *characterbilder*, which are now in various works, at the teacher's command, to be used chiefly for a good Christian and national education. Particularly, it is endeavored to view more closely the civilization of nations, especially of one's own; to give more Christian and dogmatic matter; to introduce the youth rather more into the historical development of the social orders and classes than into the history of the world; and to find one's own account in the execution. For each of these tendencies, respectable voices have been heard.

18. *What is to be thought of these tendencies?*

It is a pedagogical mistake to do too many things at once. The teacher of history must abstain from teaching at the same time catechism and natural sciences; they do not belong to history. Further, the hymn book can not be considered as a suitable guide for instruction in national history, to say nothing of the obscure origin of many songs in it. To interweave many sayings of a celebrated man, even to make it sometimes the centre of the narration, may be quite suitable. It may be very effective to celebrate a great hero or event of history, besides elevating and improving description by a good song also. But, more important is it to simplify, and to enter deeply into the chief points, and therewith to nourish earnestly a patriotic and religious sense,—which may, no doubt, be much aided by good national "*characterbilder*." A prominent regard for the orders of society is not only difficult but even not without danger. To save better care than hitherto of the progress of civilization, and to avoid subjective tendencies, particularly in modern history, will be approved by all sensible persons.

19. *How far is geography to be cared for in teaching history?*

Up to the present time, all attempts to combine, after a definite plan, all historical with all geographical instruction, have nearly failed. The common way in which it is done now, is either to premise to the history of the various nations and states the related geographical matter, or occasionally to insert it in fragments. In this way, of course, geography has not its degree; because for many geographical objects there are no points of reference and connection. Further, it would be necessary to explain at every time only the corresponding geography of that period, so that a comparison with the geography of the present time would be needed,—a necessity that has always great difficulties for young people. The plan by which certain geographical sections alternate with historical ones, (the former analytically, the latter chronologically,) no one would consider as a praiseworthy combination. In whatever way it is done, it is indispensable to make the geographical field of history as clear as possible. Instruction in history can neither be tied to a specific plan of teaching geography, nor can it aim at an appropriate and complete finishing of the latter. The same is true vice versa.

20. *What is the value of historical poetry in teaching history?*

So far as historical poetry keeps within the sanctuary of truth, its artistical glorification of characters and deeds is unquestionably of high value, and the appropriate use of it can not be too much recommended. But, as soon as it leaves truth, and idealizes, poetically, the historical persons and their exploits, it

is no longer of importance for instruction, even if the poems be of great poetical value.

21. *Why are the historical dates so valuable?*

It may be asserted, without hesitation, that, without fixing the dates, instruction and a ready knowledge of history is impossible. As long as the pupil is not yet conscious of the distinction of time in its practical worth, the general outlines of the historical event may be sufficient; but, as soon as that consciousness is awake, the event and person must be connected with the date, in order that the former may be better remembered, better understood in its position of time, and better distinguished from related phenomena. The dates are the most simple monitors of memory, and can never be entirely omitted, though they ought to be limited for children, and sometimes to be made round numbers, for the sake of memory. They help to regulate the material in the easiest way, and join the natural development of events; nay, a sensible arrangement of them often aids the understanding of related events better than long expositions could do.

22. *What is the didactic value of good historical pictures, maps and tables?*

In teaching, very much depends on making history intuitive and lively. It is, therefore, desirable to aid the oral address by appropriate means. Such are historical pictures and tableaux, since they represent often the historical action more clearly in one moment than the most copious description by words. Of course, they must be true and of artistical worth. Historical maps aid best the perception of the geographical extent of a historical transaction, and often afford the most natural representation of its results upon the position of nations and states to one another on the globe. Tables facilitate both a short review of the chief events in chronological and synchronistical order, and a firmer impression on the memory, by bringing to view the rise, fusion, separation, and falling of nations, etc. Also they can best represent, in side columns, the different movements of development at the same time in state, church, science, and art.

23. *In what respects does private reading further historical knowledge?*

Since it is impossible to treat in school every thing desirable for youth, it is very important that appropriate reading in private should assist to complete the historical knowledge. It is indispensable for a more detailed familiarity with the chief characters and events of the world or the country. Fortunately, the desire to read history is as natural as it is common among youth; and, even to a more advanced age, there is no better occupation, in leisure time, than historical reading.

24. *What books treat upon the methods of teaching history?*

a. Peter, "Historical Instruction in the Gymnasia," (*Der Geschichtsunterricht auf Gymnasien*), Halle, 1849.

b. Loebell, "Outlines of a method for teaching History in the Gymnasia," (*Grundzüge einer Methodik des Geschichtsunterrichts auf den Gymnasien*), Leipzig, 1847. This work suggests a careful partition of the material.

c. Miguel, "Contributions to the study of Biography in the Gymnasia," (*Beiträge zur Lehre vom Biographische Unterricht auf Gymnasien*), Aurich, 1847.

d. C. A. Müller, "Historical Instruction in the Schools," (*Über den Geschichtsunterricht auf Schulen*), Dresden, 1835. A very thorough treatise, recommending, among other things, the biographical method.

e. Arnold, "On the Idea, Actuality, &c., of History," (*Über die Idee, das Wesen, etc., der Geschichte*), Königsberg, i. n., 1847. (See the history of the world.)

DRAWING.*

BY DR. ERNST HENTSCHEL.

I. DEFINITIONS.

“THE cultivation of the faculties of representation and form, gives us a feeling for beauty, grace, form, and symmetry.”—*Harnisch.*

DRAWING is a mode of representing solid forms by lines upon surfaces.

A drawing, as a result of artistic labor, has either a purpose outside of the art—such are mechanical drawings, plans, anatomical drawings, &c.—or it is executed for its own sake; as are landscapes, fruit pieces, &c. In the former case, their purpose is principally one of material usefulness; in the second, they are executed with an endeavor after a beautiful external form; and are thus a representation of the ideal. But those of the first sort do not exclude the beautiful, for every object, without any exception, can be beautifully represented.

Material forms are either natural or artificial; and either geometrical, or irregular.

Various species of drawing are practiced; as,

1. Linear drawing, which gives only an outline of the object; † and shaded drawing, in which surfaces are shaded.

2. Geometrical and perspective drawing. The first represents objects in their correct relative proportions as to magnitude; the second, as they appear to the eye. The geometrical delineation of one side of a body is called an elevation; that of its plan, a ground-plan.

3. Free drawing and sketching; either with or without the use of rule, compasses, &c.

4. Copying, or drawing from another drawing; drawing from nature, or of real objects; imaginative drawing, or drawing of things conceived of by one's self; of which the two former are of things as they are directly seen, and the latter are indirectly based upon the vision of real things.

In all drawing, the eye, the hand, and the sense of beauty, are employed; as are also, in drawing from memory, the faculty of conception, and in drawing from imagination, that faculty.

* Translated from Diesterweg's "*Wegweiser.*"

† Many persons include in linear drawing, drawing by the aid of the compasses and ruler.

II. SCOPE, OBJECT, AND IMPORTANCE OF INSTRUCTION IN DRAWING.

Instruction in drawing should include—

1. Exercises in understanding

a. Form, in itself,

b. The beautiful in form.

These constitute culture of the eye and of the sense of beauty.

2. Exercises in representing

a. What lies immediately before the student; as in copying and drawing from nature;

b. What has heretofore been before him; as in drawing from memory and from imagination.

These constitute the education of the hand in the service of the eye; and culture of the memory, the imagination, and the sense of beauty.

From another point of view, we may distinguish as follows:—

1. Exercises in drawing lines, angles, and geometrical figures, as a basis for all studies in drawing; that is, elementary drawing.

2. Exercises in representing objects of all kinds, or applied drawing.

The chief advantage of drawing is the culture of the various powers which it calls into action.

Training of the eye and hand.—The knowledge of what God has made, and of what man has made, depends in great part upon the apprehension of the forms of things. Form, therefore, is one of the most important phenomena of the material world. And who will deny that the knowledge of the creation is important? God, who has made such various works, and has given us the power of accomplishing and being conscious of our own culture, must prefer not to have us go blind through the world. And to open a child's eyes, not only to the forms of nature, but to those of the world of art; so that he can apprehend and remember not only the form of a plant or an animal, the course of a river or of a chain of mountains, but also the architecture of an edifice, the construction of a machine, or the plan of a city, must be admitted to be of very great importance.

The training of eye and hand which drawing furnishes, is a means of acquiring this power. Not only do we become accurately acquainted with the form of what we draw, but the work of drawing sharpens our observation of the forms of what we do not draw. Thus, drawing affords a knowledge of the material world.

In addition to this, we acquire the power of representing forms to others in a visible manner. This is a power of universal importance. A few lines will often do more than a long description.

Training of the eye and hand is also of great importance, not

merely as a means of knowing what there is in the world, and of representing that knowledge, but also as a preparation for the duties of life. Thus it is of great use to many kinds of artizans to be able to draw a little, &c.

Training of the conceptive faculty.—Without this culture, the knowledge and understanding of the forms of the visible world is not possible. Through its exercise, the pictures are represented to the mind, from which the imagination develops new forms. And without the exercise of the imagination, it is impossible to conceive of any progress into the limits of the supersensual, the abode of religion.

Training of the sense of beauty.—This introduces us to that universal pleasure, that enjoyment exclusively possessed by none, which is derived from the beautiful in nature and art.

Every man, it is true, is to some degree fitted by nature to perceive and enjoy the beautiful, up to a certain point, but no further. He whose sense of beauty is not trained, loses infinitely. Take for instance the first example that occurs in actual life. A journeyman travels through a city full of beautiful architectural works. He goes stupidly in at one gate, and out at the other; there is no such thing as beauty for him. The buildings which he passes by neither have any present interest for him, nor will they hereafter be remembered except as masses of stone, rising high in the air, hollow within, accommodated with doors and windows, alike in one place and another, and erected merely from the necessity of security against wind and weather, thieves and robbers. But suppose another and better educated journeyman passing through the same city. How much delight will he receive through his cultivated artistic faculties? He will linger for hours, with the liveliest pleasure, before each building; and will go forward, stored with wealth of new studies, and remembering all his life with delight those impressions of his journeying-years.

The connection of culture in the beautiful with culture in morals is clear. In the recognition and the feeling, the loving and doing of the beautiful, coarseness and vulgarity, and tendencies toward debasing and sensual enjoyments, find a countervailing power. The virtues especially developed by the study of drawing are, persevering industry, love of unobtrusive right action, order, purity and decency.*

A brief quotation from Goethe may conclude this introduction.

* Frederic the Great used to recognize his soldiers long after they had left the army, by the good order of their houses. An instructor in drawing might do the like. A boy who had attended school where, among other things, he had been obliged to learn the greatest neatness in writing and drawing, brought about at his return home a most beneficial reform in the external life of the whole family, by the vigor with which he opposed any deficiency in cleanliness and order.

The importance of instruction in drawing as a part of education, will best appear when we consider that by means of that acquirement we gain an increase of beautiful and noble pleasures derived from the external world. The whole realm of forms and colors opens to him; he acquires a new mental organ; he receives the most delightful ideas, and learns to recognize, to respect, to love and to enjoy, the beauties of nature.

Upon considering all that has been said of the intrinsic importance of instruction in drawing, and of its various practical advantages, we shall find that it includes no small number of qualities directly valuable as educational influences, both formal and material; and that it is accordingly an important aid in solving the problem of the common schools; which is, the bringing of the child to what is beautiful, true, and good.*

* The hundreds who frequent a public museum can not sit comfortably in a liquor shop; and will soon come to feel that there is a direct contrast between men raised by art to the level of demigods, and men degraded by brandy to the level of beasts.—“*England in 1835*,” by Fr. von Raumer.

The more recent reforms in education make this department of culture a universal benefit, no longer to be enjoyed exclusively by the painter, the sculptor, and the architect. And to this end, the primary school must provide that the eyes of its pupils are trained, their hands practiced in certainty and accuracy of delineation, and their feeling for beauty awakened and cultivated. In this manner an important service will be done to the farmer, the laborer, the mechanic, and the manufacturing operative. The farmer who can draw, will be far less the victim of his own ignorance, or of designing enemies, in setting out lands and woods, in dividing meadow, arable land, gardens, in adjusting his tools, and in all matters relating to building, hedging, and irrigation. One who is undertaking to build, whether from pleasure or necessity, can, if his school instruction has enabled him, judge correctly by the preparatory drawings of the taste, strength, arrangement, and convenience of the proposed edifice, estimate materials and cost, and then save himself and his architect much vexation and now and then a lawsuit. A wealthy patron of the arts will thus be enabled to understand better the works of artists, to estimate thus more correctly, and to value more highly and remunerate more fairly the artists themselves. Indeed, there is scarcely any person who would not derive benefit from this most desirable study. It has also a moral value which is far from contemptible. Young persons who have learned to draw, will in that way occupy many vacant hours which would otherwise be passed in idleness, with all its evil consequences. The result of this can not but be beneficial in families; and when the young have themselves grown up, and are themselves fathers and mothers, the benefit will be still greater. But individuals as well as families, will reap similar advantages from it, through its efficiency in averting many harmful and prejudicial influences. Any occupation of a regular nature, and fitted to employ hours of recreation, is a rich source of pure and quiet pleasures, elevating both to the mind and the feelings.—Wirth, in the “*Universal Swiss School Gazette*,” vol. ii. p. 8, 9.

But setting aside all questions of mere practical usefulness, and therefore passing by the inquiry in what and how many human avocations drawing is useful and necessary—aside from all this, we know of scarcely any practice of more comprehensive influence than drawing. Instruction in it, in connection with that in the intuitional knowledge of geometrical forms, has an influence in stimulating and conjoining those two great elements of life, receptivity and productivity, unequalled by any other, so far as regards material existence. It makes demands upon eye and hand, upon mind and heart; and affords a methodical culture in accuracy, neatness, and in the sense of symmetry and of beauty. It offers the most efficient of all aids to instruction in natural history, natural science, geography, writing, and mathematics.—Dr. Zehlicke, in “*Mecklenburg School Gazette*,” vol. i. p. 3.

Drawing is not only a suitable occupation for the young, but sharpens the vision, trains the hand for writing and other delicate employments, gives practice in observation and quickness of apprehension, affords a store of instructions and ideas, develops the faculty of order and the sense of beauty, gives activity and cheerfulness, and is absolutely indispensable in many occupations.—Zerrenner’s “*Principles of Education and Instruction*.” Edition of 1833.

To aid in the actual solution of this problem is the purpose of drawing. If without it, it can not be completely and in all respects solved, the importance and indeed the necessity of it as a study are beyond doubt. It is always the duty of the common schools to give instruction in drawing; and only unavoidable deference to still higher necessities can exceptionally justify a temporary omission of it.

The actual state of affairs, it is true, argues against this opinion. In far the majority of the common schools, no instruction at all is given in it. Calligraphy is practiced with zeal and a great expenditure of time; a multitude of names of Asiatic rivers and Brazilian apes are committed to memory; and the most abstract grammatical relations are taught. But no care is taken to make the children familiar with the sphere of phenomena lying immediately around them, and to fit them better for real life, by means of drawing. The unpractical nature of the German mind is one reason for this; another is, that the Pestalozzian principle of a harmonious development of the fundamental human faculties, has, during the last ten years, not only not gained in currency, but actually lost. Whether this last fact is the result of our inability, light-mindedness and want of judgment, or of the truth that every idea has its periods of brightness and obscurity, is a question to be settled by others. To return to the practical view of the subject. The French are in this matter, as in others, more judicious than we. There the law enforces the teaching of drawing in all the elementary schools.*

III. APPLICATION OF THE GENERAL PRINCIPLES OF INSTRUCTION TO DRAWING.

A. *Outline of the Proper Exercises for the Common School.*

1. Both elementary drawing (of lines, angles, geometrical figures,) and applied drawing must be practiced; the former as a very necessary substructure for the latter, on the principle of beginning with the elements; and the latter, because the forms of the world around us,

* The Royal Government of Magdeburg, in a circular order to the common and burgher schools on the subject of drawing, of April 6, 1847, reproves the neglect of it; which is the more surprising, inasmuch as there is scarcely to be found one school inspector who is not convinced "that drawing, which is in itself an occupation appropriate for the young, and of an innocent character, sharpens the vision, quickens the hand, trains the attention and the apprehension, conducts to intuitions and to ideas, develops the faculty and the sense of beauty, prevents tedium and idleness, and is of great pedagogical importance; and who does not know how many occupations require a knowledge of drawing; and that, especially at the present day, when such rapid progress is made in all industrial pursuits, drawing is a study absolutely indispensable." And the circular adds, "It is very true that at present, many things are studied in our burgher and common schools, and in many ways. But it is also true that all such studies, whenever they exceed what is necessary, should not be permitted; and that therefore the school department has long been endeavoring to fix the proper limits to the field of study; and that for a study so important as drawing, the necessary time *must* be found.

without comprehending and representing which neither the formal nor the material object of drawing will be reached, are almost always not plane figures, but solid forms.

The educating power possessed by elementary drawing, is not doubted even by its opponents. Nor does it deserve the common accusation of dryness and wearisomeness, if properly commenced and continued. Experience shows that boys find an especial pleasure in dividing an angle into three, four, or more equal or proportional parts, in constructing an equilateral triangle, an octagon, a circle, &c. Many maintain that the fundamental forms should be practiced only in real drawing—in drawing actual objects. But this would destroy a portion of the expected advantages; for besides the fundamental forms, all the collateral work which drawing from nature requires, must be repeated exactly as often as the fundamental form; usually without any benefit. An equilateral triangle must be drawn correctly, not merely once—for chance may bring that about—but twenty times; which would show that chance has nothing to do with it, and that certainty of execution has been obtained. But who would need to design twenty times over the whole decoration of which the triangle may form a part?

2. In applied drawing, exercises in drawing by hand and outline sketching, perspective and geometrical drawing, copying and inventive drawing, should, none of them, be wholly omitted. But as a general rule, the drawings in all these departments should be linear only, and not filled out by means of any shadowing.

The practice of free off-hand drawing is evidently indicated as necessary, by both the formal and material purposes of instruction in drawing. This formal purpose requires as great a variety of stimuli as possible. These can not be conceived of without free off-hand drawing. In respect to the material objects of drawing, the pupil who restricts himself to outline sketching, must give up the idea of representing a very large number of forms which could well be produced in free off-hand drawing. But there should not be such an omission. Instruction should be in accordance with nature; and this requires that the perceptions of the pupil should be directed to the whole world of nature and art.

With reference to the other kinds of practice, may be mentioned—

a. *Reasons for practicing outline drawing.*

The great accuracy which this requires, affords a peculiarly good practice of hand and eye, and has, in particular, great value as a training to observant, judicious, and provident activity. Any one who has accustomed himself to go about with circular and ruler, square

and pencil, is much readier at apprehending than those who are ignorant of the use of them. Many objects in practical life, also, can not be drawn except in outline.

b. *Reasons for practicing copying.*

1. The requirements of actual life demand it.

2. A harmonious culture of the artistic faculties is impossible without practice in copying; and this both with reference to the technics of art, and to the cultivation of the sense of beauty. Such a culture doubtless requires in particular that the pupil should accurately comprehend a large number of given forms. But the mathematical part of drawing implies much less apprehension than representation, and even this only according to fixed and very simple relations. Drawing from nature again affords, more especially, training in apprehension; and the subjects selected may be as difficult as is desired; but still, only a relatively very small field of forms can thus be introduced into the common school for actual apprehension and representation. In drawing most animals, for instance, there would be very much discipline for both eye and hand; yet animals could hardly be made models for drawing in the common schools. The taste, again, would be very much cultivated by the study of classic architectural ornaments; but it is out of the question to go to Cologne or Strasburg to draw those there, not to mention crossing the Alps. Thus the necessity of copying becomes clearly obvious.

c. *Reasons for drawing from nature; geometrical (elevations) and perspective.*

1. The pupil improves in power of apprehending the various forms around him,* and in remembering them.

2. It enables the pupil to understand perspective drawings immediately upon seeing them.

3. There are frequent occasions in actual life when it is important and even necessary.

4. As an immediate, free and independent mode of reproducing what the eyes perceive, it has an entirely peculiar attraction for the pupil.

5. Acquaintance with the laws of perspective introduces the pupil to an entirely new world of ideas and thoughts; and it is certain that such an occurrence can not be without influence upon his general intellectual development.

These reasons in favor of perspective drawing, founded both upon the formal and the material purpose of instruction in drawing, are not

* "It is astonishing how many deceptions remain undiscovered without the practice of this art, and how invariably we see otherwise than as we suppose."—*Otto*.

without weight. There can be no complete instruction in drawing without that in perspective. If perspective has hitherto found little or no favor in our common schools, the reason is, partly the undeniable difficulty of the subject itself, and partly the lack of time, room and apparatus. It can therefore perhaps never be a universal study. But in all schools where space and time are not too limited, at least the more advanced pupils should make a beginning in perspective. Some details on this point will be given below.

d. *Reasons for practicing inventive drawing.*

1. The power of producing the beautiful already exists in the child, and shows itself in innumerable ways. We must develop it if we desire to avoid a one-sided culture.

2. It is certain that, as Otto says, this independent creation of beautiful pictures elevates the pupil to a consciousness of the rays of that divine creative power which appears in the human imagination.

3. Practical life often calls for ability to arrange or construct in a tasteful manner. Many mechanics could not get on without the faculty of inventing beautiful forms.*

e. *Reasons for and against drawing with shaded surfaces.*

aa. For.

1. It affords a knowledge of light and shade as found in the world without; that is to say, of one distinct aspect of the phenomena of objects.

2. It relieves the pupil from his dissatisfaction, upon comparing his unshaded sketches with the common shaded pictures, and discovering his own to be comparatively incomplete.

bb. Against.

1. It is of but little value, in comparison with a knowledge of outline drawing, in regard to the apprehension of objects in nature and art. Light and shade change continually, while outlines are more permanent.

* Although I use the word "inventive" in an entirely general manner, the term of course naturally applies to the invention of symmetrical figures from modifications of the fundamental mathematical forms. I am not of the opinion of those who think that such exercises should be rejected on account of the lack of reality in such figures.

Those who doubt whether such figures can be called beautiful at all, seem to doubt also whether the habit is to be approved which has prevailed for so many centuries, of using such forms on walls, doors, windows, fireplaces, hangings, cupboards, tables, furniture, carpets, table-cloths, book covers, embroidery patterns, and in a hundred other such ways. But the fact that these objects do certainly exist, and that other similar ones continue to be designed and used, so that the figures in question do in fact have a relation to real objects, is a sufficient reason for not omitting them from instruction in drawing.

Otto states the necessity of the three principal departments of drawing, viz., copying, drawing from nature, and inventive drawing, as follows: "Drawing from visible bodies trains especially the eye; drawing forms kept before the mind by the imagination and produced by it, and still more the work of imagining them, trains the imagination; and the copying of pictures already executed, the sense of beauty."

2. For such drawing as is required in practical life it has sometimes no value, and at other times a very subordinate one.

3. If not very well prepared for and very well managed, it frequently produces a bad effect, and thus obstructs the cultivation of the taste instead of promoting it; and even renders the minds of immature scholars obscure and stupefied.

4. It wastes time needed for other most indispensable exercises.*

These reasons on both sides indicate that this department should be studied, but that its practice should be confined within somewhat close limits. Only remarkably talented and industrious pupils should be permitted to pursue it, and then not unless they have prepared the way by a thorough practice of outline drawing. Those collections of copies for drawing are quite unpedagogical, in which every thing is shaded, even from the very beginning. Unfortunately there are so many such, that more proper points are too often entirely omitted.

Having thus discussed the necessity of studying in the common schools the various departments of elementary and applied drawing, free off-hand drawing, outline sketching, copying, drawing from nature and inventive drawing, the next inquiry is,

B. *The relations of these different departments of practice to each other.*

1. Elementary drawing is the basis for all the others, and is therefore the first step.

2. Perspective drawing from nature is the most difficult, and therefore should constitute the last or fourth stage.

Want of elementary practice has an astonishing power of interfering with the results in perspective drawing. This latter, moreover, requires a certain maturity of the whole man; and it is also less important for ordinary use than the other kinds. And in the small extent to which it can be learned at the common schools, it can have but a small influence, relatively, in developing the sense of beauty. All these considerations indicate that perspective should be the last department taught.

3. Outline drawing is not to be taken up with the elementary

* The shading is certainly a main reason why, in so large a share of the common schools, notwithstanding all the time spent in drawing lessons, the people do not learn to draw. As soon as Johnny has practiced lines and outlines for a few months, he is given a large fruit-pie, a group of animals, a landscape, or a head, to shade. The outline is very quickly executed, for the circle is used; and "the circle is on purpose for drawing outlines;" and on he goes, with his shading. For twenty or forty lessons, he sits scratching vacantly, humming and thoughtless, until the wonderful work is completed. Then it is glazed and framed, is handed all round at the examination, stared at and bepraised by people who do not understand it, and our young hero, who can not draw a right angle, nor sketch a window, and who has no idea of beauty of form, receives a prize. At home, they hang up the picture with great ceremony, "in everlasting remembrance," in the best parlor. Poor Johnny!

course, but should come later, immediately before drawing in perspective from nature, except so far as it belongs to geometry, and is employed in the construction of purely geometrical figures. It thus should constitute the third step, or last but one.

On the subject of practicing outline drawing in the elementary course, opinions differ. Ramsauer says that it would be an unjustifiable waste of time to work with ruler and circle before the eye and hand gain firmness. Hippius directs a whole series of elementary exercises with the ruler, before beginning free off-hand drawing. Most teachers of drawing are of the opposite opinion to this. We incline toward the side which experience seems to have indicated, namely, that of the majority.

4. Between elementary drawing and outline sketching is the place for free off-hand drawing, applied to actual objects; which thus occupies the second place.

5. Having thus determined upon four principal departments, the question will come up, Where does copying come in; and elevations; and inventive drawing? We answer:

a. Inventive drawing has already been practiced in the elementary stage. But the pupil must always be made master of the materials with which he works; he must have seen specimens of inventions of the sort which he is expected to make.

The child can not develop the idea of the beautiful from himself. Some of the Pestalozzians have erred to an unspeakable extent on this point. Never was a more unpedagogical problem proposed than that of J. Schmid, for beginners—"Make a beautiful combination of isolated points!"

But where the imagination has been set in action by examining models, the pupils may be permitted to make some experiments in invention, for which reason we have admitted it as above. For it is certainly according to nature, to begin to develop the different phases of the artistic faculty in children, from even the very point where they begin to spring out. We must, it is true, have regard to the old motto, "*Non multu sed multum;*" in order that we may not, in avoiding one-sidedness, fall into the opposite error of studying too many things at once.

b. Drawing from nature, so far as it consists in making simple elevations, may be practiced during the second stage. For those just beginning it is too difficult, principally on account of the usually necessary reduction to a diminished scale.

c. Copying may be commenced in a very easy way, as soon as a good beginning is laid in elementary drawing.

All the preceding details may be grouped as follows, in a

General Scheme for Instruction in Drawing.

First Grade, or Elementary Drawing; and in connection with it, Inventive Drawing and Copying.

Second Grade, Application of free off-hand drawing; including Copying, Geometrical Drawing from nature, and Inventive Drawing.

Third Grade, or Outline Sketching; with a continuation of Copying and Inventive Drawing.

Fourth Grade, Perspective Drawing, exclusively.

This plan is in accordance with nature, as relates both to the pupil and to the subject.

C. *Directions for further practice in the different departments.*

GENERALLY.

The same principles which have been laid down relative to the succession and connection of the various departments of practice, are applicable also to the choice and selection of the materials for each separate one.

It is therefore necessary,

First, To draw various forms. For if the instruction given is to communicate any formal culture, the child must, as has been said, comprehend its entire scope. It is an error to choose artificial forms only, or natural forms only. The teacher utterly misapprehends the character of the common school, who causes architecture, or tools, or flowers, or landscapes, either of them exclusively, to be drawn. The pupil does not see either of them exclusively; nor is it the business of the common school to educate especially for any one occupation such as that of the carpenter, the cabinet-maker, potter, &c.

Secondly, It is the universal rule to begin with what is easy, and to proceed from that only with great caution. Now the easiest part of drawing is that with right lines; not perhaps where the fewest lines are used, but where the relations of lines and angles are easy of comprehension. Of the regular forms, for instance, an easy one is the regular octagon; and a difficult one, the regular pentagon. Irregular forms are easy, if they are derived from regular ones; as, for instance, the semi-circle; but difficult otherwise, as in the case of the eye, nose, ear, hand, &c.; all animals; most flowers and fruits; all trees; most tools, &c. Thus many of the designs most frequently given to children as elementary exercises, are entirely improper for the purpose; and great care must be taken not to be led astray by such titles as "*The Little Flower Draftsman*," "*Elementary Exercises in Landscape Drawing*," "*Studies of Animals for Industrious Boys*," &c.

The principal disadvantages of selecting too difficult subjects to be copied are, waste of time, discouragement of the pupils, or else vanity and overestimate of their powers. And in schools where there are several classes, a teacher who proceeds in a thorough manner, will find himself cast into the shade by this faulty mode of proceeding by his colleagues.

“But the children will not work well at easy exercises.” Unfortunately this is too true. They want to make a great picture, of the market-place at Leipzig, and that, if possible, during the great Easter fair; the shipwreck of the Medusa; St. Genevieve; the battle of Katzbach, &c. But it will not do to permit this. The more difficult it is to bring the children, by a course of instruction unbroken, and yet interesting, appropriate, attractive and not wearisome, to the point where they will find their pleasure in solving with certainty the problems laid before them, instead of in their extent, so much the more zealously should we labor to accomplish it.

But even the most careful arrangement of the order of problems will not avail, unless,

Thirdly, The pupils receive the necessary explanations and assistance. Here failure is frequent. Perhaps the pupil is set to copy a flower. He begins at once, at one of the extreme points; and goes on to draw leaves, anthers, petals, pistils, &c., one after another, as zealously as possible, down to the minutest parts and details. After long and careful labor, his flower is finished; an excellent flower, but unfortunately quite different from the original. There are schools where drawing is practiced in this manner, year after year. But how easily would the pupil have accomplished his work in the case proposed, if he had at first been taught how to see the blossom correctly. The fundamental form would have been laid out perhaps by three or four points; and all the details would then have fallen into their places of themselves.

It must be plainly said, that in most drawing schools, instruction in intuition and apprehension is unjustifiably neglected. Many teachers have scarcely any idea of the basis of all drawing, of which the judicious Bräuer, in his “*Theory of Free Apprehension*,” has observed, “Before any figure is drawn, it is necessary that it should be seen or understood in all its parts and relations.” Here is a principal reason why so little progress is commonly made in this study.

But supposing that all the conditions hitherto laid down have been complied with; then, lastly and

Fourthly, It must be strictly required of the pupil, that he draw well; that is, correctly and with entire neatness. No botching or

working over, indistinctness or fancifulness, smearing or rubbing, trifling or talking, will accomplish this. The whole of the pupil's power must be earnestly and perseveringly exerted upon his work. It is only by this means that drawing will become the important educational instrumentality that it may be made.

Working in company is much to be recommended. The task may be given out, the mode of performing it stated, and then followed at the same time, from point to point, by all. This trains to intelligent, orderly and regular labor. It is unnecessary to argue that all possible means should also be tried to enlist the interest of the children in the work which they are to do, and to conciliate their love of it.

DETAILS.

1. *Elementary Drawing.*

a. Should elementary drawing follow geometry, or geometry drawing? Neither, and for this reason; that the order of study of the two subjects must often be very different. Geometry considers the triangle before the square; while in drawing, many squares may be considered before many triangles are. And much that pertains to geometry is of no importance to drawing. For it results from the nature of the case, that the portion of geometry which is of use in drawing, is studied during intuitional instruction, and therefore long before drawing is commenced. Such points are, ability to recognize a right angle, a square, a circle, &c. I find no use in connecting geometry with drawing. But it is a different thing to repeat while drawing the fundamental forms, that part of geometry which relates to them. This will aid in thorough comprehension of the case, and is to be recommended.

b. There are elementary exercises which consist in drawing right and curved lines by the children together by beat, large free lines, if possible with a movement of the whole arm. These exercises are of great importance; they should be practiced at the same time with such others as require the closest care, and where therefore the pupil is working more by himself and in detail.*

c. Exercises in estimating the lengths of such straight lines as may be found at hand, by natural or artificial means, may, from time to

* The opposition of many of Peter Schmid's pupils to this class of exercises, has for a long time been much less violent. Ramsauer says. "Brief and definite orders, and prompt and uninterrupted work according to them, regulated by keeping time, will accomplish an infinite amount of good in acquiring any kind of manual skill where practice is the thing required. While on this point, a word should be said of the applied art of writing. Markwordt, of Berlin, practices much in large free strokes. A great part of the so-called 'American method in writing,' also consists of large free movements in unison; and the results are so evidently good, that the system is daily coming more into use."

time, be introduced between the drawing exercises proper, but should not be carried too far.

d. In arranging the subjects for practice, the objective and subjective order should be, as far as possible, united. According to the purely scientific or objective arrangement of the fundamental forms, the equilateral triangle should come before the rectangle; but in drawing the order should be different, because the latter is much the easiest to draw. The same is true of the pentagon and octagon. A course of instruction arranged with reference to subjective principles may, it is true, at first seem disorderly rather than orderly; but a more acute vision will discern the "red thread" which leads through the whole.

2. Copying.

a. Subjects beautiful in themselves should be selected for copying. For example, a finely formed vase should be selected rather than a common kettle. The faculties used in drawing will be as well trained by one as by the other, while the former is of greater value in developing the sense of beauty.

b. For beauty of execution, only the very best designs are sufficiently good; those only moderately well done can not go.

c. For the purpose of working in classes together, the use of designs large enough to be seen by the whole class—those made to be hung up—is much to be recommended. An industrious teacher will even, if necessary, prepare such himself.

It is still more important that the teacher be able to design on the blackboard. Hippius says, "The children can see the drawing constructed; can watch the beginning and the end of it; and can obtain more thorough ideas as to apprehension of objects. They should themselves proceed to imitate these drawings, which should be suited to their capacities, on a smaller scale. The manipulation of the work should be such as to serve as a model to the children; the teacher locating in the proper places the necessary initial points, in a careful, I had almost said a learner-like manner. When the figure on the blackboard is complete, it should be analyzed, and understood both as a whole, and in the relations of itself to its parts and of the parts among themselves. After this mode of intuitional study has been sufficiently practiced, the teacher should again go through with the process of drawing the figure, as it were in his thoughts, by dictating the work point by point. At the same time he should pass round among the benches, directing and assisting wherever necessary, reproving or praising, and endeavoring to keep all the pupils in cheerful activity.

d. Even when the children draw each by himself, after small separate originals, they should often be made to draw their copies on a larger or smaller scale, for the sake of gaining in freedom of conception.

e. With an eye to the ultimate and principal purpose of instruction in drawing, it will be better for the pupils to sketch many objects with few strokes, than to occupy the same time over a few drawings, more elaborated. But these latter should not be entirely excluded. The best mode is to produce, from time to time, some larger work, and to draw between or along with these many sketches not so much finished in detail as full of meaning.

f. For copying, more reference should be had to the sex of the children than was the case in elementary drawing. Thus, architectural subjects should be chosen for the boys, and beautiful vases for the girls; weapons for the former, flowers for the latter, &c. One-sidedness in selection should, however, be avoided. The girls should be made to comprehend the beautiful forms of the higher departments of architecture, and the boys the characteristics of leaves and fruit. In short, to repeat the principle once more, it is the whole world of forms which the school should prepare its pupils to comprehend.

3. *Inventive Drawing.*

a. This may be practiced both upon spontaneous conceptions and upon real things. In either case, the pupil may be required either to complete a design, to decorate it, to vary it, or wholly to invent it. For instance,

1. Ideal representations. Completion—to draw the whole of some figure from half or a third of it. Decoration—to ornament a rectangle with lines all converging to its center. Variation—to change a regular octagon into an irregular one. Entire invention—to draw a group of equilateral triangles and decorate them at pleasure.

2. Real objects. Completion—to draw a window, having one quarter of it given. Decoration—to ornament a design for a table top. Variation—to change a quadrangular window into one with curved lines at the top. Invention—to design a beautiful trellised gate.

The usual order of these exercises should be, first, free representations of real objects, together with drawing mathematical figures. Completing a design is usually easier than decorating it, and that again than varying it; while absolute invention is the most difficult of all. The lessons should be arranged in accordance with these principles.

b. Occasionally an entire class, or at least a section of it, should

work together at invention. If, for instance, the problem is to decorate a square, the children may step up to the board, one at a time, and work upon a square drawn upon it. This will furnish many opportunities for remarks, and the inventive faculties of each pupil will benefit all.

c. Sometimes the pupils should merely sketch their conceptions without completing them; and the teacher may then criticise the sketches. In this way, several designs may be sketched at one lesson. The slates may be sometimes exchanged about in such a manner, that each pupil can see the designs of all the others.

d. Invented designs which are to be finished in detail, should be approved in outline, to prevent expending hours of the pupil's labor on a design which may, perhaps, at last be rejected.

4. *Drawing from Nature.*

First, as to geometrical drawing from nature.

a. Either actual objects, such as are about the children, should be drawn, such as doors, gates, trellises, floors, windows, cupboards, stoves, monuments, &c., or there should be used, as Otto very judiciously recommends, an apparatus on purpose, by means of which all sorts of figures can be set up together, on a ledge on the blackboard. The drawing may either be of the natural size or on a reduced scale. In the latter case, great care must be taken that the children shall justly estimate the relative sizes of the reduced objects.

b. Just at this point it is of especial importance that, in the beginning especially, much work should be done in common. Before the children put pencil to paper, they must fix upon all the relative dimensions, not by means of a mere cursory view of the object, but of a careful survey of it. It should be a point of honor to come as near as possible to correctness. When all the estimates have been made, the teacher may name the dimensions before the class; and then they may proceed to draw.

c. This is a very appropriate place for tasks to be performed at home. "Draw the front of your father's house; the windows of the sitting-room, &c. I will take occasion to compare the drawings with the originals." And so on.

About this time a beginning may be made with perspective drawing, perhaps somewhat as follows:—

a. Practice the children in seeing real objects in a perspective manner. This is not very difficult, and has the advantage of showing the pupil what perspective is, even if he does not become able to draw on its principles.

b. Perspective may be taught by copying. Perspective designs may be given to be copied, arranged in a progressive manner, and

instruction on the laws of perspective may be given at the same time. This is the method of Soldan, Warmholz, and others; and is not liable to any weighty objections.

c. Exercises both on copying and seeing should be practiced.

d. Drawing from real objects should be practiced, either by section of the class at once, or singly.

Drawing is of course a more useful exercise than mere seeing; and drawing from real bodies is better than from another drawing. And it is better to display the article to be drawn conveniently upon a table for one, two, three, or at most four scholars, than to elevate it somewhere for the whole class to draw from.

The circumstances must govern in each particular case. I would however have some exercises in seeing, in every school where drawing is practiced at all. I add a few hints for such as have proceeded far enough to draw real bodies.

a. To complete the shading of what is drawn should be unconditionally forbidden. The common school has no time for this, if the children are to be made at all acquainted with perspective.

b. The subjects should not be too difficult; such, for instance, as plaster heads, landscapes, groups of animals. The principal thing is to teach the children to comprehend and represent with ease the simplest perspective appearances.

c. The children should not be troubled with difficult theories of perspective, nor, on the other hand, should they be restricted to the brief rule, "Draw what you see." Some knowledge of the laws of perspective is indispensable for the moderately and less capable pupils, as well as an acquaintance with some simple means of aiding in seeing in a perspective manner.

d. These laws of perspective, however, should not be given, but discovered. It is wrong, for instance, to tell a pupil that a circular surface or thin body can be seen as a straight line, and then to hold it up to him that he may be convinced of it.

e. The most practical possible application should be made of the principles which lie within the scope of the common school. These should be joined to the exercises on cubes and prisms, for instance, a drawing of a chimney, a chest of drawers, an open door, &c.; and the best scholars may afterwards draw a house, a bridge, a gateway, &c.

5. *Outline Sketching.*

a. The common school is not the place for designing pillars, capitals, and similar architectural constructions. They belong to the industrial school. The business of the common school is limited to this: 1. Geometrical construction of lines, angles, and figures; 2.

The application of these to the drawing of simple sketches and ground-plans.

b. Great skill may be attained in this kind of drawing, so far as it can be carried with the aid of the simple instruments which the children can be trusted to use. Without using these, the practice would do more harm than good.

c. The use of the circle and ruler must be industriously practiced, in order to the acquisition of skill in it. Many simple problems should be given out for using them; as, for instance, to draw four angles one after another, each half as large as the preceding; to magnify to many times its own size, &c.

d. As to selecting subjects for ground-plans and elevations, the following suggestions may, perhaps, be of service:—

1. Select for drawing, a plan of the school garden; the church-yard; of some building, as the church; an elevation of the school house, &c.

2. Let the children copy some plans, ground-plans, elevations, &c., in order to become acquainted with the usual mode of doing such work.

3. Let each pupil himself make out some such plans, ground-plans or elevations of his father's house or garden, &c.

D. *Course of Study.*

This is rather to indicate one mode of arranging the work, than to be followed to the letter.

1. *Common schools of three classes.*—Drawing should be practiced only in the middle and higher classes; not in the lower. It is safe to calculate that children of at least three different grades are always to be found in each class; so that divisions must be made. More than two such divisions are usually too many, as experience indicates. Thus each class will have a two year's course, and each pupil will, at least in that part of the study where the whole section works together, go twice through one of the halves of the course.

a. Middle class.—Here it will be well to permit the capacity and industry and progress of each pupil to determine which half of the course he shall go twice through with. The course should be as follows:—

First half—

1. Elementary drawing. Lines, angles, the easiest divisions of lines and angles, the rectangle, isosceles triangle, square, rhombus, rhomboid, equilateral triangle. Straight and curved lines together, by beat,

2. Copying. The simplest forms with straight lines, partly representations of real things, partly variations of fundamental forms.

3. Invention. The easiest exercises in completing and varying forms; usually to be executed in common.

4. Beginning of estimating dimensions; usually of those where one of the dimensions to be estimated may serve as a measure of the others.

5. Examination of the model drawings.

Second half—

1. Elementary drawing. Continuation of the division of lines and angles. The regular hexagon. The regular octagon. Different curves on straight lines, and half and quarter circles. Irregular polygons; waving, serpentine and spiral lines; the circle, ellipse and oval. Curved strokes together, by beat.

2. Copying. In the first half year of designs with straight lines only; in the second, of those with curved and crooked lines. The straight lines should always be in simple combinations; the curved ones in connection with straight ones; and easy flowers and fruit given only to the most capable of the children.

3. Invention. Tasks somewhat more difficult, but no designs of real objects yet to be permitted.

4. Drawing from nature. Very easy elevations; and only to be practiced as a secondary exercise.

5. Study of model drawings.

6. Estimating dimensions; partly with and partly without the use of the legal measures of size and distance.

b. Upper class.—Here the scheme must be a little more carefully arranged. I suppose the children to draw in perspective only during the last year of school, and then during both lessons; so that their copying and inventive drawing must be done at home. The children of thirteen years of age, again, should form one section, (Section 1,) and those of eleven and twelve another, (Section 2.) Then the instruction for the year may be arranged as follows:—

1. From Easter to St. John's day. For Section 2, off-hand drawing; exercises in copying and invention. Section 1, perspective; first beginning.

2. From St. John's day to Michaelmas. Section 2, off-hand drawing; copying, invention, elevations. Section 1, perspective, continued.

3. From Michaelmas to Christmas. Section 2, outline sketching; geometrical constructions; but for the girls instead, off-hand drawing. Section 1, perspective, further continued.

4. From Christmas to Easter. Section 2, outline sketching; ground-

plans, and in off-hand drawing; copying, invention, elevations. Section 1, perspective, concluded.

Observations on the foregoing plan.

1. In the first quarter, Section 2 is so employed that the teacher may busy himself mostly with Section 1, where his aid will be quite indispensable. And in Section 2, also, the exercises, in copying especially, can be adjusted to the capacities of each individual scholar.

2. In the second quarter, Section 2 will have advanced far enough to work by themselves for say half an hour together. That time may thus be spent in introducing Section 2 to the department of drawing elevations. The pleasant summer days will be found quite suitable for drawing in the open air; and the pupils, while unoccupied during vacation, may execute many drawings. Toward the end of this quarter, Section 1 may be set at drawing easy buildings in perspective, in the open air.

3. The third quarter will find Section 2 busily employed with circle and ruler. The pupils of twelve years old, who are going over the ground a second time, will be able to assist those of eleven, so that the teacher will get time to do some open air work in pleasant autumn days with Section 1. But if he does not think it safe to leave Section 2 alone, he may take them out also and let them sketch elevations.

4. When winter comes round again, Section 1 will be employed again in the house, in learning something of drawing bodies bounded by lines not straight. Section 2 will take up off-hand drawing again, in the departments of copying and invention; and some ground-plans may also be drawn.

5. The exercises in copying and invention should continue what was begun in the middle class, but not too rapidly.

For copying, pictures of flowers, fruit, ornaments and characteristic animal forms may be gradually introduced. The inventive drawing may be in part of imagined forms, in part from real objects. No teacher who pursues his subject with a really vivid interest, can fail to find abundance of materials for lessons and models.

2. *Common schools of two classes.*

a. Lower class. If the pupil remains five years in this class, he should draw during the last two. Thus we shall have pupils of eight and nine years of age, in one section; so that each will go twice over the year's course. The course should include all the first half of what was prescribed for the middle class of a school of three classes.

b. Upper class. Here there are many difficulties. I shall sup-

pose two sections to be formed; one of the pupils of ten and eleven, and the other of those of twelve and thirteen, so that each section shall go twice through the course. The lower section should draw what was directed for the upper division of the middle class in a school of three classes. The first division may alternately draw in perspective one hour, and in the next partly make outline sketches and partly work at copying and inventing. There are many disadvantages in this arrangement, but I have not been able to make a better one which was not too intricate; and our pedagogical literature affords very little aid on this subject.

3. *Common schools of one class.*

Nothing can here be done in perspective. The pupils should draw, from their tenth year upwards, in two sections. The course of study should be that for the middle class of the school of three classes; except that the children should learn something of outline sketching during the last half year of their schooling. Some of the better scholars may perhaps be permitted to copy some of the exercises laid out for the middle class.

E. *Miscellaneous Observations.*

1. Beware lest the instruction in drawing educate the children in falsehood. Where every drawing which is shown at an examination is more than half done by the teacher, or by his assistants, such a result is certain to follow.*

2. The purely technical exercises of off-hand drawing should chiefly be done on the slate; but copying, elevations, finished inventive drawings, &c., on paper. It is necessary to be economical, but then pains should also be taken to enable the children to enjoy repeated examinations of what they have drawn by care and industry. It is always unpleasant to children to see a piece of work which is carefully finished, thrown away at last.

3. Avoid all luxury, especially in poor neighborhoods, in pencils, paper, &c. The children should understand the necessary truth that man must always learn to accomplish the greatest possible results with the simplest means.

4. It is not judicious unsparingly to cross out every ill done work from the pupils drawing book, for this may frequently destroy in a moment the work of many laborious hours, besides disgracing the book, as the children say. Only evident idleness should undergo so severe a punishment.

* "Act honestly! Let your examination be a proof, not of what your powers as an artist are, but of what you can do, as a teacher, through the efforts of your pupils. Honor truth; and she will honor thee in turn."—*Hippius*

5. The strictest care should be taken to make the children sit correctly while drawing; for carelessness in this particular will very easily lead to crookedness in weakly children. It is a great evil for the pupil even to turn constantly towards the right hand to look at the design to be copied. A conscientious teacher will use every means of avoiding such habits.

6. The pupils must be protected from too bright sunshine, by curtains or some equivalent means.

7. All conversation should be strictly forbidden during the drawing lesson. It is astonishing to what an extent the looking off from the work which is inseparable from whispering, interferes with and defeats the comprehension of the design and success in reproducing it.

8. The frequent use of India rubber is decidedly to be prevented. This is, in many schools, practiced to a miserable extent; no drawing being finished without having been rubbed out in every part, nobody knows how many times. Instruct the pupil in a truly elementary manner, teach him to apprehend, make him work with attention and care, and away with the India rubber!

9. Whatever work is given to the children to be done at home, must invariably be shown and examined when completed.

10. If possible, let the most skillful pupils be employed as assistants in instruction.

INSTRUCTION IN DRAWING IN PUBLIC SCHOOLS.

Drawing, since the establishment of the Academy of the Fine Arts in Berlin in 1690, and of the Real School by Hecker in 1747, has formed an important branch of instruction, not only in professional and technical schools, but in institutions of general culture, of the highest and lowest grade. In the classical and scientific schools, in the trade schools and further improvement schools, in the primary and secondary schools, we are sure to find its place in the programme of studies. In 1831, it was made a matter of special regulation by the Minister of Public Instruction, which was revised by the same authority in 1863, with suggestions as to the aims and methods of this branch of instruction.

The following Regulations for instruction in Drawing in the Gymnasiums and Trade Schools of Prussia, was issued by the Minister of Public Instruction (Von Muehler), October 2, 1863 :

Instruction in drawing is an important element in the education of youth, and forms an essential part of the programme of superior schools.

Experience has demonstrated that the actual state and results of instruction in this branch, as well as the development of scientific teaching, and the condition of art and industry, require a revision of the regulations of March 14, 1831. With the advice of the royal academies of fine arts of Berlin, Dusseldorf, and Königsberg, and of the provincial academic councils, and of several teachers of tried experience, the following regulations have been prescribed :

I. PROGRAMME FOR GYMNASIUMS.

1. Instruction in drawing in gymnasiums is given in four classes or consecutive courses, the trade school constituting the fifth class.

Independent of this division of courses, pupils, as far as local convenience permits, shall be classed in special divisions, according to their capacities and progress.

Lower Class :

2. Elements of the theory of drawing ; lines of different directions, and dimensions in various combinations. Drawing of straight and curved lines without model.

In the first course, that steadiness of hand is not to be expected, which is necessary for drawing lines and circles with the perfection attained with the use of instruments.

Second Class :

3. First elements of perspective, with the occasional use of the ruler and compass if necessary. The pupils may draw after models of wood ; the apparent changes of aspect to which bodies are subject must be explained ; also the effect of light on the surface of bodies, and the shading of solids, beginning with those with plane surfaces. The models are to be turned successively to the right or left and placed at various distances from the pupil.

Moreover, in this class free-hand drawing after engravings is entered upon, advancing to parts of the face and to entire heads, giving at first only contours and slight indications of shade.

Third Class :

4. Advanced exercises in free-hand drawing after models and plaster casts, ornaments, leaves, parts of the human body ; copying engravings is to be continued, and landscape drawing to be begun.

Progressive development of perspective ; drawing from models in various positions and at various distances. Theory of the vanishing-point.

Introduction to the use of the ruler and compass in the principles of architectural design.

Fourth Class :

5. Free-hand drawing after engravings, arabesques, animals, heads, and complete figures ; more difficult landscapes.

Drawing from busts, full heads, use of stump and drawing with two crayons. Perspective continued to drawing apartments and groups of difficult objects not presenting too great difficulties.

11. PROGRAMME FOR TRADE SCHOOLS.

6. The four preceding classes, comprising the course of a gymnasium, are also the first four classes in the trade schools, with the difference, however, that in the latter, free-hand drawing is taught to pupils of the superior classes, together with linear drawing (ruler and compass), beginning in the third class. The method of projections, on a plane or in elevation, is theoretically and practically exposed, and extended much farther than at the gymnasia, while a greater number of hours also are devoted to instruction in drawing in the superior classes. Beyond this, the trade schools add a special fifth class to the course pursued at the gymnasium.

Special or Fifth Class:

7. Continuation of free-hand exercises; problems from perspective and the theory of shadows, with scientific explanations; exercises in linear drawing according to the special profession of each pupil; elements of topography.

8. As a close to the instruction in drawing, polytechnic schools can impose proofs of capacity upon pupils leaving the institute:

1. *Linear Drawing.*—A geometrical or perspective projection, including construction of shadows, simple objects in architecture, mechanics, or other branches. This proof implies the supposition that pupils of the superior course of a polytechnic school are able to trace back any graphic representation to its elementary geometrical construction; that they are familiar with descriptive geometry, with the theory of shadows and of perspective, and that they are sufficiently practiced in designing architecture and machines, without having completely exhausted the theoretical part of the branches.

2. *Free-hand Drawing.*—In this branch the individual disposition of each pupil should be considered; their inequality in this respect does not admit of a formal programme as definite as that for linear drawing. The more advanced pupils should be able to draw with the free-hand, arabesques, landscapes, animals, heads and entire from engravings, and various objects, including shaded heads from models in plaster, and prove their comprehension of the principles involved.

3. Drawing of plans and topographical drawing must also, to a moderate degree, become familiar to the pupils.

To this programme are appended the following suggestions:

1. Instruction in drawing should proceed gradually from the most easy to the most difficult studies, avoiding that pedantic monotony which weakens the attention of pupils, and passing lightly over isolated details, accustoming the student at an early period to consider the whole. There is no want of excellent models for the first courses in instruction; but it is recommended that the teacher should sometimes make his own models that the pupils may see the method of constructing them. In the beginning the entire class should be engaged in the same problems in order to better sustain their attention and to elevate and stimulate their zeal.

2. The programme of instruction in drawing in the superior schools, particularly in gymnasia, embraces also, besides the training of the eye and the hand, the development of the feeling for the beautiful. Pupils will learn by progressive exercises, to take in at a glance the characteristic forms of objects, and to properly appreciate the beauties of natural scenery and the master-pieces of plastic art.

3. Free-hand drawing is the most important exercise at the gymnasium, and the course should correspond with the indications of the programme, without becoming purely mechanical; but should, on the contrary, be pursued with the object of elevating the student to spontaneous and intelligent reflection. Nothing should be done by the beginner without previous theoretical and practical explanations. The education of the mind must accompany that of the hand; the latter can produce only what the eye sees, and the eye sees incorrectly without the aid of the understanding. The copying hand is not only an instrument in the service of the eye, but the auxiliary of a reasoning mind.

To attain this object, it is particularly important that the instructions should not be limited, as is often done, to the mere copying of engravings, a system from which science and method are almost always excluded. Drawing from engravings alone is injurious to the eye, because the object to be reproduced is always too near; and it will happen that pupils, after following a course in drawing through several years, will not be able to draw correctly even a chair or any other simple body.

4. Experience shows that most pupils leave the gymnasium to choose a profession after the third or fourth class, for which reason the complete drawing course for a gymnasium has been so organized that the pupil can acquire, before he leaves, besides some skill in free-hand and linear drawing, the theory of making plans and elevations as well as the elements of perspective; in short, they are sufficiently familiarized with the principles of design to pursue the course by themselves, if their vocation requires.

In gymnasiums the use of the ruler and compass in architectural design is reserved for the higher classes.

The education of the æsthetic sense, aimed at in all the other literary studies of the gymnasium, is also assisted by the study of models from the antique, and pupils in the higher classes should be made familiar not only with the classic antiquities, but also with some of the master-works in sculpture and architecture.

5. The polytechnic schools, by the terms of their organic regulations and to respond to their object, should initiate their pupils into a thorough knowledge of nature, science and art, by giving due importance to the instruction in drawing. By it, pupils should become accustomed to observation, in order that, by penetrating mathematical forms, they may be able to find and recognize them in all the natural combinations into which they enter, and to determine their peculiar and external characteristics. The better they understand the laws of nature, the more the sense of the beautiful will develop itself within them.

6. If, for the object of polytechnic schools, linear design occupies an important place in the programme, it is not with the desire that free-hand drawing be neglected; on the contrary, it should be cultivated in an earnest and methodical manner, always connected with instruction in perspective. It is recommended to add it to the plan of the fifth class, and if thought proper, to the preceding courses, in connection with lessons in natural science, and to introduce as a model the skeleton of the human body.

Before commencing linear drawing, properly so termed, the pupil should have acquired skill in free-hand drawing. This branch may begin in the third class, with the theory of projections, since perspective has been a subject in preceding classes, and may be continued with the theory of shadows.

7. Instruction in drawing should not generally pass the limits assigned in the programme of the school; its object is not to form artists, but to exercise pupils in the elementary principles of art, in the understanding of form, in sureness of eye, in the habit of estimating proportions, and in steadiness and skill of hand. Copying landscape studies is often dispensed with in higher classes, as the time and labor spent are out of proportion to the usefulness of the practice, and because both teacher and pupil are easily deceived by productions of this sort.

8. In the selection of studies, regard should be had to the needs of instruction, rather than to method and æsthetics.

9. Besides a collection of studies and models, it is indispensable that superior schools should be provided with a well-lighted hall specially adapted to this in-

struction, where suitable objects for observation, the copies of characteristic and celebrated works of art, busts, ornaments, fragments of architecture, etc., will be the best decorations. The daily contemplation of these models will contribute essentially to the development of the faculties concerned in drawing.

SCHMIDT'S METHOD.

In 1836, Mr. Peter Schmidt received a pension from the government in acknowledgement of the services rendered the schools and the country by a new method of drawing introduced by him into the Royal Real School, and taught by him to the teachers of the trade school and of the city normal school.

In this method, pupils begin by drawing from geometrical forms, made in wood or plaster, of a square pillar (seven and a half inches high and one inch and a half in its square section), a niche, and a low cylinder. The square pillar separates in joints, affording a cube and parallelepipeds of different heights. The hemisphere, which caps the niche, may be removed, leaving the concave surface of its cylindrical part. Each of these models afford a graduated series of lessons on the drawing of solids, and of curved lines, and the drawing of lines of different degrees of strength, and of shadows. This is accompanied with some of the more simple rules of shadow and shade. More difficult exercises follow from natural objects, and from works of art, or mechanism, according to the attainment of the pupil and the direction of his taste. An account of this method will be found in Prof. Bache's description of the Royal Real School of Berlin.

DUBUIS' METHOD.

The method proposed by M. Alexander Dubuis, of giving the human head, or bust, which presents only very general masses, or features; after this, another bust, with some additional indications of the head; then a third, in which the details are more numerous and more decided; and lastly, a fourth, in which the details are according to nature. These four busts, each placed in different positions, presenting four successive stages of the same figure, is in use in some public, as well as private drawing schools.

DRAWING IN COMMON SCHOOLS.

Although drawing receives some attention in the common schools, and the teachers are systematically trained for this purpose, its scope in Prussia is far more restricted than in schools of the same class in Bavaria and Wurtemberg. By the "*Regulativ*" of 1854, drawing in the Teachers' Seminary "must not go beyond introductory lessons in the linear representation of simple objects," and in the ordinary one class elementary school, it must not be taught beyond the simplest free-hand drawing from flat examples. Practically, it is not carried, as in the best Bavarian schools, into elaborate penmanship, tasteful as well as accurate map-drawing, ornamental designing, and the culture of the sense of the beautiful generally. Nor is it applied in the common schools, as in Wurtemberg, to the industrial details of the future occupations of the pupils. Instruction of this kind is reserved for the adult, or supplementary schools, and to the trade and art schools.

In the absence of any official directions as to the system of teaching drawing in this class of schools, we introduce a very valuable paper on the subject, prepared by Dr. Hentschel for Diesterweg's "*Wegweiser*," a manual which has special reference to the organization, instruction, and discipline of common schools:

INSTRUCTION IN SINGING.

BY DR. E. HENTSCHEL.

I. DEFINITIONS.

By singing we understand the production of the beautiful, as accomplished by the human voice, by means of the union of musical tones with poetical words; the union of music and poetry.

The elements of speech are sounds; of music, tones. From sounds are formed syllables, words, sentences, periods; from tones, 1, in succession, melodies, which consist of phrases and periods; and 2, in combination, harmonies or chords. Every succession of tones, and of combinations of tones, whether of single tones or those consisting of several tones together, (chords,) may be considered in three respects.

1. Height or lowness, or melodically. This department is called Melody.

2. Length or shortness, or rhythmically. This department is called Rhythm.

3. Loudness or softness, or dynamically. This department is called Dynamics.

The relation of tones to each other with respect to their simultaneous sound, is the harmonic relation; and the study of them is called Harmony.

The distinctions between the various kinds of singing, such as the church, solo, choral, &c., are understood by every one. Either solo or choir singing may be in unison or in harmony. A mixed choir is one in which there are women's or boys' voices as well as men's.

Singing, as a development of the beautiful, is an expression or representation of the feelings. The beautiful is within the singer or subject, as the occasion of his feelings; and it appears also as the object of feelings, through the medium of poetry and music.

Several of the faculties are exerted in singing. The singer is concerned, first, with words. These he must learn (unless in the case where he composes them himself, which is not considered here), remember and reproduce. In learning and understanding the words, their logical and poetical natures are to be considered; and use is made of the understanding, the memory, the imagination, the fancy,

and the sense of beauty. And in reproducing these words, besides the above faculties, the voice is employed.

Secondly, the singer is concerned with musical tones. And these also he must learn, (except in the case, not here considered, where he himself composes them), remember and reproduce. In learning these tones, he must, firstly, consider them with exclusive reference to their melodic, rhythmical, dynamic, and harmonic character, and secondly with reference to their inner or æsthetic character, through which they exemplify the beautiful. The former of these two is accomplished by the musical faculties; the latter, by the fancy and the sense of beauty.

The musical faculties include the musical memory, and the powers of apprehending and of reproducing sounds—usually termed the ear; and also the rhythmical faculty, or faculty of time; as well as that which appreciates the degree of loudness of sounds. The power of apprehending sounds, if developed to the point of intuition of sounds, presupposes a systematic knowledge of sounds, which requires the exercise of the numbering and reckoning faculties, as well as of the memory. In order to the comprehension of tones from the written marks, or notes, which indicate them, is required, besides the musical faculties, a system of notation; which is an affair of the understanding and the memory. And to produce the tones thus indicated, the voice is necessary.

Singing represents feeling; sometimes a feeling which indicates a condition which is not in any proper sense that of the singer, and can perhaps never be so. This is the case for instance, almost always in oratorio, in opera, in ballads and romances, and in singing war-songs, hunting-songs, sea-songs, and many others. But the singing is intended to give pleasure; artistic pleasure; and of this there are different kinds and degrees; the highest being that where the reflective faculties are quiescent, and we are transferred so wholly into a foreign condition of feeling, that we are wholly carried out of ourselves; and every feeling that speaks in the music, whether of grief or joy, becomes entirely our own. This is most easily the case with children, who are always more poetical than adults. Jean Paul says, "Singing imparts to children something of the enjoyment of heaven; for they have not yet lost any of their rights to it."

Men also find in singing an inexhaustible fountain of the noblest pleasure,* which no one is forbidden to enjoy. The delights of this art are in nowise confined to the saloons of the rich and great; its pleasures and beauties will abide in the most lowly room, under the

* "The most joyous of joys, music."—*Klopstock*.

humblest roof, if the occupants only know how to introduce them there.

Singing also produces an artistic transfer of the consciousness, not as it were into a foreign condition of life, but into an excitement of a sort at first strange, but which becomes natural through the influence of the singing. Thus a cheerful song enlivens the sad; a spirited one refreshes the weary; and a devotional one gathers together the thoughts, all distracted by the incessant impulses of outward occupations, and elevates them to God. In such cases as these, there obviously takes place not only a mere transitory pleasure, but often a profound and permanent influence upon the whole inner man.*

In other circumstances, again, no stimulus, no excitement of the sensibilities is necessary; the heart itself is "full of a thousand feelings," and they overflow in song. A victorious army sings a *Te Deum*; the mournful choir laments the fallen; a rich harvest blessing opens the lips in joyful hymns; friends departing to distant lands mournfully sing a departing song; a Christian congregation joyously shouts its inspiring hosanna to the Lord; an anguished and stricken

* A remarkable instance of this nature is related in Schubert's "*History of the Soul*," of the preacher Kühze of Berlin, who was freed, by listening to a devotional song, from an agonizing fear of an apparently necessary operation upon his eye; a result which also had such a favorable influence upon the eye, that the operation was found unnecessary.

"And I can testify," says Luther, "which also experience demonstrates, that after the holy word of God, nothing is so good, and so highly to be praised and famed, as music; and that for the reason that it is a controller of all the movements of the human heart, and has such a power over it, that men are often governed and overcome by it, as by a master."

Acoustics, so far as I know, does not yet account for the fact that we feel pleasure in hearing chords, and displeasure at discords. We know that musical tones are produced by regular atmospheric vibrations, and that all vibrations of aliquot parts chord. If two or more tones sound together, either the atmospheric waves coincide and strengthen each other, or they obstruct and destroy each other. These promotions or obstructions evidently communicate themselves through the ear to the nervous system and the mind, in one case in a manner promoting their natural action, and therefore pleasant; in the other, in a manner obstructing it, and therefore unpleasant. The first of these two kinds of impressions we call a consonance or chord, the latter a dissonance or discord. By the use of both, the artist communicates to us the joy or sorrow of his soul, in an immediate manner; and by the solving of dissonances, which concludes a contest of tones, he communicates that excitement which always follows the conversion of grief into joy.

But more than this, acoustics can not at present tell us. Music has not only scientific but psychological abysses: and no psychologist, even though likewise learned in art, has yet been able to penetrate them. But they exist, because the composer's elevation into pure feeling, into the feeling of the harmony of his own inner nature with the world of sound, exists. "It is," says Prof. Grassmann of Stettin, in his excellent treatise on "*Acoustics*," (Stettin, 1837, p. 25,) "the joyful or sorrowful emotion, which we feel within ourselves in a truly physical and real manner; and again, it is the pulse of our own heart, the deepest longing of our breast, which takes full possession of nature, and is given back again to us through musical tones; so that we may feel ourselves to be no longer individualized, but sunk again within the depths of the universal life. This most secret and profound emotion within us, by a wonderful sympathy, arouses even the least stimulative portions of our nature, and leads us into joy or grief, inasmuch that we can hear, sounding back to us, the most secret tremors of the soul; as if nature were calling to us, 'I understand thy profoundest desires; I partake of thy pleasure and thy sorrow.'"

heart cries out of the depths, in lowly penitence. Song is the language of the feelings; and human nature is under a profound necessity to speak in this language. This is proved, not only by the story of "John the Soap-boiler,"* but by the history of all times and people, and especially by that of Christianity.†

Singing has a great influence upon the life of the feelings. There is truly such a power as the Power of Song.‡ From the battle-songs of the ancient Germans, therefore, down to the patriotic songs of the present day; from the hymns of the early Christian Church to the chorals of Luther, we find it employed for the highest and holiest purposes of our race; not to refer to the analogous place which it filled among the nations of antiquity. It should especially be remembered that it operates, by awakening and stimulating the religious feelings, upon the will, and thus becomes a means of elevating the moral nature. Song is not only a promoter of the Beautiful, but through it of the Good.§

II. CHARACTER, PURPOSE, IMPORTANCE, AND NECESSITY OF INSTRUCTION IN SINGING.

The character of instruction in singing, is derived from the character of the art itself. As this has for its object to produce the beautiful by means of a union of words and tones, the former has for its object, words, tones, and the union of them. It therefore includes exercises in

1. Understanding and pronouncing words, which comprehends hearing, reading, understanding; or expression.
2. Understanding and producing tones, comprehending melody, rhythm, dynamics, harmony; or, vocal exercises.
3. Conjoining tones and words, which is the union of the two former, in singing, proper; or, execution.

The exercises in words are the same for singing and language.

* I will quote one similar case from my own experience. In each of the rooms of a school, the class was in the habit of beginning their daily work with a short morning song. The mingling of different tunes and modes sounded ill without; and as circumstances did not permit all the classes to be assembled together for a common morning devotional exercise, it was decided that only one class should sing at a time, each in its turn, a prayer being offered in each of the other rooms. But after a short time all the pupils petitioned for the restoration of the old custom, alleging that it was impossible for them to begin their work without singing.

† "When Christianity had awakened the life of the feelings, and had supplied it with the loftiest ideals of existence, humanity could find only in music a sufficing mode of expression, and thus was gained a new Christian art."—"*Esthetics of Music*," by Dr. Hand, 1837.

‡ "By the influence which music exerts upon the hearts of all, it operates most powerfully upon the character."—*Kocher's "Music in the Church."*

§ Klopstock said to Rouget de Lisle, author of the "*Marseilles Hymn*," that he was a dangerous man; for that he had killed more than fifty thousand Germans. What then might be said of Körner, Arndt, Schenkendorf, and others? Henry the Lion's motto was

"Fight without song
Can not be strong."

They secure for the pupil a store of imaginations and thoughts; and, as has been observed, they train the understanding, the memory, the fancy, and the æsthetic faculties.

Exercises in tones belong properly to instruction in singing. They give a knowledge of the system of tones, as a separate department of creation, distinguished by an abundance of phenomena; they develop the acoustic faculties, without whose cultivation no education in harmony is possible; and as has been already observed, they train the understanding, the memory, the æsthetic faculties, and the voice.

The exercises in singing, to repeat the observation, have a peculiar influence in enriching and elevating the emotional life, and indirectly upon the determination of the will toward what is good. For it may here be observed, that the sense of beauty, as it becomes developed in any one direction, becomes also, according to the laws of psychology, easier and freer of development in other directions; in this case, namely, in the direction of what is morally beautiful.

Such are the formal and the substantial educational influences of singing. It is likewise in a high degree adapted to assist in leading the child toward what is beautiful, good and true; and to really accomplish this, is its purpose.

It is for this purpose, also, that it is so important for the common schools, which are themselves intended to serve the cause of the beautiful, the good and the true. It may even be said to be absolutely indispensable as a department of common school duty, because it promotes the objects of all the rest, in a manner not otherwise to be supplied.*

The consideration of some of the special influences of singing as a duty, will only confirm their views of its value. It is an excellent means of sharpening the powers of observation, and of accustoming the pupil to acting promptly as directed by a word, a nod, a look. It thus counteracts both the indolent carelessness and indifference of some, and the precipitate hasty ways of others. In short, it is of great value in a gymnastic and disciplinary point of view.

In most other studies, each single pupil stands by himself and acts for himself; or at least a community of action is not indispensable. But the study of singing puts a close and strict constraint upon all the class together, both in an external and internal sense.†

* "Music, by its rhythm and time, imbues the feelings with a regulated harmony. So highly did the Greeks value music, and in so many ways did they practice it, that the expression a "musical man" was equivalent to ours of a "cultivated man." They therefore bestowed the extremest care upon this study, which was designed to unite in a beautiful habitude, readiness, openness, circumspection, and a most powerful mental discipline. "*Pedagogy as a system*," (*Die Pädagogik als System*), by Dr. Karl Rosenkranz. 1843.

† "A choir is like an association of brothers. It opens the heart; and in the streams of song they feel themselves to have but one soul and one heart."—Herder.

And lastly ; it may be observed, that good instruction in singing, by developing the pupil's faculties for rhythm, accent, and melody in speaking, renders very valuable assistance to the increasing efforts at present being made to elevate the style of reading above the repulsive sing-song practiced in so many of the ancient schools.

In concluding this statement of the importance and necessity of teaching singing in the common schools, I may not inappropriately quote the following authoritative opinions :

Music is a means of culture so healthful for sense and soul, so powerfully promotive of virtue and godliness, that we are bound to train our youth in it with conscientiousness and dignity, zeal and perseverance. NAGELI.

Music may be considered a department of man's intellectual life, which he can not omit without restricting and weakening himself. It is one of those intellectual endowments by means of which he is to become conscious of, and joyful in the world, himself, and his mental life. MARR.

Even if the young are unable to attain to any important grade of artistic power, music deserves, on account of its educational value, as possessed of a peculiar power of influencing the mind and the heart, one of the highest places as a department of study. NATORP.

III. APPLICATION OF THE GENERAL PRINCIPLES OF INSTRUCTION IN SINGING.

A. *Two Courses; their relation.*

The instruction in singing should be both formal (disciplinary) and material (efficient in the study itself.) These two purposes require :

1. A series of elementary exercises ; an elementary course.
2. Practice in singing songs, &c. ; a singing course.

The former is to give the pupil a knowledge of the necessary principles, and a mastery of them ; and the latter, to train him in expression and feeling. We may lay down, therefore, with a view to secure these objects, the following principles :

The elementary course should

1. Continue during the whole period of school attendance.
2. Include all the elementary tones.
3. Proceed by an unbroken progression.

And the singing course should

1. Also last during the whole school period.
2. Be related to the whole life of the child, both within and without the school.
3. Include nothing which is not significant and attractive.

We shall hereafter recur to these principles and add to them. The present purpose is, to inquire what should be the relation of these two courses to each other within the school ?

Should the elementary course precede the other ? In this case, the children would during a certain time have only preparatory exercises, without singing ; and for a long period together ; for the elementary course, to comply with the second and third principles just laid down

respecting it, could not be concluded for weeks and months; which would violate the first principle relating to the singing course, and also the first relative to the elementary course.

We are thus naturally led to the idea of connecting both courses. The most suitable way of accomplishing this, seems to be, to apply in the singing course, the principles learned in the elementary course. This however, sometimes leads to a violation of the principles relating to both courses. It is evidently impossible, for instance, to find songs which shall correspond with all the steps of the long unbroken series of exercises, which shall be satisfactory in point of beauty, and shall bear upon all the various aspects of the child's life.*

There is therefore no mode left, except to divide what can not be connected; to conduct the singing course independently, parallel with the elementary course. We must be able to sing, at Christmas, "Glory to God in the Highest!" and on the king's birthday, "God save the King," without having to inquire whether in either of them there has not been used some progression or measure which had not been practiced. If some such freedom is not taken, we shall never see the fruits ripen which have been for thirty years looked for from the instruction in singing.

But, it may be asked, How then shall the children be taught to sing? I answer, in that manner which is adapted to the grade of development of their musical powers. Those who can only sing by ear, should sing so; and he who can do more, should do more; whether he can only follow in a general manner the outline of what the notes set before him, or whether he can sing strictly and surely the notes as they stand. The singing course requires the application of all that was learned in the elementary course, but in selecting songs we should not depend entirely upon the former. The pupils should in good season receive the notes, with a brief general explanation. Then each of them should make the best he can of them. Such is both the ancient and modern practice of almost all instructors in singing in chorus, both for small and large classes.

But, it may be further inquired, is not this too mechanical a practice? Does not such a course almost altogether prevent singing with a due feeling of the expression?

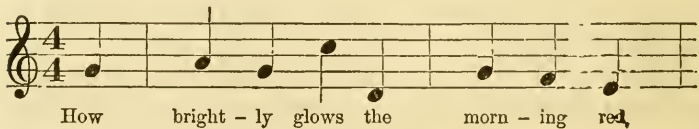
* At the Martin's Foundation in Erfurt, as appears by the Rhenish "*Gazette*," (*Rheinische Blätter*), Vol VI, No. 3, p. 273, all the songs are learned by rote, without notes; that is to say, without any artistic and methodical gradation in their order. It is stated a little further on (p. 286,) that the director of that institution often spends as much as a fortnight in searching and referring, and years in corresponding, to find a suitable song or melody, "because he subordinates the religious instruction entirely to that in singing;" and "rejects all songs which are not good in text and melody, in every particular." I would inquire how long his researches and his correspondence would be, if he should have reference, in addition to anything like systematic progress?

To this I may reply :

The problem which the child must solve in order to sing with proper expression, is usually stated thus : To be able to sing a choral or simple air from the notes without the aid of the teacher. But do you know what is required for this ? This problem, in the first place, is one in which many persons never learn to solve ; because it has not pleased God to endow them with the requisite power of apprehending the tones as written.* Neither, again, do even remarkably endowed pupils often solve it before their eleventh or twelfth year, however early their instruction is begun, however carefully and skillfully conducted. And only those children solve it at once, who possess very distinguished musical powers ; such who open the whole world of musical sounds to themselves as it were with one magical blow.

And do not be misled if you hear of, or even think you have found, one or another school where the pupils have learned in a very short time to sing from notes or figures. Upon a close examination you will always find one or the other of the following cases true.

Either the airs sung consist of short phrases scarcely including any notes except the first, third, fifth and eighth, and unsatisfactory and crippled, such as the following :



or, the pupils do nothing except to keep time ; that is, they follow after a certain feeling of the succession of the tones, while the teacher, in the pride of his heart, thinks they are reading the notes ; or, some more capable children are acting as choristers to the rest, who sing after them unintelligently, by ear.

But again, what does "mechanical" mean ? Where does it begin,

* The result of my observations upon more than a thousand pupils of the most various ages and grades of development, is as follows :

Memory of tones, is universal.

A certain sense of tones, without any clear intuition of tones, is quite frequent.

Comprehension of tone, and certainty in it, quite rare.

And these conclusions are confirmed by the following extract from the "*Rhenish Gazette*," (Vol. X., No. 3.) of an article on instruction in singing, by Karow : "For singing, as well as for music generally, certain natural endowments are necessary, and one destitute of these, whatever his efforts, will not learn to sing. We may compute that, of the singing classes in the schools, the following proportions will be found ; of eighty children, ten will become very skillful and competent singers ; twenty others, not distinguished, but still competent ; five and twenty others, will sing well enough with the rest, but not in solo, as they will depend upon the rest ; twenty others will not trouble themselves with the notes, but will sing only by ear ; and the remaining five will be unable to sing, being defective in ear or voice, or both."

and where does it end? A, sings an air wholly by ear, while B sings it by the notes, by his comprehension of the intervals of the octave. A, it may be said, learns mechanically. B, however, although in a higher grade, also learns mechanically. C, again, who feels the meaning of all the intervals, sings by note accurately without depending merely upon a knowledge of the scale, but does not understand what are the harmonies at the base of the melody:—he also sings mechanically. D, who sings also without depending upon mere knowledge of the scale, knows these harmonies, but not the laws of their connection:—he sings mechanically too. Lastly comes E; whose attainments are equal to theirs and who knows the last item also, but has no idea of the mathematical basis of the system of musical tones;—he is a mechanical singer too! The truth is simply this;—children will, and ought to, and must learn songs all the time; joyous, powerful, living songs. And what can be the harm, if they only sing them by rote, if they can not sing by a knowledge of the scale; or by that knowledge if they have it, if they have not attained to the intuition of the melodic interval? Each one of our faculties is from God, the inferior as well as the higher. Therefore watch over each and make it useful in its own time, and accomplish some good thing with it!

B. *Contents and Management of the two Courses considered, further.*

I. Generally: and

a. Notation. To about the end of the eighth year the children should study without making use of written notes. After that time, however, they should always be used. This delay in using them follows from the principles of proceeding from the simple to the complex, and from the known to the unknown.

It is however necessary both for formal and substantial reasons, that written music be invariably taught. For however little the pupil may know of singing by note, his execution will always be freer in character than if he has learned exclusively by rote. But the very great majority of teachers of singing unite in testifying that under all circumstances, the use of the notes is an important aid in all practice and repetition. And if others maintain from their experience the opposite, and perhaps even say that the notes are a hindrance, they only prove that however interested they may be in singing, they do not know how to use the written notes.

In teaching singing, we should distinguish two principal stages; singing by ear, and singing by note.

The instruction should be by means of actual vision. The representation of sounds by notes is the method most obvious to the eye,

and therefore unconditionally to be preferred. Compare the following two modes of writing an air:

Those exceptionally able pupils who are now and then found in every school, can, according to all experience, sing with equal ease from notes and figures. But it is quite otherwise with all the rest. Whatever may be said to the contrary, they find the notes much the easiest; that is, unless they are drilled in a quantity of unmeaning rhythmic and melodic phrases, instead of real airs, that present a variety of rhythms and intervals. With most children, either the musical faculty gradually develops to the point where they can sing an air with an entire understanding of it, or that degree of attainment is altogether wanting. They are thus, until their fourteenth year, if not permanently, left to practice singing by note, in such a way that they guide themselves, in general, by the form and location of the notes, but where they bring out each single note rather by a sort of feeling of what ought to follow the preceding one, and by means of a knowledge of the scale, than by any real and clear knowledge of melody or the air itself. As long, therefore, as a pupil is not able of himself to execute each note of a written melody, exactly as it ought to sound, so long he has nothing to do with figures, and would get none except utterly indeterminate information from them. But the method by notes always gives him some assistance; it represents to him the relations of the tones, and he has only to look at the notes, to find at least a leading sketch of the melody. And this material representation is of great use in retaining the melody. As the eye seizes upon the groups of notes, the memory connects the tones with them; and it often needs but one glance at the notes to recall whole melodies which have been forgotten. But the figures afford no such assistance. One row of figures looks just like another; and the pupil must go one by one through the whole series, and pick out each note, before he can tell, what the melody is. Therefore, no figures.

The notes should be learned in the key of G, not in that of C, which is in scarcely any collection that most used.

b. With respect to singing.

Whatever is learned by children should be learned as thoroughly

as possible; or if that has not been the case, should at once be made so. What is defective neither educates in form nor in substance; and indeed in the former sense it is positively injurious. One third sung too flat brings after it twenty other flat thirds; and passing over one pause endangers the time at every other pause; &c.

In every stage must be unconditionally required purity of intonation, correctness of rhythmic representation, observance of the dynamic marks, clearness of enunciation. Other things must receive a proper relative share of attention.

This perfection in what the children learn must especially be required in three respects; Firstly, the problems, to be solved must always be suitable to the pupil's grade of attainment; the course of instruction must be one of unbroken progression. This principle is universally known and yet often quite disregarded. In many schools, music too difficult is selected for practice; and the unavoidable result is a lamentable disfigurement of musical works perhaps the noblest of their kind. What is the occasion of such errors? Often vanity; often ignorance of music, not always of an excusable kind.

Secondly; the teacher must be competent to give in every case such directions and guidance as are required, in order to avoid what is false, or to remedy it. No pupil can arrange the succession of problems for himself, without the invigorating aid of the teacher. A whole class may perhaps sing an interval too low, and all exhortation to sing it higher may be fruitless, however earnestly they endeavor to do so, because they do not see what the interval is. In such a case the teacher must aid them, by singing or playing the required note correctly.

If the possibility of correctness by the pupil is conceded, then thirdly, the teacher must insist with persevering and unbending strictness, that the problems proposed be solved without error. This proceeding will accustom the pupil to correctness, which will become to him both a musical and a moral necessity. Once more, therefore, endure nothing erroneous! Every thing depends upon this. He is a forlorn teacher enough who permits inaccurate singing for four whole years, with the idea that things will improve in the fifth year, because "people learn to walk by stumbling." That proverb, like many others, is a heap of meal with a cat in it; and he who can not apply it better than that ought to be ashamed. To such I would say: It is *not* by stumbling that people learn to walk; it is by walking.

Rules for practice.

As important aids toward singing correctly I may name the following:

1. Unless the contrary is strictly prescribed, sing with the full strength of the voice. It is a great fault for the children not to produce a good full tone. A whispering, lisping, powerless melody is never true. But loud singing is not screaming. If the pupils keep strictly to the musical tones they can not scream.

2. In much of the practice, an instrument should be used. Fortunate is the teacher whose school children come every Sunday to church, and standing around the organ, sing the chorals with care and perseverance. That will be worth three singing-lessons a week.

And generally, of elementary singing practice, we may say:

No instrument. Very bad.

Piano-forte. Somewhat better.

Small school-organ. Better again.

Violin. In general, better still.

Church-organ. Very good in some cases.

Sometimes one and sometimes another, according to circumstances. Best of all.

The non-use of an instrument occasions such crying evils, that every one must understand them himself. Of the instruments above-named, the piano-forte and organ are better than the violin, for accompanying part-singing; but for exercises in accent, and practicing single voices, the latter is much to be preferred. For while playing the violin, the eye can be kept upon all the children, which is not often the case with keyed instruments in ordinary school-rooms; it can be carried about; and its sharp and piercing tones are much more impressive than those of a piano-forte, or of a small school-organ. The tones, again, can be modified upon the violin, in any desired way, &c.

But let me not be misunderstood. Singing with an accompaniment is not an end, but is the means to an end. A choir accomplishes its proper, real, and most beautiful work, only when singing truly and surely without accompaniment—*a capella*. The same object should be sought in every village school.

3. In singing by beat, the beat should be kept without any break, either by the teacher or by the children, or by both. The teacher should keep time by counting aloud, or by movements of his bow, a rod, &c., each pupil being to go strictly by it. If the children keep time, it should be either by causing some to count aloud while the others sing, or by having all mark time. This they should do, not by using movements like those of the instructor, up, down; up, right, down, &c., but by audible strokes of the hand either on a table or into the other hand; a much easier, more natural, and more useful method.

4. If orthography is the schoolmaster's heaviest cross, enunciation

while singing is certainly one of the second rank. Nothing will avail toward this end, except for the teacher to use zealous and unintermitting strictness with the children—no, first with himself, and afterwards—with himself again, and after that with the children—in the enunciation of everything that is read or sung in the school.*

II. In particular; and

a. Elementary course. This should include

aa. Exercises in the understanding of the melodic, rhythmic, dynamic, and harmonic relations of tones; exercises in hearing, which, by causing the pupil to note by written marks what he hears, will lead to a knowledge of writing music.

bb. Exercises in singing; in the production of melodic, rhythmic, dynamic, and harmonic tone formations. A distinction should be made between dynamic exercises and vocal exercises proper, in the strict sense; such as are intended to operate upon the material of the voice, and to give it strength, endurance, sweetness, flexibility, and quickness. Nor can the harmonic exercises be properly referred to those in melody. In order to avoid confusion, the following compendious classification will be found convenient: 1. Melodic exercises, including those in harmony. 2. Rhythm. 3. Exercises for the voice, including dynamics.

To proceed to the necessary directions as to the arrangement and conduct of these departments of practice.

1. It has already been stated that the elementary course should extend through the whole school period, its easiest exercises may be commenced with children of five or six years old. For the rest, "Art is long, and school time short." There are many things which must be studied only by advanced scholars, such for instance as the minor key, &c.

2. The elementary course, as has also been observed, should include all the elements, and therefore the harmonic. Harmony, even in its elements, is of especial value for formal training; and is also very attractive to pupils. It opens to them an entirely new view of music.

3. The principle already laid down, that the elementary exercises should proceed without any intermission, is a universal one; but in singing it is of especial importance, which is the reason why it is repeated here.

4. The matter should be arranged at once subjectively and objec-

* There was a little girl who, in a song to Spring which she had learned in school, sang "A Moor out of his shell, springs out the tender shoot," (*Ein Mohr, &c.*) instead of "Upwards out of, &c." (*Empor, &c.*) and when told that the latter was the correct word, she answered that her teacher knew best about that.

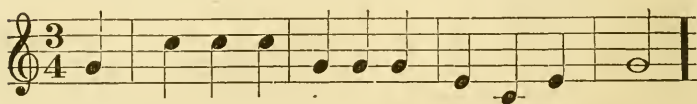
Again; a boy was asked what they sung in school, and said, "*The Chandelier;*" (*Der Kronleuchter*;) having caught that sound instead of the word "Scale," (*Tonleiter.*)

tively. To arrange it wholly objectively is unpedagogical; wholly subjectively, impossible. It is not correct to pursue one department through, as rhythm for instance, and then melody, but they should be taken in corresponding portions; first the easiest parts of all the departments, so far as they belong to the matter in hand, then the more difficult ones, and so on. But this subdivision must not be carried too far, for fear of losing the connection of what is taught.

5. The different departments should be so taught that some one of them shall always be the main subject, and yet so that from one step to another they shall always form a whole. The former of these requisites follows from the principle of taking simple things before complex; the latter will enliven the children, and render the teaching substantial and significant. If, for instance, the time be $\frac{3}{4}$, and the melody that of the major common chord of the first, there may result forms like this,



And words may be set to such phrases; as, for instance,



Rise up from your pil-low, for cock-crow is past!

The smaller the attainments of the pupils, the more care is necessary to preserve them from what is unmusical and unpoetical. As they proceed further, it is of course easier and easier to select not only brief musical phrases, but entire songs, which can be used first for illustration, and then in the singing course. But care must be taken that the songs do not become the principal thing, and the practice of the elements secondary.

The rule that only one department is to be the object of study at a time, must not be construed to mean that no time should be kept while studying melody, and that the rhythmic exercises should be in monotone. So complete a disjunction as this of the elements of music, neither accords with the nature of music nor with that of the child. We often find rhythm without melody it is true, as in the drum; but melody will not accept the converse, and go without its companion and supporter, rhythm. Even the simplest exercises very soon become wearisome and distasteful if they include no rhythm.

The children's minds develop all parts together; and therefore the melodic exercises should have some rhythmic forms, and the rhythmic ones some melodic form.

6. The course of proceeding should be from things to their names and signs. When, for instance, the children are to go from quarter notes to eighth notes, some quarter notes should first be played, while the children beat in four-four time; then a sudden transition should be made to eighth notes, which will strike the attention of the children, after which the name of the shorter note may be told them, and its representation shown.

7. Even during the stage of singing by ear, melodic and rhythmic voice-exercises should be given.

8. The harmonic element should be as much as possible omitted from the melodic exercises at this stage. It should only be introduced so far as is necessary to understand and correctly sing the major common chord in its simplest forms.

9. The vocal exercises of this period should be arranged with very great care to limit them to the capacities of the age of the children. They should, in general, consist of very easy successions of quarter notes of moderate pitch, sung sometimes loudly and sometimes softly; such, for instance, as these :



10. The harmonic element is most appropriately brought out in connection with the scale. It is true that very little work can be done with it, but that is no reason why none should be done. The following points may be taught :

aa. Construction of common chords or triads upon the first, fifth and fourth of the key.

bb. Construction of the chord of the seventh on the fifth of the key.

cc. Establishment of the following as the fundamental musical chords :

I.	V.	I.		
I.	IV.	I.		
I.	IV.	I.	V.	I.
I.	V.	I.	IV.	I.
I.	IV.	V.	I.	

It will be of course understood that these principles must be brought out by means of actual intuition. Mere words and figures would be

entirely useless. The children must hear the chords and their successions. For this purpose the school organ* will be found very useful, but not indispensable, for the teacher will have a living organ; namely, the children themselves.

11. Vocal exercises in the scale—with rather more advanced children therefore—should be made a chief study here.

The best material for this practice is the scale itself, which should be sung in long, sustained, *crescendo* and *diminuendo* tones. The common schools have nothing to do with artistic runs, trills, &c. Instrumental accompaniment is especially necessary here.

The middle notes of the voice should be chiefly practiced, and in the scales of D, E♭, E, and F. The children should never be required to force out very high notes by a violent effort, which proceeding can only do harm. And it is as unfair as it is ill-calculated, to endeavor to train the children to a more correct style of singing by making them sing every air a third or a fourth higher than it was set by the composer.

12. The pupils should be trained to write upon the staff the notes which they hear. Diligent practice in writing music should therefore be required. Otherwise the pupils' attainments will be entirely one-sided. To sing from note is one thing; but it is another, and equally important for musical culture, to be able to write down notes that are heard. Writing music also constrains that class of scholars who are disposed to accommodate their singing to that of the rest, to the exertion of all their musical faculties. And it is the only mode of continuing the instruction after the children have arrived at the point of intuitional comprehension of the music, and of preserving them from innumerable errors. If Nägeli had done nothing except to introduce writing music as an exercise into the schools, he would even then have done them an exceedingly great service.

b. Singing Course.

I shall repeat here the three laws already laid down, and shall add others.

1. The singing course should continue through the whole school period. Even the youngest pupils will readily sing simple airs by ear; and according to all experience will partake of their enlivening and improving effects.

2. The singing should have a real reference to the life of the child.†

* The melodeon, perhaps, in an American school.—*Trans.*

† "The simplest enjoyment and the simplest instruction, are enlivened and reinforced by singing; and what we even fail to accomplish by instruction in faith and morals, may be taught by song."—*Goethe, Wilhelm Meister's Wander-Years.*

At the Rauhe Haus near Hamburg, great stress is laid upon singing. Credible reporters.

Singing is intended to enliven, ennoble, and cheer the whole of man's life. Regard should be had to the present and the future of the child; to his permanent and varying relations to nature, other men, and God. With reference to the present condition of the children, instruction in singing should, above all things, stand in the closest connection with religious instruction; including the faith, love, and hope of Christians. And on every occasion of school life when the religious feelings of the pupils are appealed to, at the beginning and end of lessons, weeks, months, or years, at preparation for a church festival, at confirmation, the king's birthday, &c., singing should be employed. In our day, the liturgical element, in which singing holds an important place, has been introduced for religious purposes into schools. This is much to be rejoiced at; and may be of very great service.

There should be a little singing festival in the church at least once a month; and not merely on such occasions as visitations, consecrating an organ, &c. This might be done without difficulty almost every where. But it will be necessary to confine the selections to the simplest class of music, and to persevere in accustoming the congregation by little and little to take more pleasure in such music, than in the ungodly uproar of the usual style of church music. Materials truly useful should be selected, every thing should be thoroughly practiced, and care should be taken that the audience may understand the words.

Besides religious songs, secular ones should also be learned, so that the children may use them as a means of enjoying themselves at home, at play, at festivals, during walks, journeys, &c. And for this purpose, such music is appropriate as has the artistic effect of transporting the child into conditions of existence quite strange to him.

How shall reference be had, in the school singing, to the future of the scholars?

First, by having a good stock of chorals.* Chorals are an indispensable necessity of religion and sacred worship. Every child should be able at leaving school, to sing at least fifty or sixty chorals from memory.

There should also be a suitable number of secular songs. With proper management, the pupil may graduate in possession of as many as thirty such. What should their subjects be? Experience shows that the religious feelings of the people expresses itself through the medium of chorals. For this reason I should use songs for other

describe the judicious mode in which Mr. Wichern makes use of it at prayer and labor, exhortation and admonition, at serious and cheerful occasions, and sorrow and joy, and of the important good which he thus accomplishes.

* These correspond to our usual church psalmody.--*Trans.*

purposes. Of them, also, I should exclude some kinds, viz: 1. All songs of particular vocations, except war-songs, and for their proper localities, mountain songs and sea-songs. 2. Songs for occasions that rarely happen in actual life; such as, "Up! with mountain-staff in hand, forth with joy to Switzerland;" which is nevertheless in itself a good song. 3. All songs which, though perhaps good in themselves, do not correspond with the popular mode of thought and feeling; such as, "Know'st thou the land where the lemon-trees bloom?" 4. Love songs. 5. Drinking songs. I add a mere suggestion of the proportion in which I would perhaps arrange thirty songs to be learned, namely: five, to incite to good company; three soldier's songs; three traveling songs; six for general expressions of pleasure, and for observation of nature; four patriotic; five romantic historical; four miscellaneous. Total, thirty. For girls, I would substitute cradle songs for the soldiers' songs, and for the traveling songs, others referring to the observation of nature.

3. All songs should be beautiful, both poetically and musically.

What is worthless in itself can never develop the artistic sense, nor properly cultivate the feelings. There are good words to bad tunes, and wretched rhymes to beautiful tunes. And it requires much study on the part of the teacher to acquire a sure judgment on this subject.* Especial care is needed with respect to children's songs, properly so called; for among the great number of them are many bad ones. A children's song is never good unless it can be sung with some enjoyment by grown persons also. Moralizing songs for children, in particular, are bad, and always will be; and so are those where the children are made to sing to each other, and encourage each other to joy, to innocent cheerfulness, &c.; such as,

"Open brothers, ear and heart,
Unto teachings wise."

"Our daily work is done at length:
Now for a joyous game!
Pleasure for working gives us strength,
And strengthens all the frame."

* "Notwithstanding the great number of songs for the young, yet but very few of them are really adapted for use; partly on account of their faulty and spiritless melodies, and partly, and especially, on account of unsuitable words. * * * * The text of a song must be adapted to the young, clear and plain, joyous and vivid; equally removed from watery and feeble sentimentality, and from a stupid jumble of morals and phrases."—*Memorial of the Nuremberg Education Society.*

As music is variously taught and practiced in the teachers' seminaries, many young teachers come to believe that it is an easy thing to compose for singing. So they proceed with great confidence to make motets, and hymns and cantatas, and make all possible haste to introduce their compositions into a church or a school. Great evils are to be apprehended from this source.

Some valuable observations upon this pseudo-poetry are to be found in Franz Horn's "*Forte-piano*," and Hiecke's "*Instruction in German in the German gymnasia*" (*Der deutsche Unterricht auf deutschen Gymnasien.*)

With regard to the relation between the words and music, we can not be too mistrustful, in particular, of operatic airs with words set to them.*

Songs, to be appropriate, must be both objectively beautiful, in themselves considered, and suited to the children's capacity. Children should not be forced up to any thing which is without the sphere of their apprehensions. On this point, I shall hereafter remark further.

4. Each style of songs should be used for its proper purpose; for each has its peculiar influence in training the pupil.

a. Sufficient reasons have already been given for cultivating both church and secular singing in schools, it may be added, that the former can not properly be very extensively used in the lower classes, and must commonly be sung somewhat faster than at subsequent periods.

b. Care should be taken to have the singing in unison, or in parts, as the case may demand either. Children less than nine years old, usually sing in unison. Part singing is not natural to them, whatever credit it would obtain at examinations. With older children the case is different; they may sing in parts; but should still not transgress the limits of popular requisites in the artistic direction. Part-singing is however so efficient a means of artistic training, and its power over the feelings is so great, that it should not be omitted, even in the smallest school.

On this important subject many mistakes are made. The following principles may serve the reader as initial points for his belief.

aa. A mixed choir is always most efficient; and should therefore be formed wherever possible. The school will furnish sopranos and altos; and there can always be found some accommodating youths or men, who will sing tenor and bass. The thing can easily enough be done without sounding drums and trumpets, with prudence and perseverance.

The societies for men's choirs seem in some places and lately to have hindered the prosperity of small mixed choirs. This is much to be regretted, however useful those societies are. Forget not the children!

* In an extensively used collection of songs, the "Hunter's Chorus in the Freyschutz," is to be found, set to an Advent hymn! In the same, "Christ a gardener," is set to the duett from Titus, "In friendship's arms;" which, as a reviewer in the "*South German Messenger*," (*Sddeutscher Boten*.) says, "fits like a theatrical costume on a clergyman."

bb. In schools where only the children can be employed, the following plan may be adopted, which will prevent very various errors, namely: The children should sing chorals, generally, in unison; secular songs in two parts; and all music for religious, and especially church festivities, in three parts.

Chorals can not and should not be sung in parts, for the reason that time will not be found for practicing them in that manner; and because it would prevent those appointed for the middle and lower parts, from thoroughly learning the air—a great disadvantage.

Only on some few special occasions should a choral be sung by the children in three parts; and if such an experiment should succeed, it would probably be beneficial.

Chorals in two parts are always somewhat dry. But if the teacher will have some such, let him be careful to see that the second part is of an independent and marked character.

The reasons for singing secular songs in two parts are these:—

1. This method is indicated by the nature of that sort of music.
2. The practice will be found sufficient for the needs of the children in that particular.

3. It does not, like singing in three parts, impose on some of the children the necessity of sacrificing themselves for the sake of the rest, by the unnatural practice of singing in the lower register, which is also in itself uninteresting to them, and if long continued, very wearing.* But the church requires a more dignified style. Here, singing in two parts seems empty and dry; at least three parts are necessary. Nor should the choruses in the liturgy be sung in two parts only; but rather in unison, with organ accompaniment. Children can profitably sing in four parts only under very favorable circumstances.†

c. Solo singing, as well as singing in choir, must also be attended to. This is necessary both on account of the individual development of the pupil as well as the formation of his style, and the consequent influence of it on the feelings. With regard to this last point, I need only refer to such songs, motets, and little choruses, as are used in school in which choruses and solos alternate. The effect of such pieces when well executed, is very good. It also has a very good effect, when some single verse of a song is sung by some one person, the whole singing the next. The solo singers should be trained separately, by which however I do not mean that they should be trained in the higher artistic departments of music.

* Gersbach, Herder, Rinck, Mühlney, B. Klein, and the profound Nägeli, have, I believe, scarcely set any children's songs in more than two parts. Their statements of the reasons, however, are not sufficiently lucid.

† There are very various opinions on this point, and I know that many persons differ from me. But I have many authorities on my side.

5. Care should be taken, not only to select music suitable to the children's capacity, but to practice them long enough to be able to execute them with certainty and freedom.

This principle has already been indicated in substance, but ought to be here again stated in full and expressly.* It is not until all technicalities are done away with, and all sense of constraint or impediment by difficulties is removed, that the heart of the singer opens itself. The desperate efforts of some singers, or entire choirs, to accomplish a task beyond their abilities, does not even afford the audience the pleasure derived from the breakneck leaps of a rope-dancer. Therefore, no great contrapuntistic choruses, nor elaborate solos. All that is required is simple songs, and little motets and choruses, at the utmost not more difficult than the most difficult of Hientzsch and Erk. If circumstances imperatively require that the children should execute some more elaborate piece of church music, the most skillful of them should be selected, and practiced in private on the cantatas, hymns, &c.

6. The practicing of songs, during the period of singing by ear, should be by playing or singing them over to the children, who should then endeavor to execute them.

When the period of singing from note begins, some ten or twelve lessons will probably be needed to acquaint the children with the main points as to the meaning of the notes, especially their rhythmic value; which should be thoroughly illustrated by examples. Then will follow the use of the notes in practicing songs. The children should be prevented from becoming discouraged if they do not at first understand more than a very little of the details of the system of notes. They should be allowed to be astonished, not at what the notes do not do for them, but on the other hand as the real help which they afford. And they will be much delighted, as the meaning of the written notes, at first so puzzling, becomes gradually more and more distinct, and when at last the song which is given them to sing shall contain its own explanation.

C. INSTRUCTION IN SINGING, IN COMMON SCHOOLS OF THREE CLASSES.†

(Two hours of singing in each class, weekly.)

1. *Lower Class.*—(Four half hours.) In each half hour; Elementary Exercises, ten minutes; Songs, twenty minutes.

2. *Middle Class.*—(Two full hours.) *First:* Indispensable information as to the notes, and for practicing songs; together with repetition of songs previously learned. This during from four to six weeks.

* "In order that the execution of compositions may be as little as possible interrupted or hindered by ignorance or hesitation, and that no perplexity may interfere with the artistic conceptions of the singer, and thus prevent the successful training of his feelings."—*Nägeli*.

† *Viz.*, of a three years' course.

Next, in each hour; Vocal Exercises, ten minutes; other Elementary Exercises, twenty minutes; Songs, thirty minutes.

3. *Upper Class*.—(Two full hours.) *First*: Continuation of the fundamentals of written music, and repetition of songs already learned. This during three or four weeks.

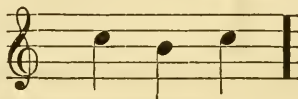
Then, during each hour; Vocal Exercises, ten minutes; other Elementary Exercises, twenty minutes; Songs thirty minutes.

Details on the above points.

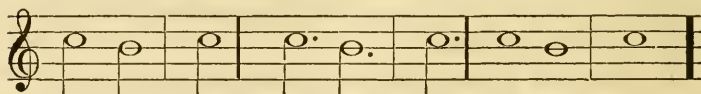
a. Lower class.

The elementary course consists of simple exercises, in the singing by rote of single tones and simple connected tones; in distinguishing high and low, long and short, loud and soft tones, in counting to time, &c.; such as are prescribed in almost all the better class of books on the subject. A course of vocal exercises should also be combined with this.

Take for example the following cadence.



The teacher plays these notes, the children counting them. Then let them describe them, somewhat thus; "The second tone was lower than the first, and the third higher than the second; and the third was like the first." Then let them sing them, to the sound *ah*, first getting the measure of their duration from the playing of the teacher; who must by the way watch carefully to see that the last note is not flat. Then let them count to each tone, one, two, and one, two, three, and one, two, three, four, while the teacher is playing them; and let them also beat time. And then let them do the same to their own singing of the notes. In these cases, they will sing the following.



Then let them sing the same notes to words, such as "summer comes," or the like; which will give an opportunity to train them in enunciation. That is, they must say, not "sum-mer," dwelling on the *m* with their mouths shut, but su-mmer, holding the vowel sound, &c. Lastly, the cadence may have a name given to it; it is a "cadence from below." Such exercises will be found very interesting, if conducted with spirit.

The songs, in the lower class, must be sung by ear, after being

played or sung by the teacher. The following may serve as an example :



Oh how cold the weather's growing, And the sky all cloud-ed o'er,



From the North fierce winds are blowing, And the sun-shine's seen no more.

First the words should be repeated to the class, and said over by them. Any mispronunciations should be corrected; and the words "o'er," "north," "fierce," &c., briefly explained. The teacher then announces that he will play the melody. All are attentive. He plays the first half of it, once, twice, thrice, four times; the children beating time, which they can easily do. Some of them will at once begin to hum over the air, but should be stopped. The fifth time, they may all sing it, softly. Then the teacher sings it alone, then plays it alone; and then the children sing it by themselves, the teacher marking time for them. Perhaps they will sing the second or third G too low, or fall behind the time, or take breath after "cold," or make the first note of the third full measure too short, &c.; all of which errors should be corrected on the spot. For a change, sometimes part of the class may sing, and sometimes all; and perhaps some one of them may be found bold enough and able enough to sing in solo. The teacher should always accompany, to prevent falling from the pitch. After the first half of the melody has been learned, the second should be practiced in the same way. When the whole is well committed, the teacher may play second to the children's soprano, or sing a second, and play the first. It will not sound well for him to sing the air. Then the remaining stanzas of the song may be learned. Every thing should be executed correctly and well. The result of such a course of training will be very satisfactory. When the children go home, they will be singing the song, wherever they are. What more could be desired?

b. Middle class.

As has been stated, this class should begin by devoting from four to six weeks to a very simple preparation for singing by note. The object of this preparation should be to make the children acquainted with the leading points of the notation, without burdening them with details. It can not be expected that the children shall learn to sing independently by note; but they will receive whatever assistance the notes can give them; their eyes, ears, and feeling for time, will be trained. An excessively long step will be avoided, by thus placing the children midway of the great space between singing without notes, and the free reproduction of what the notes represent. They will attain to the position occupied by those many thousand singers who do not indeed really sing by note, but who still would not on any account be without the notes. In short, the pupils will be placed in a situation where they will learn songs, not with a full intuitional appreciation, but with the aid of the use of their faculties of tune and time.

What should be the exact importance of these acquirements? I think it should be sufficient, if the children learn that

1. The tones, rise, or fall, as the notes do.
2. The notes show whether the tones proceed onward by gradations or jumps.
3. The steps of the latter kind are various; thirds, fourths, fifths, sixths, sevenths, octaves. The pupils must learn to recognize these promptly by the notes. A short series of exercises should be given to acquire this facility, preparations having been already made for it in the lower class; by playing one and another of these intervals in different parts of the major scale, and making the children what they are; and then by the reverse method of calling for an interval, which the children are to sing. But nothing difficult should be introduced.
4. The notes indicate the length of the tones.
5. There are whole, half, fourth, eighth and sixteenth notes. A whole one is as long as two half ones, a half as two fourths, &c.
6. There are also rests or pauses, fourth rests, eighth rests, &c.
7. A note or a rest very often has a point or dot with it; which increases its length one half.
8. The notes are arranged into groups or sections, each of which is called a measure. One measure may contain four quarter notes, or three, or two; or three eighth notes, or six, &c. The pupils must be able to name all these.
9. They must also be able to beat time. For $\frac{4}{4}$ time, four motions of the hand must be made, for $\frac{3}{4}$ three, for $\frac{2}{4}$ two, for $\frac{3}{8}$ three, for $\frac{6}{8}$ six, or sometimes two. It will be a sufficient exercise to them, if ap-

propriate portions of airs are written on the blackboard, named, and then played, while the children keep time, counting aloud.

10. Various marks are used to indicate whether to sing loudly, moderately, or softly.

11. The words are printed underneath, one syllable to each note; if several notes are connected together by a stroke or a curved line, they are all to be sung to one syllable.

12. There are many other marks, which will be learned afterward. The present is only a small beginning.

To know the names of the notes will be of no use to the children in this stage, because the present object is not an introduction to the system of the tones, but merely to afford the means of gathering by the eye an acquaintance with the outlines of a melody.

About midsummer, if the course commenced about Easter, the children can continue their singing practice in the green and flowery meadows; where they may wander without being constrained by methodical hedges and ditches, walls and timbers; freely, joyously, and, if God will, piously.

Rules for singing practice.

1. Whatever is to be understood must, so far as the children's capacity will go, be made entirely clear to them, and then stated by them.

2. In general, the children should be encouraged to make exertions of themselves; and they should be encouraged—especially those who are in their second year—to endeavor frequently to sing the air which is in hand, without assistance. But this must be done cheerfully and with interest; without any misery or any inflictions.

3. Where the children's knowledge fails them, play them the air.

4. Part of them—to repeat the suggestion once more—only count time aloud, while the others sing. But all of them must always keep time by light blows on the other hand or on the table, until the music is learned with entire certainty.

5. Every eye should be strictly required to be directed to the music. The less capable may often be assisted by pointing out one note after another with a stick.

Close adherence to these fourth and fifth rules will often give the children a facility in singing by note beyond what could have been believed.

An example will illustrate this course of proceeding. I select the beginning of a well-known song by Nägeli:—



Let the notes be very plainly written on the blackboard, at first without the words. Then let the notes be first read, thus: "Dotted eighth; sixteenth, rising second; fourth, rising second; fourth, falling second, &c., &c.;" ending with "fourth, rising fourth; half, falling third."* Then a rising fourth and a falling third may be sung. The children can sing these intervals themselves, with occasional assistance, if their ear has been sufficiently well trained. That is, if they remember clearly the triad *g, b, d*, they will not sing *g, b*, instead of *g, d*. Then those who are in their second or third year's practice may sing the scale with *la*, except a few who are to be stationed with the smaller children, to count aloud, keeping time, also, with blows on the hand or the table. If the air is correctly sung, well; if not, let it be played over by the teacher. Then the smaller children may sing along with the rest, another section counting; or all may beat time. This exercise should continue until the melody is sung with entire correctness and in strict time. Then the text may be written under the music.

This practice is for the last half of the singing lesson. The first half should be used for the elementary course. My mode in this particular would be the following: Take one of the better works on teaching singing, and begin where the subject of written notes is introduced, and proceed strictly as is written, going very slowly, since there is time enough; and be satisfied with whatever acquirements can be made. Only, some portions of the songs given as exercises in time or melody may perhaps be omitted, if the purpose of comprehending the written tones is attained; since the singing-course has particular reference to the development of the feelings of the children.

This should usually be opened by vocal exercises; which are also often properly introduced just before or during the singing exercises. Our practice (at Weissenfels) is to practice the scale, at first in two

* This mensuration of the intervals is of the greatest importance; at least, my own experience shows that for the majority of pupils it is the simplest and surest way of learning to sing truly. It is an excellent thing when a pupil feels the key so well as to be able to strike the intervals correctly by taking the notes in their relation to the key note. But this power will fall him as soon as the melody passes a little beyond the limits of the simplest juvenile songs, and even within those limits will be much confused by a modulation. In these cases, if the pupil is not practiced in the sort of knowledge of the intervals referred to in the text, he will grope about in an uncertain manner, as is the case with too many who sing by figures.

tetrachords (c, d, e, f; and g, a, b, c:) then altogether, usually with the sound a, b, sometimes loudly and sometimes softly, (the latter is much the most difficult, but is very important;) and always beating time (with two, three, four or six beats to a note.)

Thus the pupil makes his way through the middle class. At his leaving it, his voice will be found somewhat developed, a fund of songs laid up in his memory, and his power of reading at sight gratifyingly cultivated. The latter however is very seldom the case to an extent that makes it allowable to dispense with carrying on the elementary course together with the singing course, in the higher class. Careful beating time must also still be kept up for a long period yet; it is only in the latter years of their school life that the more capable of the children will be found capable of singing independently by note.

c. Upper class.

Before proceeding here with the singing course, the pupils must be somewhat further practiced in written music, for the sake of easier understanding. From three to four weeks at the beginning of the course may be specially devoted to this purpose. However much progress may have been made in the middle class, or the elementary course, they must yet be taught in the upper class:—

1. That there is a universal (chromatic) scale which is several times repeated.

2. That it consists of twelve tones.

3. That the tones are so near together that it would not be easy to sing another between them.

4. That the steps from one of these tones to the other is called a half tone or semitone.

5. That these tones have their fixed names and signs; and what these are. The scale most natural to commence with will be that of C, the intermediate tones being added. The nature of these semitones may be illustrated by marks, by a scale, a staircase, the keys of the piano-forte, the situation of the tones on the neck of the violin, and by playing and singing them over.

Reading written music, to which the middle class has at least afforded an introduction, must here become an indispensable preliminary to singing practice. The subject of the different keys can not be begun in these three weeks of instruction; it must be left for the elementary course, to be there treated deliberately and thoroughly.

About Whitsunday, of the third year, again, singing practice may recommence, the vocal exercises being resumed, and the elementary course taken up again where it was left off in the middle class.

I may properly give an instance of the instruction in singing of the upper class; for which I will select a Whitsunday hymn.

Deck the walls with wreaths of flowers, And conse-crate to God the
hours, And let the al - tar al - so bloom.

The course of instruction may be as follows:—1. The key, signature and time may be determined. 2. Count the measures. 3. Read the notes, as follows, a; a; rising fourth, d; rising third, f sharp; falling second, e; falling second, d; rising second, e; rising second, f sharp; falling third, d, &c. 4. Take up the longer intervals. Which are the thirds? The fourths? Who can sing a fourth? How does a sixth sound? &c. 5. The upper section makes an attempt to sing the scale with la, the lower section beating time and counting aloud. Every eye fixed on the notes! Trifling variations from the melody can easily be corrected with the violin; if there are any serious ones, the class must be stopped, and the error expressly corrected. If they do not succeed after two or three attempts, play the passage to them.

6. All the class sings the scale, naming the notes by name, and beating time accurately.

7. The words are put under the music.

When afterward the keys are discussed, they can be properly spoken of at each lesson. The principal thing, however continues to be that the children shall recognize the intervals, even if only by their numeral designation, and not by the interval of sound. Experience teaches that those who learn on that plan gain a very good degree of certainty and facility. It will of course be observed that as the elementary course progresses, the increasing vocalizing powers of the class can be more and more exercised.

I could now proceed, if my space would permit, to describe in very bright colors our scholar, now stepping forth from the upper class into active life, free, joyous, bold, and if God please, pious. But I leave every young teacher to imagine such a picture for himself.

SCHOOL DISCIPLINE.

PLAN OF INSTRUCTION; PLAN OF LABOR.

Translated from Deisterweg's "*Manual for Teachers*," for the Am. Journal of Education.]

SECTION I.—SCHOOL DISCIPLINE.

CAN we hope for a conclusive discussion of school discipline?

Many teachers have occupied themselves on the subject, and there is no end to their discussion on it. We have not thought proper to devote to it an extended chapter, for the very plain reason that we do not consider it a separate, independent department; but as one and the same with instruction. In our opinion, it coincides with didactics; and, if not identical with it, is still a consequence of it. The true didacticist is also a disciplinarian; he who holds clear views as to instruction, does the same as to discipline; he who instructs well, disciplines well; subjects of instruction are, according to the ancient but often forgotten opinion, "disciplines."

These views—which it would be easy to extend—were not received so long as the old dogmatic way of teaching was recognized as the sole duty of the teacher. Then, a man might know much, speak well, and "teach" well, and yet know nothing of maintaining discipline. Such (to mention a name whose reputation will not be injured by it) was Schleiermacher, at the Gray-friars' Gymnasium, at Berlin; and such were many other learned men, even down to the present day. But since we have come to include in the idea of teaching something more than, and indeed something entirely different from, the mere communication of knowledge—namely, to stimulate, to develop, to lead into a condition of independent activity; in a word, to instruct, according to the rational modern meaning of the term—since this has been the case, there have been no longer good teachers who have not understood how to discipline their schools. As far as his capacity and power of instruction go, just so far do his educating power and efficiency go. Whoever agrees with the previous positions in this book will agree with this assertion.* The schoolmaster of the present day does nothing except to teach, from one day's end to another. He is entirely a teacher, and is therefore with propriety called by that name and by no other. It is not an arbitrarily invented name,

* Compare this: "Discipline is not the art of rewarding and punishing, of making pupils speak and be silent; it is the art of making them perform, in the most appropriate, easy, and useful manner, all the duties of the school." The definition of "school discipline," by the Conference Society of Capellan, (see above,) is evidently too broad. "The elementary school ought, by the spirit ruling within it, and by its instruction, so to operate upon the children that they shall receive a preparation, adapted to their ages and capacities, for temporal and eternal life."

which may be exchanged for a better. The ancient "schoolmaster" has nowadays advanced to the grade of "teacher." As teacher, he calls into activity the observation, industry, love of learning, capacity for it, power of language, capacity for independent action, and self-control of his pupil; all his faculties, not merely those of acquiring knowledge, but the feelings and the character. That is, he directs, corrects, and disciplines him, outwardly and inwardly. The pupil attends school. Here, order, propriety, morality, good manners, obedience, regularity in coming, going, standing, and sitting, and in preparing and delivering his work, love of his occupation, his teacher, and his school, and also truthfulness and credibility, appear as the consequences of the influence of the living, educating principle of the school; that is, of a teacher whose intellect and will are active, vivid, and strong; who, just as Schiller composed, philosophized, and labored as a character, does every thing, inspires every thing with character. The whole matter of disciplinary means therefore concentrates itself in this requirement from the teacher. Teach with didactical—and consequently also with disciplinary—power and skill. The principle of teaching is the principle of school education.*

Thus it appears that the teacher, while bestowing attention upon his system of instruction, must also pay attention to whatever outside matters relate to it, must adjust his views and practice as to them, and must cause his scholars to conform to them. And in like manner it is self-evident that, where several teachers are laboring together in one school, there must be an agreement upon subjects of this kind, that there may be a harmony of action among them, and one may not pull down what another builds up. The right spirit of instruction will lead the teacher to right action. Shall we go into particulars under this subject? Their name is legion—but we will refer to a few.

1. Strict enforcement of regularity in teaching school, neither too soon nor too late, but before the stroke of the bell. The teacher therefore to be in the school before it is struck. This is indispensable. Any one coming late to remain standing during the first hour, and to go to the foot of the class.

2. Pupils to be quiet in their places, and to be quiet while preparing their lessons.

3. Exercises to commence at the stroke of the bell, with singing or prayer, or both, but briefly. One stanza of a hymn is enough. Unprogressives have all or half of a hymn sung. But the object of singing is to be a stimulus for work.

4. Position of the teacher before the class, at his post; not to be wandering about. To see all, to address all, to question all, to stimulate all, as one man.

5. Indication of readiness to answer by lifting the forefinger or right hand, not the arm: one to be selected to answer.

* Curtmann gives, as the principal requisites of a teacher as disciplinarian, watchfulness, love of order, consistency, and fairness.

6. Such one to stand up and speak in a clear, distinct, definite, strong manner. No error, stammering, slowness, half-answer, or slothful answers to be allowed. No telling—that school-pest! Why?

7. For repetition, the pupils to leave their places; not otherwise. The teacher who always needs this means of stimulating the attention is fond of ease, or a feeble teacher.

8. Recognition of every endeavor after success, according to the amount of effort, even if the results are small. Such recognition encourages; while blame, especially if undeserved, is prostrating.

9. No moralizing. Give brief and clear orders, laconic praise* and blame. The laconic teacher is the best.

10. Patience with the feeble, unweariedness with those who try, peremptoriness with those who do not do all they can.

11. The pupil's eye to follow his teacher as a planet the sun, or as a satellite its planet. This must happen of itself, or else it is a made-up action, and valueless.† Erect but not stiff carriage of the body, the feet to be kept still, the hands off the table.

12. Pupils to leave school quietly and orderly, before the teacher, with a silent salute to him; and to go quietly home.

Will this dozen of hints be sufficient? Must we instruct the teacher how the scholars should behave when a stranger, or the pastor, or a school-inspector, &c., visits the school? or how to meet the complaints of parents? or how to punish, with what, whether with a stick, and a thousand other questions? Where should we end? Those desiring information on those points, should study the books already named, on school discipline, especially that of Dobschall. As seeking the kingdom of God is the first thing, and to be replaced by nothing else whatever, and guides into all truth, so does a right spirit in teaching lead to right action. This, accordingly, is what the teacher should endeavor after. Without it, all else is wood, hay, stubble, which the fire will consume. With it, it is impossible to go wrong, although "man errs so long as he struggles" it is true; but he will not, on the whole, ever fail of the right way. Experience purifies and directs. Not all things are for all. "Though two do the same thing, it is not the same;" and this is true both of delinquent scholars and of disciplinary teachers. "No one thing is suited to all." What one man applies with success, will fail in the hands of another. There is no receipt-book for the thousand and thousand cases which arise in discipline. "What the understanding of no wise man sees, childlike feeling will practice in simplicity." These teachers are born rich. Others learn from them, by their example, by observ-

* Praise, that is the approbation of some respected person, (*Laudari a viro laudato*), elevates the soul, and encourages it to noble sentiments. See Jean Paul Richter's "Life," iii., 13: "Even the greatest minds, however much consciousness of power and self-reliance they may have, still sometimes, even from their youth up, feel the need of an encouraging recognition of their talents, and of the successful application of them. The estimate of others is indispensable to a man's correct appreciation of his own worth." Every teacher who educates should continually remember this. The Hamburger, Gurlitt, is a model.

† "A made-up educated man is the most foolish creature under the sun."—(Bettina.)

ing them. "Demonstration goes beyond study." The best work is done by a firm character, a will directed toward good. To this end have we "Moses and the prophets." And in this also all depends upon the spirit of the work. A right spirit leads to right thoughts; as is the former so are the latter.

Of means of punishment* we prefer to say nothing at all. They are mostly useless and unnecessary; where the instruction is of the right character, *i. e.*, adapted to nature and to the subject. The pupil should study in the school, and with pleasure. Where this is the case, there will be few or no improprieties; where it is not, the teacher will be constantly obliged to make rules and inflict punishments, but without the result desired. For the design of punishment is to do away with punishment. But both punishment and delinquency are avoided by love of the pupil's work. And this love of the work† must be produced by the work itself. A consciousness of constantly growing powers continually stimulates the desire of their development. The principle of instruction is the principle of education; the method of instruction is the method of education.‡ Where this is not so, but where the two do not coincide, and where, thus, the instruction is not in and of itself educating, but only instructs—communicates knowledge—there there is no real education. Those not clear on this point should study the work—which I can not sufficiently recommend—of Weiss, "*Experiences and Counsels*," (*Erfahrungen und Rathschläge*), 2d vol. The result of his excellent discussion of the subject is concentrated in the following statement. "Instruction, in order to develop into independent action and fitness for actual life the whole mental powers of the student, as a being of senses and reasoning powers, should first of all endeavor to stimulate and bring into full activity the feelings, as the central point of, and means of operating on, all the mental faculties and their results. Instruction, in order to accomplish this result, should use its material only as a stimulus, should proceed from actual observation of objects of intuition, and should from this develop within the pupil's mind the idea of those objects. By this method only can the inner nature be entirely reached, a true interest in the subject of study excited, and the understanding and will (head and heart) alike cultivated, and consequently the individual educated by means of education."§

* The right of punishing minors, and of applying necessary constraint to them, needs no establishment. The means used, however, should be of such a kind that it may be certain that "the pupil, if he were to express a reasonable conviction on the subject, would approve them."—Rotteck, "*Public Science*," I., p. 140.

† Young teachers are most concerned about discipline, because they do not understand instruction. And most very learned men, not understanding the latter, do not understand the former. If they should acquire a knowledge of methods, they would learn discipline at the same time. This is exemplified at the teachers' seminaries. Where their pupils are made skillful in instruction, they prosper in all things.

‡ Pleasure—enjoyment—sympathy—in realities, is the only real existence, and the only means of making realities known. All else is vain, and wasted time.—(Goethe.)

§ I will add to the above an extract from the work of a powerful, thoughtful, and experienced woman—[TINETTE HORNBERG, "*Thoughts on Education and Instruction, especially of the Female Sex*." (*Gedanken über Erziehung und Unterricht, besonders des Weiblichen Ges-*

ADDITIONAL.

The preceding chapter is a brief one. The following propositions may perhaps serve as useful themes for meditations connected with it.

1. Fichte expresses himself as Weiss did, "*Orations to the German Nation*," (*Reden an die Deutsche Nation*,) Leipzig, 1824, p. 52.

"Even although this mental action is not that from which good morals proceed, and though, to this end, a special direction of that action is necessary, still this love is the universal condition and form of the moral will; and accordingly this species of intellectual training is the immediate preparation for moral training."

2. A good teacher must always maintain his discipline with a strong hand; although it is a secondary object, and not a primary one. The only primary object is instruction. Discipline is the outward strength of armies; learning is the strength of the scholar.

3. Discipline is an adjustment from without; cultivation, from within. Nor is discipline civilization. Neither discipline nor any particular degree of civilization necessarily excludes a state of external barbarousness. There are barbarians who are disciplined and civilized.

4. "Instruction is divisible into two kinds; either educating or purely instructing. When the teacher instructs, confining himself strictly within his science, strictly within his objective method, this is pure

chlechts.) Berlin, 1845 Euslin. A work which I urgently recommend to parents and teachers. P. 252:—"I would, on the contrary, for my own daughters, (if I had them,) search the world over for a good teacher, and would rather they would remain deficient in any thing else than in this. For if I should succeed in obtaining a good instructress, in my sense of the term, I should also have obtained a good educator. But here also I come into open opposition to Herr Schulz. He pronounces it an error to take as synonymous the ideas of 'Art of Education' and 'Art of Instruction.' With reference to the male sex, I will express no opinion on this point, although I entertain a distinct one. But it is my conviction—and one not to be shaken—that, for girls, no distinction can be made between these, but that each is indissolubly implied in the other. This is no theory constructed by me in the air, over my writing-desk; it is the result of twenty years' practice—of an experience which can not be annihilated by the acutest discussions of the learnedest men. But what is that which is called education? I will permit Herr Schulz himself to answer. It is 'To guide and accustom young minds to the true, the noble, and the beautiful; to propriety, modesty, and elegance.' I will, for the present, accept this definition, though it is too narrow for me, and under it would inquire of my own past pupils, whether most of the advantages included under it, which they gained through me, did not proceed from the hours of instruction. I have already had oral or written testimony from many of them, that that very species of instruction which Herr Schulz thinks us (women) unfit to give, viz., religious instruction, exercised an influence upon their views and feelings, to which they principally owe whatever of good there is in them, and which is still an active and efficient principle within them. It was especially during the instruction which I gave my pupils in religion, (I called it instruction in Christian duty,) in history, mythology, natural history, &c., that I found opportunities of awakening in them, in a manner the most simple and natural, and adapted to their capacities, ideas upon the glorious destiny of man in general, and of woman in particular, upon the holiest duties of both, upon the great happiness of an existence devoted to the service of what is truly good and beautiful, upon the inestimable value of a truly childlike relation to God, upon real human greatness and virtue, upon that most difficult and rare art, of living a beautiful and noble life—in a word, upon all that concerns the true worth and happiness of man;—ideas whose germs lie slumbering within most minds, but which are often not strong enough to bring themselves to the birth, but demand a Socrates to arrest them and bring them forth into the clear light of intelligent freedom."

instruction; as in the universities, &c."—Prof. Braubach, in "*Mayer's Review*," May, 1843.

I do not agree with this statement. All instruction has an educating effect; is at least intellectually educating; that is, it renders definite the thinking faculties, and gives consistency of thought, thus working indirectly upon the will. Instruction which did not do this would be a mere mass of notifications, not worthy of the name of instruction.

5. School discipline, like instruction, will take form from the qualities, especially the temperament and character of the teacher. The foremost influence should be love to the vocation and the pupil; next, and with these, comes strictness in fulfillment of duty, faithfulness in small things, and from them love of justice. On the latter point Doederlein—"Addresses and Essays," (*Reden und Aufsätze*), Erlangen, 1843, p. 235—has some very true and acute remarks.

"The reputation of strict fairness and its closest expression, unconditional impartiality, is the first fundamental requisite of efficient school discipline. What I mean is, that the teacher must, from the first, be so impregably established by his whole character in his credit and reputation, as that nothing else shall be necessary to protect him in the practice of entire justice and impartiality. He must absolutely have entire freedom to manage his pupils variously, according to their different individualities; and, both in punishing and rewarding, to follow the higher considerations and requirements of an intelligent prudence and wisdom, without being obliged to apprehend a charge of partiality. He must have reference to variety of talent and temperament, and even of condition and education; (for if two persons suffer the same thing, yet it is not the same.) But all these considerations, let it be observed, should be strictly pedagogical, not at all political; according to the commands of conscience, not the counsels of worldly wisdom."

6. The school is essentially an educational institution; it educates by means of instruction; that is, not merely by communicating knowledge, but by the exercise of the faculties on the material which is the subject of instruction, and the various arrangements which the success of the instruction require. Any one violating these latter, or not applying his individual faculties to the best of his ability, is deserving of punishment. Under this statement come all school delinquencies, (crimes not being here referred to,) including moral ones, such as lying. The school-boy lies, usually, to escape from the punishment of some neglect of work, forgetfulness, &c.; to lie in order to bring a punishment upon his comrade is—to the honor of human nature in boys—a thing unheard of. But, on the other hand, the number of cases where he lies in order to preserve his comrade from punishment is legion.

All delinquencies and punishments in school can thus be brought into connection with instruction and its requisites.

Or they may be considered apart; as moral delinquencies.

Either view is correct; neither excludes the other. The educator will prefer the latter; but most parents, the former, especially the

less judicious. The measures pursued may, in the former case, be referred to the biblical admonition, "Let all things be done decently and in order;" in the latter, to the text, "Train up your children in the nurture and admonition of the Lord."

7. All school punishments are pedagogical; that is, they are intended to improve the child. Theories of deterring, or of retaliation, are quite inadmissible; as is that of any expiation to an offended God. God can not be offended. Men must put themselves on the right terms with him, and with his own conscience, by sorrow and improvement.

That the more strictly religionist (*sogenannte strenggläubige*) or orthodox and pietist teachers find themselves obliged to use a stricter disciplinary practice is a fact. The main reason of this is, the erroneous assumption that God's majesty is offended by every wrong action. No such view ought to be expressed, even in the penal codes. Whether such is the case, must be left to the higher and invisible Judge. Man has no voice in that decision, nor consequently should he have in inflicting a punishment for it. This same class of teachers often, by reason of the same doctrine, see faults and sins where others do not. It is in this case as with the ghost-seers. He who believes he sees them does see them. But the worst thing is when they look upon the child as a reprobate or a criminal. And yet this is seldom a correct opinion, even of such adults as are punished for crimes. "The more we examine men and their errors, the more occasion we shall find to treat them, not as hardened devils, but rather as poor tempted creatures."*

8. "Much speaking is a weariness to the flesh." Many laws, many transgressions. It is enough to frighten one, to read all the rules which are given to teachers. See, for instance, the little work, "*Discipline in the Common School*," (*Die Zucht in der Volksschule*), by Raimund Hermanuz, director of the Catholic Teachers' Seminary at Ettlingen, in the Grand-duchy of Baden. Karlsruhe and Freiburg, 1843. Herder, pp. 48. Catholic clergymen are fond of admonishing and moralizing. In this work we find it advised to make use of tablets of rules, places of honor, golden-books, &c. All pure supererogation! Otherwise, the book contains many good observations. But he must be a poor teacher who needs this army of advice. And *quere*, can such a master in laws and rules ever educate so as to make apt and ready pupils? Such things would leave us to the conclusion that it is better to go back to the old fashion, and find in hard blows one universal means against all kinds of school delinquencies. Lied? the rod. Lazy? the rod. Struck somebody? the rod; &c., &c. *Toujours perdrix!*

9. The Gregorius Strike-hards, in their day, used, "as their daily apparatus for school discipline, a surly countenance, a thundering voice, a litany of terms of abuse, a hard fist, and a tough hazel stick. See Schlez's "*Gregorius Strike-hard*," &c., (*Gregorius Schlaghart*, &c.) Nuremberg, 1813. 3d ed., p. 128.

* *The Prussian Outline of a New Code, and its Relations to the Rhine Country*, (*Der preussische Entwurf einer neuen Gesetzgebung und ein Verhalten zum Rheinlande*.) By Gottfried Duden. Bonn, 1843. Weber. 62 pages.

The eleventh and twelfth chapters of this book, (which are the best of the whole,) are still to be recommended to many passionate teachers. "Opposites illustrate each other."

10. It is proper here to refer to a new work, in which this subject is discussed in an able manner; viz., "*School Discipline. Systematized in a simple plan as a scientifically arranged department of knowledge; and briefly and generally discussed from the moral point of view, with direct reference to the practical needs of the teacher,*" (*Die Schuldisziplin. Als wissenschaftlich geordnete Kunde in ein einfaches System; zusammengefasst und aus sittlichem Gesichtspunkten für die unmittelbare Schulamtspraxis kurz und übersichtlich dargestellt.*) By K. F. Schnell. Berlin, 1850. Wiegand. 123 pages.

II. PLAN OF INSTRUCTION IN A SCHOOL.*

The plan of instruction (*Unterrichtsplan oder Lehrplan*) of a school includes: designation of the matter to be studied; its division into the different grades and classes; fixing the time to be devoted to it each year, week, day, hour, &c. The scheme for the latter is the lesson-bill, (*Lektions-und Stunden-plan,*) and is a subordinate part of the general plan of instruction. The plan of instruction sometimes contains more, sometimes less. It may omit any reference to method, which may be left to individual teachers; or it may confine itself to general indications, or may extend to more detailed directions; may prescribe the text-books and class-books in each study, &c. It should include, if not a scheme of directions for studying, (*Lernplan,*) at least one for working (*Arbeitsplan;*) that is, such directions that, though the pupil may learn in the course of instruction in each separate study how to do his work in it, each teacher for himself, and all the teachers of an institution containing several, shall be informed what and how much is to be given to the pupils of each age and each class for memorizing, preparation, and repetition, orally or in writing; what is the maximum of time which each teacher may require to be devoted to his department on any given days, &c. There is no need of mentioning minimums, at least in our day; for our present teachers are inclined, not to exact too little from their pupils, but too much.

We add a few details, as briefly as possible, on the chief points relating to a plan of instruction, and their principles.

1. In drawing a plan of instruction for some particular school (for there can be no universal one, nor even a general one for all of a certain class of schools, or none except such as are confined to entirely general principles,) the first consideration is to select the studies. These are determined by the class of the school (whether elementary, common, classical, &c.) and its purpose. This is the first thing to determine.

After determining upon the studies, the next thing is, to lay out the extent to which each of them shall be pursued, and the apportionment

* The plan of instruction is the most important part of the school ordinance or school regulations; which last include the determination of all matters relating to the school, as grade of institution, authorities and teachers, situation, fees, vacation, &c. But, as these are adjusted by local regulations, and usually by the authorities themselves, we shall here confine ourselves merely to the plan of instruction, with which the teacher is concerned.

of them to each class, by half-years, or (which is better) by years. The best courses are arranged by years. The whole extent of what is to be learned by one class, that is within one year, is the year's task for the class, and must be mastered, in order to proceeding into the next class. It will not be found well to carry the specification down to weekly tasks; it will better for the teacher, during each week, to have regard to the task for the year. It will naturally require some years' experience to be able to apportion the weekly work accurately in this way. The individual character of the teacher will also modify the distribution. One will be unable to accomplish what will be mere sport to the other. But on this point personal convenience must be subordinate to the requirements of the study, and not *vice versa*. We can not, however, in this place, discuss the subject of personal peculiarities.

2. The subdivision of the material of each study among the various classes and years is called the course of study (*Lehrgang*.)

The governing rule in this particular is the furthest proposed point of attainment in the school, which is decided by its object as a school.

The distribution of the material to be studied among the various classes proceeds backward from this point, having reference of course to the age of the pupils, and being such that the highest class will reach the proposed furthest point. Subject to this object, the distribution will be adjusted to the contents of each study, in the first instance without reference to any other studies to be pursued by the class during the same time. Only when the extent of the various studies to be pursued by each class has been fixed can their various scopes be compared, and the estimate made whether their total exceeds the capacity of the pupils. The distributions of the various studies thus first made was a provisory one; and the final one can only be made at this point. Further actual experiment will bring any necessary modifications. These will be made, in part, as teachers, books, &c., are changed. Every plan of instruction is, therefore, a provisory one. In this world every thing is temporary. We are all provisory persons, ourselves, and so are all our institutions and works, without any exception. Whether that which is appropriate to-day will be so to-morrow will appear when to-morrow comes. Nothing can claim that it will be appropriate to-morrow merely because it is so to-day. Its suitability for the morrow must decide for it; nothing else. The dead have no right to legislate for the living. "Only the living have rights."

The following general principles may be stated, for the selection and arrangement of the materials of a study.

a. The most important points should be made most prominent; those less so may follow after.

b. If the time and capacity of the pupils and teachers are sufficient only for the former, then the latter, the less important points, may be omitted, or made entirely subordinate and considered along with the others. The studies, for instance, absolutely indispensable in every common school, even the smallest, are Religion, Reading, Writing, Arithmetic, and Singing. Those not absolutely necessary are all others; such as real

studies, called also studies in useful knowledge, knowledge of forms, drawing, &c. The useful-knowledge studies may, if necessary, be connected with reading, and studies out of the reading-book.

c. Whatever is presupposed in a subsequent study must have been learned in a former one.

d. Related subjects must be attended to at the same time. (See the didactic principles above laid down.)

e. In each successive grade, the powers of the pupil must be exerted, not upon many subjects, but upon few. In a higher school, for instance, two languages should not be commenced at the same time. The successive method should also be used; or rather a successive arrangement.

In arranging the course of a single study, the most important point is the arrangement of materials. As (merely for illustration) in Arithmetic, 1st, numbers from 1 to 10; 2d, from 10 to 100, &c.: in Geography, A, preparatory course—home geography; B, geography proper—including, 1st, mathematical geography, 2d, physical geography, 3d, political—as, *a*, of Europe, *b*, of Africa, &c.

The second point in a special course of study is the presentation or management of the materials, either scientific or didactic. The former considers the subject in a purely objective manner, the latter has reference at the same time to the needs or nature of the pupil who is to study; whether he is an elementary pupil, a gymnasiast, &c. Here, also, the method followed makes its appearance: whether analytic, proceeding from a whole to parts; synthetic, from parts to a whole; or genetic, deducing one thing from another. Thus, instruction in language may proceed from sentences down to single sounds (analytic;) or from sounds up to sentences (synthetic;) or by the production of finished and compound sentences from simple ones (genetic.)

On these principles the subjects of study may be distributed according to the different classes of the schools.

3. As to division into classes, and distribution of studies among teachers, the following principles may be laid down:—

a. The younger the pupils the fewer the teachers; and only one where possible.

b. Always one principal teacher, or class-ordinary, for one class, with a principal study; who is to maintain a unity of action in order, discipline, &c.

c. A class system should prevail in every common school, rather than a system by departments of study (*Fachsystem.*)

d. The principal of the school (rector, director) should conduct some lessons in each class.

e. The most skillful teachers should be employed in the lowest classes, and the next most skillful in the highest.

f. A less skillful teacher should be employed in the department he understands best, in several classes.

g. No one should have an exclusive privilege of teaching in one class. The good of the school must be considered before private preferences.

4. With respect to time the following principles may be stated:—

a. Studies and classes should, from time to time, be redistributed in various ways among the teachers. Variety is refreshing.

b. The greatest number of hours should be devoted, not to that study which is in itself most important, but to those which require most time to master them. For example: religious instruction is more important than all other instruction; but it does not follow that a greater number of hours should be devoted to it. The influence of religious instruction is not proportioned to the number of hours devoted to it. Every true teacher is a religious teacher. Religion is not an isolated thing, disconnected from others.

c. Studies requiring most concentration and intense action of the mind from teachers and pupils should be taken up in the first part of the forenoon; though, at the same time, regard must be paid to a proper interchange of subjects.

d. A parallelism between the first and second halves of the week is well enough, but not absolutely necessary.

e. The lesson-bill of a school of one class, with one teacher, will of course differ from one for a school with several separate classes. In the former case, such studies must be entered for each hour as permit the teacher to instruct in one study with one portion of the pupils, while the rest are at work by themselves, or with the help of an assistant. In the latter, a great variety of arrangements are possible, a selection from among which will depend upon the judgment and experience of the teacher of each individual school. There can be no universal rule of proceeding for all cases.

“Yourself is the man;” “Demonstration is better than study.” That is, it may be better (for instance) that one division of the school should occupy all of half a given time than that two divisions should together occupy twice as much. Circumstances are frequently decisively powerful, and not to be overcome. In many situations the question must be, not what could be done if the case were so and so, but what can be done under circumstances as they are, which can not be modified? Instruction is necessary, and profitable; but there are also other necessary things. The teacher should not be a weak, still less a narrow-minded, man; who can see nothing except his pupils, and who thinks that the salvation of the world is depending on his efforts, and the salvation of his pupils on their attendance at school.

5. The plan for working (*Arbeitsplan*) should define for each day of a year how much time the pupil in each class shall devote to private study. It is the maximum of time, of course, as was already observed, which must be fixed for each study on each day. The principal points to be regarded in this arrangement may be gathered from the following observations.

a. Nothing should be prescribed for the sake of prescribing it, nor for the sake of keeping the pupil busy—an object which many ignorant parents desire to obtain for every hour; a point which the teacher should

never concede to them—but because this method of study promotes progress, develops the pupil's self-reliance and power of independent effort, and assists him in mastering his materials. The lessons must, accordingly, be carefully selected, and must always be suited to the age and powers of the pupils.

6. The younger and less capable the pupils are, the less able are they to study by themselves at home.

c. The teacher should make the pupil master of the substance of his work, and not leave it to the latter himself; for, as a general rule, he will not be competent. Under the direction of the teacher, and with his mind fully awake, he will learn more than in ten times the same time alone, amongst the interferences or fatigue of home. The school becomes agreeable to thousands of scholars, (and hundreds of thousands of parents,) from the misery which their studies at home inflict upon them. And what is the use of studying in pain and misery? How does it rob the child of valuable time, which he ought to be using in his own sports and in the cheerful company of his parents! Therefore, all labor at home should be confined within a reasonable extent—at present within the indispensable minimum; for the opposite extreme, even in schools for girls (!) is the present tendency. The first question for the teacher to consider at present is, Are these hours of study at home indispensable? Can they be omitted? (God bless this reflection: posterity will thank us for it.)

4. The work for the studies at home must be previously mastered in the school.

It is not enough that a task is prescribed which is reasonable in itself. The pupils must be rendered capable of themselves attaining a perfect mastery of it. How do the poor children torment themselves if they find themselves unable to do this! Therefore, the teacher should show them how to memorize, prepare, recite, write a composition, solve a problem, &c., by going through those respective kinds of work with them. Thus the teacher becomes the true friend of his pupil; a much more efficient relation than that of master. (There are still many teachers who are not, it is true, flogging-masters, but are still prison and torture-masters. In the hands of many teachers, the catechism is a real instrument of torture.)

e. The scheme or plan for working should contain directions for a whole week, and every day of it, by name—Monday, Tuesday, &c.; and with two columns for each day—"Written Exercises" and "Oral Exercises."

The principal studies of Monday should naturally be arranged with reference to the business of the Sunday; viz., rest and edification. Those of Thursday should be somewhat similar.

The oral and written exercises should have a relation to each other.

On the first day of the year's course, the plan for working should be delivered to each pupil, along with the lesson-bill, and both should be hung up in the school. Both are, of course, the result of the ripest consideration of the associated teachers. It may contain a list of the books which each pupil must procure.

Instead of further remarks, we shall add one or two examples, but still not as models; every lesson-bill and plan of working must be an individual work.

PLAN OF WORK FOR FIFTH CLASS OF A SEMINARY.

(Boys of 7 to 8 years.)

TO PREPARE AND WORK UP FOR.	IN WRITING.	No. of hours.	ORALLY.	No. of hours.	
				No. of hours.	Total.
Monday.	Arithmetic.	1	From Bible history. Reading from reading-book. Learning a hymn.	$1\frac{1}{2}$	$2\frac{1}{2}$
Tuesday.	Work in German.	1	Stanza of hymn, or some texts. Reading lesson.	$1\frac{1}{2}$	2
Wednesday.	Penmanship.	1	Reading lesson.	$1\frac{1}{2}$	$1\frac{1}{2}$
Thursday.	Arithmetic.	$\frac{3}{4}$	Biblical history. Reading lesson.	1	$2\frac{1}{4}$
Friday.	Work in German.	1	Stanza of hymn, or texts. Reading lesson.	$1\frac{1}{2}$	2
Saturday.	Penmanship.	1	Memorize from reading-book.	1	2

PLAN OF WORK FOR THIRD CLASS OF A SEMINARY.

(Boys of 10 to 11 years.)

FOR	IN WRITING.	No. of hours.	ORALLY.	No. of hours.	
				No. of hours.	Total.
Monday.	Arithmetic: some problems.	1	Geography: a task to learn or repeat.	1	4
	One drawing.	1	German: to learn a poem.	1	
Tuesday.	French: translation from Schifflin.	$\frac{3}{4}$	French: memorizing.	$\frac{1}{4}$	2
	Arithmetic: problems.	$\frac{3}{4}$	Latin: memorizing from grammar.	$\frac{1}{4}$	
Wednesday.	French: translation from Schifflin.	$\frac{3}{4}$	French: memorizing.	$\frac{1}{4}$	$2\frac{1}{4}$
	Latin: translation.	$\frac{1}{4}$	Latin: preparing a lesson. Religion: memorize a text or stanza.	$1\frac{1}{2}$	
Thursday.	German: a composition.	$1\frac{1}{2}$	Latin: memorize from grammar.	$\frac{1}{2}$	$2\frac{1}{2}$
			Geography: memorize a task. German: memorize a poem.	$1\frac{1}{2}$	
Friday.	French: translation from Schifflin.	$\frac{3}{4}$	French: memorizing.	$\frac{1}{4}$	2
	Arithmetic: problems.	$\frac{1}{2}$	Latin: preparing lessons, or grammar. Religion: memorize a stanza or text.	$\frac{1}{4}$	
Saturday.	French: translation from Schifflin. Latin: translation.	$\frac{3}{4}$ $\frac{1}{4}$	French: memorizing. Latin: preparing lessons.	$\frac{1}{2}$ $\frac{1}{4}$	$1\frac{3}{4}$

6. Principles as to books and methods.

The selection of school-books is sometimes left to the teachers, and sometimes prescribed. Between these extremes, of entire freedom—which may run into arbitrariness—and the utmost definiteness, there are many different degrees. Sometimes the teachers select, subject to the approval or rejection of the officers; sometimes the plan of study designates a number among which the teachers may select, &c., &c.; among all which intermediate plans, that which is legally practiced in Prussia seems much to be preferred. In Austria the latter of the two extreme modes prevails; which secures a fixed and uniform course, one entirely stationary in respect of improvement. In the condition of the Prussian system, it is a useful arrangement for the plan of instruction to designate those books which, for the present, (until better ones appear, or others are found more suitable,) shall be used as manuals. This plan materially aids in fixing the terminations of the class courses; as the rate of progress is thus easily fixed. Thus, in Kohlrausch's Biblical History is taken, during the first year, from §1 to §25, inclusive; and so on.

It is also of great use to designate the means by which the teachers will find their labors facilitated.

As to methods, most teachers are of opinion that they should be properly and exclusively determined by the teacher; and that the plan of instruction should, in this respect, confine itself at furthest to entirely general prescriptions. The teacher, it is said, *is* the method; a good teacher with a bad method is better than a bad teacher with a good method, &c.

To these views I can not subscribe. If it is true—and who will at this day deny it?—that didactics has its laws, then these must be observed, and can be violated only to the injury of instruction. These laws were established in order to be obeyed. They are based upon investigation of human nature, and of external objects. As long as these last do not change, those laws must prevail.

And as to the comparison above cited we hardly know what to say of it. Of the four combinations,

1. Good teacher with good method;
2. Good teacher with bad method;
3. Bad teacher with good method;
4. Bad teacher with bad method;

it will easily be seen that Nos. 2 and 3 are impossible, as implying evident contradictions, and that Nos. 1 and 4 are mere tautologies. It is self-evident that a good teacher will have a good method, and a bad teacher a bad one. The method is not a garment, that can be put on and off, the man always remaining the same. It is the expression of the teacher's personality, as interpenetrated with the nature of the thing studied, and the living consciousness of the nature of the pupil; it is the objective instructing mind itself. If the idea is admitted that a bad teacher can have a good method, and *vice versa*, it is implied that the method is some external thing, which might perhaps be called a manner, but should never be called by the honorable name of a method.

Such a manner, pattern, or wooden regulation, how useful soever, will certainly never make good instruction out of bad; they do not even desire to be mentioned at all. They belong to mere manner, as do all other merely external matters, and may be in one way or another, and good in either case.

There are many teachers who pay no great attention to methods, either because they have to be arbitrary, or because they do not understand what methods are.* They have probably accustomed themselves to a particular kind of instruction, (commonly that of prelection,) and now find this very convenient, or, as they say, "practical." They say, "I find it exceedingly well adapted to me." Granted; but what does this prove for the value of their method? How do the pupils find it to agree with them? Will the object of instruction be attained? These are the questions which need to be answered. Nor would I desire to destroy that freedom which the teacher must enjoy, in reference to the development of his personal character, and the recognition of it; but this freedom must not become entirely lawless, and proceed arbitrarily, on the principle that "Such is my good pleasure." Nor can I assent to Pustkuchen's doctrine, that "The important matter is the result; not the mode in which it was produced. The former must be definitely required; the latter may be left to free choice." For the value of the results depends precisely upon the way in which they are produced. If the latter is not right, the former can not be valuable. Therefore, I claim that the plan of instruction should indicate the method to be followed in each study, in each stage of it, on the received principles of didactics. Of course pedantry is to be avoided: the old principle holds good, "In things necessary, unity; in things doubtful, liberty; in all things, charity." Therefore, there should be, in each class, fixed outlines for each study, for all teachers, whatever their varieties of character and tendency. These prescribed outlines should not be considered strait-jackets and go-carts, but only as confirmed principles; not as dogmas, but as results of all reflection and long experience, both at home and abroad, and as to be received until better shall be found. Such principles as develop themselves gradually out of the united experience of the teachers of one school, as a common opinion as to the best mode of action, form a center and rule for the efforts of all, and insure unity of aim and endeavor.

7. Lastly, there may be added to the plan of instruction some general regulations as to discipline. This department we consider, as was already stated, not at all as a separate branch of the labor or the attention of the teacher, but as strictly a constituent of instruction; and, gen-

* "A protest has been made, on strictly supra-naturalist or rationalist and thus quite one-sided grounds, against special instruction, against a general methodology; as being that 'by which the power of each body of teachers is broken down, and their most important individualities, and the benefit arising from them, are neutralized.' But the inquiry may very properly be made, What power? what individualities? For all powers—the most distinct individualities—always have submitted, and always do submit, themselves, in all places and at all times, to a higher will, to universal laws, with a free obedience which makes them loftier and freer."—Kapp, p. 79.

erally speaking, only as the general conception of such externals as must be regulated in order that the attainment of the purpose of instruction may be made as certain as possible. In some points the teachers must be agreed. Therefore, the plan of instruction should define,

a. How the books shall be held; whether *ad libitum*, or on some one model, &c.

b. Before what time the pupils must be present; and after what time not admitted, &c.

c. Where they shall assemble.

d. Whether they shall salute the teacher.

e. Whether they shall rise up or not when answering a question.

f. What shall be their position on the benches.

g. Whether any use shall be made of emulation.

h. What measures shall be applied to those who do not perform their work, or not in time, or not in the right way.

i. What shall be done to those who do not complete their tasks, &c.; and as to other matters in the school, in part of a local nature.

Such matters may seem to a mere observer of little importance; they are, however, in fact, of great importance, and for want of regard to them many schools are ruined. In education, every thing is important; and the conscientious teacher will omit nothing. He will, with religious earnestness, apply himself to great things, and to apparently small ones also. Thus he will save himself a multitude of troubles and obstacles; will, by means of foresight, watchfulness, and careful supervision, escape the painful necessity of inflicting frequent punishments; and will every where appear as the loving, careful, and intelligent father of his pupils. He will look for the essence of things, not in laws, regulations, and rules, but within—in the soul. "Salvation comes from within." "Words are nothing; it is the spirit in which we act."

8. Literature.

1st. Plan of instruction for the common schools, with special reference to the province of Prussia. By J. F. Sluymer, (*Lehrplan für Volksschulen, mit vorzüglicher Berücksichtigung der Provinz Preussen. Ausgearbeitet von J. F. Sluymer.*) 2d ed., Königsberg, 1847. Gräfe & Unzer.

After an introduction, respecting the idea of a plan of instruction, the place of the common school, division into classes, extent of study of each class, &c., the author lays down his course of study. For each study he states, in beginning, its end; the furthest point to be attained. He then discusses the study itself; states the portions of it to be studied in the lower, middle, and higher classes; names proper works, both to be used by the pupils and by the teachers, in preparing and further cultivating themselves; and ends the section with observations on the mode of instruction, the most probable defects and errors, &c. A very useful and judicious work. He adds, at the close, some lesson-bills, with remarks on attendance, and gives a sketch of a good school.

2d. Outline of a plan of instruction for common schools, (*Entwurf eines*

Unterrichtsplanes für Volksschulen.) By R. Kirsch. Leipzig, 1840 Reclam.

Already referred to.*

3d. Brief plan of instruction for the common schools, as a guide to the surer attainment of their objects. By several educators, and edited, with an appendix in school discipline, by A. M. Claussen. (*Kurzgefasster Lehrplan für Volksschulen als Wegweiser zur sicherern Erreichung ihres Zieles. Entworfen von etlichen Schulmännern und mit einem Arhangen über Schuldisziplin herausgegeben von A. M. Claussen.*) 2d ed., improved. Oldenburg, 1844. Stalling. Pp. 50.

4th. The Burgher Schools in Leipzig in 1842. A picture from life. (*Die Bürgerschule in Leipzig in Jahr 1842. Ein Bild nach dem Leben.*) By Dr. Vogel. Leipzig, Barth. Pp. 152.

This work describes the organization of the real schools, burgher schools, and elementary schools of Leipzig. May such a picture soon be possible of all our larger cities!

5th. Ordinance for the Real Schools of Meiningen and Saalfeld. (*Ordnung für die Realschulen zu Meiningen und Saalfeld.*) Meiningen, Gadow. Pp. 76.

A model of completeness as an ordinance for these schools: containing, 1. Classification of schools; 2. Plan of instruction; 3. Regulations as to service of teachers; 4. Regulations for examinations.

* There appeared, in 1829, at Schwelm, (Scherz publisher,) my own "*Plan of Instruction for the Elementary School at Mors,*" (*Unterrichtsplan der Elementarschulen in Mors.*) Pp. 68. A. D.

MAN AS THE SUBJECT OF EDUCATION.

INTRODUCTION.

The *subject* of education is man, in regard to body and soul, in his undeveloped, imperfect state.

The *aim* of education is, to promote his mental and physical abilities, in a manner harmonious with nature, in order that the object intended by nature may be reached as perfectly and as certainly as possible.

This presupposes, above all things, the existence of natural abilities in man; that these abilities can, and should, be developed; and that this development must be effected in harmony with a certain general high aim, which determines the direction of the development.

The science of man, his natural abilities, and the natural development of the same towards a determined highest aim, *i. e.*, Psychology and Anthropology, forms the most necessary foundation of a philosophy of education, and its first part or division.

MAN AS THE SUBJECT OF EDUCATION.

The philosophic observer distinguishes in man, as the subject of education, at once two parts, *viz*: *body* and *soul*; and between these two parts, a difference, as well as a harmony and coöperation. Considered each by itself, the parts appear not only to be different, but in seeming opposition to each other. Considered in union, they appear not only as being naturally and designedly made for each other, but as the two necessary factors to the product called *life*, each completing the other, and each in want of the completion of the other; each one influenced by the other, and influencing the other in return; and both, although thought of as separable, in reality inseparable, and acting always in union.

However accustomed science may be to separate body and soul, it is far more important for the educator to conceive and observe them in their inseparable reciprocal action, and in his educational work, never to operate upon the one without due consideration of the other.

The body is the organ of the soul, in all the outwardly directed activity of the latter. The former is composed of the same chemi-

Translated from Dr. Riecke's *Erziehungsschre*, by Prof. Bengal, State Normal School, Ypsilanti, Michigan.

cal substances which form the whole remaining visible world. An uninterrupted assimilation and return of the particles from the surrounding world, or a continual change of matter is the condition of its existence, and of all its activities. With the discontinuance of this change of matter in the body, its life becomes extinct.

Entirely different is it with the *soul*. In the midst of all this change of matter, by which, in a short time, the body becomes an entirely new one, containing not a single fibre from the former, the soul retains *unity* and *continuity of consciousness*. This single fact is sufficient to prove the fallacy of the materialistic assertion, that the soul is only a product of the physical organism. If it were, its consciousness also would necessarily change with the change of the particles, by whose coöperation it should be originated. Thus the soul must be considered as endowed with *reality, constancy, and independent individuality*.

But *how* does the soul communicate with this material organ? How is it able to influence and to move it? Why is it that the body so perfectly answers its wants? And what becomes of the soul after having lost this material organ by death? These questions have at all times occupied the minds of the greatest thinkers, without being definitely and conclusively answered yet. The different answers made from time to time to these questions, form the different systems of spiritualism, materialism, and that of the real, organic incorporation, (*die organische Vereinigung*; Fichte). An extended treatment of these systems does not belong here. To the demands of a sound philosophy of education, neither the system of spiritualism of Leibnitz, with its predetermined harmony, answers; nor modern materialism with its denial of the independent existence of the soul, and its continuance after death. The philosophic educator must adhere to a real connection of body and soul, and, at the same time, to a real difference between both, if he means to act upon both with efficiency and a hope of success.

If we compare man with other organic beings, we should seek for the specific superiority of the former, not so much in the nature of his body, as a whole or in parts, but rather in the nature of his soul; for the body is always more or less only the expression of the peculiar type of the soul. If, therefore, the perfection of an organ consists in this, that it answers perfectly its purpose, then the body of animals, in its kind, is not less perfect than that of man. Only so far as the soul of man stands specifically higher than the soul of animals, does it need for the expression of its peculiar type a differ-

ently devised and a relatively more perfect organ. Now, the specific characteristic of the soul of man is SELF-CONSCIOUSNESS; *i. e.*, the ability to make its own thinking, feeling, and volition the subject of reflection.

A soul endowed with self-consciousness, and consequently with rational thought and self-direction, is called *mind*.

The soul of the animal possesses *consciousness*, but not *self-consciousness*; it is, therefore, not mind. We may attribute to an animal an *unconscious* reason (instinct), but it never is conscious of it, or applies it with self-consciousness. Man alone possesses the ability to develop himself to a truly mental being. Man is not born with self-consciousness; much less can we speak of his innate understanding, innate reason, innate memory, innate power of volition, etc. All these, afterwards so decidedly predominating, characteristic activities of man, must be considered as the products of development. For this reason, those activities do not manifest themselves at the beginning at all, and afterwards by different persons, and at different degrees of development, in such a different manner.

But the *possibility* that these powers (reasonable thinking, volition, etc.) can be developed in the soul of man in connection with self-consciousness; that, in the normal course of development, they *must*, sooner or later, make their appearance, and become the property of the human soul, constitutes man's superiority, that which gives him the right to be called a reasonable thinking being, and justifies his taking rank above animals, which are not capable of such development; for this development presupposes an originally different organization.

All activities of the human soul can be reduced to two innate elements, which, however, always act in perfect coöperation, namely: first, the ability to receive and to be influenced by impressions made by outside objects, *i. e.*, *receptivity*; and second, the ability to direct itself towards the objects of the outer world, in order to make them the object of its activity, *i. e.*, *spontaneity*. The coöperation of both elements produces in the soul of man, *conceptions, emotions, and desires*. Conceptions, emotions, and desires result, therefore, from three different activities of the soul, different only by the differing relations of the two factors.

The soul of man is active in this threefold manner from the very first moment when, through its receptivity and spontaneity, it enters into intercourse with the external world. This activity is, however, in its first attempts, very weak, extensively as well as

intensively—it is almost beyond the boundaries of observation. But it grows every day—indeed, every moment. It is the identical process which we observe in the physical growth of every plant and animal. It is a gradual increase of strength. Every progress contains the germ of further, as it was the result of a former, progress. At every moment, new productions of the activity of the soul are added to the former, and become thus again the material, the means of more fruits. However gradually and constantly, and, as regards single momenta, imperceptibly, this process of development progresses, nevertheless certain stages or periods in it can be distinguished, which exhibit decided characteristics. These periods, or characteristic stages of development, are of the highest importance in regard to education. For, while they exhibit to the educator the nature of his pupil, from a new point of view each time, they teach him, at the same time, the windings through which the development of his pupil goes onwards. And, as in every one of these periods, every mental power assumes a peculiar position, and as only by the relation in which each stands to the other in each stage, is its peculiar value determined, the educator learns to recognize the particular value which belongs to every one of these powers in every moment of time, and at all the periods of development.

Thus will the educator be kept, on the one hand, from overrating any single mental faculty, which might lead to a hurtful preference of the same, and on the other hand, from underrating any faculty, which might lead to its injurious neglect. These principal stages of development or periods of education are so distinctly stamped and imprinted that language has long afforded designations for them. In our own, as well as in every other, certain periods are distinguished—(1) childhood, (2) boyhood, (3) youth, (4) manhood, (5) old age. To the first three of these is assigned the work of systematic education. It is, however, difficult to determine the boundary between these stages of development; they flow almost imperceptibly over into each other. Mere limitations of time cannot define them exactly, since development progresses sometimes quickly, sometimes slowly. It only remains, therefore, to collect the essential signs or tokens of each stage, into a characteristic picture, indefinite enough, in regard to time, to admit all ordinary variations in development.

The whole life of man can be divided into *early age*, *middle age*, and *old age*. Of these, only the early age is the real period of education. It comprises, first, *the childhood*, which is again subdivided into the *first childhood* (until the end of the third year) and

in the *second childhood* (until the end of the seventh year); second, *the boyhood*, which ends with the fourteenth or fifteenth year; and third, *the age of youth*, which ends with the twenty-second or twenty-third year.

Far more important than exact division of time, is, however, the discovery of the characteristics of each one of these periods of development. These are given by the history of the development of man, as experience places it daily before our eyes.

The first sign of life of a new-born child is its *breathing*. With this it enters into an intercourse with the outer world, and particularly with the air, that subtle, mobile, all-penetrating and all-surrounding elastic fluid, which is destined to be an indispensable element of man's life from his first breath to the last. But the opening of this intercourse with the outer world does not seem to be a wholly friendly one, as is indicated by the bitter cry with which the new-born child greets its new, unaccustomed position. This cry is always more or less a painful or impatient act, and, in every case, is caused by outside influences. It is the child's first involuntary and unconscious reaction against any foreign intervention—its first protest against any attempt to treat it as a mere thing. Of course its friends consider this first utterance as a sign of life, and receive it with great joy, and conclude from its greater or less power, upon a greater or less vital strength.

But besides the air, there are other imponderable, and even more subtle elements of life, which, no doubt, bring their never ceasing influences to bear upon the new stranger, such as electricity, magnetism, light. Immediately observable, however, is only that of light. The eye of the new-comer is, by this singular phenomenon, involuntarily and irresistibly attracted, but also, dazzled by its excess, repelled. Particularly plain is the attractive power of the light, if it reaches the eye of the child in the centre of surrounding darkness; if it is, so to speak, concentrated into one point, as, for example, the light of a candle. Henceforth it is the air and the light which exercise the greatest, most decisive, and most extensive educational influence upon the child. The former opens not only the lungs, and, through them, the voice, but also the ear, that most important channel to the child's mind. The latter develops the eye, and presents to the child the wonders of the visible world, which in return are destined to unfold, and gradually to enlighten the inner world of the child. Unhappy the child to whom Nature has inexorably closed these two doors in such a manner that they never can

be opened by light and air! And yet, also, to such, still other doors or organs are open, which, at least partially, supply the want of sight and hearing.

However great the power of the outer world may be in its influence upon the young child, it is, nevertheless, soon observable, that under and through this very influence, the mental power of the child becomes stronger every day, until it has gained freedom, consciousness, and a complete mastery over the influences of the external world. The eye, at first overpowered and dazzled by the light, gradually becomes accustomed, not only to endure it, but to use it at pleasure for seeing. Henceforth it no longer follows involuntarily the attraction of the strongest light, but it chooses the objects which it wishes to see in the light. The hand, at the beginning wholly inactive, and afterwards groping insecurely about, learns to serve the eye by seizing what the eye beholds. The voice, at first nothing but a monotonous, involuntary, irregular cry, commences to become the expression of definite desire, by naming what the eye beholds and the hand grasps. Thus come order and harmony into the actions of the child. It proves the existence of a soul which gives direction and aim to the eye, hand and voice, and causes the movements of these physical organs to appear at the same time, as activities of the soul. From this it follows, as a matter of course, that the development of body and soul ought to progress symmetrically, and should never be divided, and that it is almost an impossibility to separate it in the first period of development. The growth of the limbs, the gradually growing hardness of the bones, as yet still soft, the expansion of the lobes of the lungs, the development of the brain, the breaking through of the milk teeth, etc., are all phenomena which concern the soul of the child no less than its body. They condition and attest the mental as well as the physical growth. Particularly is this manifest in the gradually increasing activity of the senses. The highest senses, *i. e.*, those which are for its highest mental development, namely, sight and hearing, are just the ones which develop themselves first in the child, and furnish thus for its mental development, the first contribution of incalculable importance; while, on the other hand, the lower senses, namely, the senses of taste and smell, develop themselves much later, and reach still later the necessary freedom. It is, again, the mind of the child which causes a quicker development in the senses of sight and hearing, because the mind is principally occupied with the activity of these senses, and keeps them thus in constant exercise. This fact ex-

plains clearly why the mental development of a child is slower and kept back, if one of the higher senses is wanting; and also why, in consequence of an originally deficient mental receptivity, the development of the perceptive powers progresses slowly and imperfectly, as in the case of the so called *cretins*.

In proportion as the activity of the senses is developed, the perceptive powers also grow. The more definite the activities of the senses, the more definite and clear are the conceptions of the child. Every sense contributes by its activity to the extension, clearness, or correction of the conceptions. Extension and correctness in these can, therefore, not be gained otherwise than through a constant exercise of the senses in correct seeing, hearing, feeling, tasting, and smelling, and by the direction of each sense upon the proper objects of perception. Every perception made through a sense, exercises not only the physical organ as well as the perceiving soul, but leaves also in the latter an impress which alone enables the soul to recall, that is, to remember, previous perceptions. Without these impressions or traces retained in the soul, the latter would be incapable of renewing within itself former perceptions, or, rather, the feeling attending them. The fact that the repetition by the senses of the same observation, and, consequently, of the same perception, facilitates the reproduction of the latter, would be inexplicable without this supposition. These impressions or traces, however, must possess a certain strength, in order to be lasting and capable of a reproduction. The proof of this assertion is found in all those perceptions of the senses which we have made in a state of absence of mind. These disappear within us, *i. e.*, they leave no trace upon our mind strong enough for reproduction. Whilst, on the other hand, all impressions or traces retained in the soul, become strengthened by a repetition of the same perception: hence comes the popular idea and expression—"to impress something upon the memory by frequent repetition." A conception, however, is nothing else than the reception of the characteristics of a perception into the unity of consciousness. This unity of consciousness is mediated by language. The importance—the indispensableness of language for the formation of clear conceptions, and particularly for retaining and renewing the same, arises from its influence in developing the consciousness of the child. Thus language appears among the earliest means of education. Language is the true cement between the soul of the child and everything else which is destined to enter into a reciprocal action with it. Language leads the soul of the child out

of itself, and makes of the soul an active participant in surrounding nature, and in the world of man. But language also conducts the whole outer world *into* the inner nature of the child, and makes it the inseparable property of the soul. Without language there is no distinct conception; without distinction and clearness of conceptions, there is no durable, solid, lasting seizing and retaining, and, therefore, no security and clearness in further application. Thus is language in regard to extension, clearness, durability, reliability, and, consequently, for the whole education, and the value of remembrance and power of thinking the first necessary condition. With language, the mental life of the child grows visibly. The first words which the child stammers with consciousness, introduce it, in the strict sense of the word, into human society. It is the first self-active step with which it passes the barrier of unconsciousness. It is Correggio's exclamation—"I, too, am a painter." The child seems to feel this itself. It does not become tired of repeating its first-learned word over and over again. And as it has, even earlier, heard and understood many words, without, however, being able to pronounce them, its linguistic progress goes on with surprising rapidity. This progress is such that a child with ordinary abilities is able to speak its mother-tongue in its second year as well as it is needful at this period. What immense progress is gained with the mastery of language for the entire mental development of the child! We can speak with it and instruct it by speech. All communications, all exhortations, all reprimands, all warnings,—in short, all instruction and education is henceforth connected with language. Henceforth the whole life of the child is principally a life in and with language. It grows with the latter, and we can say, "The child (and everybody else) knows just as much as it has words to express," with more correctness than "We know only what we have in our memory," as we often say.

From all this we perceive what an important position the perceptive power occupies, as regards the entire mental development of the child. For language is, first of all, the expression of the conceptions. Without it, feeling and volition would remain undeveloped. The formed conception is the light which gives to feeling clearness, and to volition certainty. And, if it must be admitted that the proper development of the power of volition (the will) and the emotion is to be regarded as the principal aim of all education, yet, after all, it is the power of forming definite conceptions upon which the first and greatest care of the educator should be

bestowed, because without it, volition lacks self-conscious strength, and the emotional nature is wanting in quiet clearness. Conceptions (intuition, idea, thought) is the bridge by means of which alone the educator can not only penetrate into the inner nature of the pupil, but also be able to exercise a truly educating influence.

Without a properly developed power of forming definite conceptions, the emotions and volition (will) are mere playthings of foreign influences, and thus continually in danger of being abused and misled by bad, but mentally superior, men. With the proper development of this power, on the other hand, grow freedom and independence of the will. Only he who *knows* can be really free. Desire receives, after all, its full strength, its true value, *i. e.*, becomes free will, when it is enlightened and governed by *knowledge*.

The development of the conceptive faculty commences with intuition (*anschauung*) which will lead to *self-intuition*, which calls forth *self-consciousness*. Intuition of external objects consists in a total apprehension, the limiting and distinguishing of certain outside influences which belong together, and which operate simultaneously upon our senses. This necessarily leads to the comparison of one object with another. After the child has learned to distinguish several objects from one another, and is conscious of the difference between them, the next step is to distinguish its own "self" from the objects of the outer world. At first this is done in a similar manner as it distinguishes one object from another. This is proved by the fact that children at this period speak of themselves in the *third person*. But soon after this, the child recognizes in his own self, in his whole condition, in his volition and his experiences, no longer an extern object, but something internal: it learns to distinguish its own "self," not only from all outer objects and phenomena, but it confronts the latter as an independent power, *i. e.*, no longer as an object, but as a subject endowed with self-determination. Henceforth the child speaks of itself in the *first person*. This is the dawn announcing the rising sun of *self-consciousness*. As a general thing, this glorious conquest of growing development is gained in the third stage of life, or youth.

The picture or delineation drawn thus far, comprises, no doubt, the most interesting, most important, and most remarkable period of life. It is interesting, like every beginning of an endless progress, because here everything yet lies simple and clear before our eyes, and can, as to origin and progress, be observed and pointed out. It is important, because in this seemingly insignificant beginning are neverthe-

less included and prepared all further developments and the end. It is the fundamental sketch or outline from which nature, in the continuance of the structure, no more, or very seldom, deviates. It is remarkable, because the receptive and reconstructive powers in no other period manifest themselves in such an astonishing manner, in both the physical and psychological organism. The emotional nature and the will develop themselves in the child in a similar manner as the perceptive faculty. Emotions consist originally in the sensations produced by impressions upon the senses. We call them pleasant if they satisfy our natural appetencies, and unpleasant if they do not satisfy them.

Every sensation of the pleasant or unpleasant presupposes, therefore, an impulse in the child, which announces a want and calls for its satisfaction. At the beginning, our impulses and wants are extremely simple, calling for little more than life and motion. The wants of the child are, therefore, at the beginning, confined to the preservation of life and free motion. The most simple means answering this purpose, satisfies its appetency, and produces in it a sensation of the pleasant. The child, however, does not remain in this state. Its appetency and its wants grow daily. The more wants the child has, the more willful it will become. These wants are multiplied partly by nature itself, but also, alas! by a wrong education, by means of an artificial multiplication of the same. It is evident that in this case it is more difficult to satisfy the child, and that it must often have unpleasant perceptions, which again in turn excite its opposition, and thus may result in moroseness, willfulness, and obstinacy.

It is, therefore, the duty of the educator to confine these wants, as much as possible, within the bounds set by nature, but also to satisfy them, if they are within these bounds, in order to preserve in the child a pure feeling of that which answers best the real demands of nature. By an unnatural increase of wants, as well as by arbitrary denial of the real needs of the child, impulse and emotion become perverted, education is made more difficult, and the moral development of the child takes a wrong direction.

The more difficult period of life is, however, the now following second period of childhood, the boyhood or girlhood.

Henceforth the newly inaugurated contact with the outer world is extended to an unlimited degree. Hardly is the child able, in the crowd of impressions which rush in upon it every moment, to retain his balance, and to keep united the exterior with his interior world

by means of speech. However, with the increase of these impressions, grows also its strength to receive and to retain them. With a thousand feelers the soul of the child reaches out in the world. Like a bee it flies from flower to flower, and rocks itself in the unbounded atmosphere of perception, feeling, and desire. There commences a contest, as it were, a struggle of the soul of the child with the outer world. Every impression presenting itself is received, but not every one becomes the property of the child's soul. Those impressions which are not completely mastered by the soul of the child, disappear again, either without leaving a track behind, or—and this is most likely the case—they affect unconsciously the perceptive faculty, the direction of the will, and the emotions, whether for gain or loss. From this it follows, how important it is that the impressions made at this period by the surroundings of the child upon the latter, should be closely watched and controled.

The external weapons of the child in this contest, are the senses. Its internal weapons are, the faculties of perception and of forming conceptions, the memory, and the power of abstraction. The latter, as well as the former, become stronger by such unceasing exercise.

It is of the highest importance that the child learn to make a proper use of its senses, particularly of sight, hearing, and feeling. Yet more important is it, that the child is kept in constant practice in proper attention, observation, distinguishing, and comparing. The child still lives in this period, principally in sensual perception (*Anschauung*.) Real, individual objects (the concrete), form as yet the child's world. But the impressions offered by the external world always change their form more and more, as the mind of the child reflects upon them; they are, by means of the imagination, reproduced, partly true to nature, partly in new fantastic combinations. Therefore the predilection, in this age, for stories, (particularly *Maehrchen*,) the pleasure in pictures, especially in such as leave much scope for imagination; therefore the great inclination to such plays as are a dramatic imitation of domestic and social relations, and occupy, at the same time, the imagination. Recall in your mind, the plays of girls with their dolls, and those of the boys with their soldiers. But the powers of the child become gradually stronger. In the activity of the soul, choice comes more and more, and finally freedom. All attainments and efforts become more conscious, more independent of the exterior world, or use the latter as a means. The impulse to action, which, at the beginning, was mere desire for mechanical imitation, becomes the desire for attainments

which may govern the objects of the external world. It is also here, again, the power of perception which exercises a predominating influence upon the whole mental progress, relatively upon the freedom of the mind from the bondage of the external world. After the child has had sufficient practice in the apprehension of such pictures of the exterior world as are perceivable by the senses, *i. e.*, in a conscious exercise of the faculty of forming sensuous perceptions, then again in the repetition, combination, and comparison of the same, by means of the imagination, in view of certain considerations, then the next step is, the separation of the essential from the accidental qualities of an object, and the collection of the former into the unity of consciousness, *i. e.*, *the formation of ideas*. With this, the child enters a new world, in which it is, as a thinking being, destined to become always more at home, *i. e.*, *the world of ideas*. Henceforth it looks at the objects of the exterior world differently. It looks not only at the single individual object, which influences directly its senses, it embraces a vast number of similar objects, and combines these many individualities into *one* whole. The idea formed thus (based, it is true, upon intuition—sensual perception *Anschauung*—but being itself no intuition, but a pure act of thinking) is collected into the unity of a “word,” by which it recognises the whole as its mental property. It is evident, that by this mental activity, the foundation is laid for the government of the mind over the exterior world. The proud word put under Linnaeus’ picture—“*Deus creavit, Linnaeus disposuit,*” is, in this sense, true of every man awakened to independent thought. But also the language of the child has, by this mental process, gained new strength and new copiousness. Just so long as it was limited to the domain of concrete perceptions, it was necessarily poor, for it was completely dependent upon the direct intuition of the senses. It was only able to name what the child had seen, heard, felt, smelt, or tasted. For more than that, indeed, the child had no occasion. It had enough to do, to find its way within this circle, and to impress upon its mind the lessons in language which it received from its surroundings. But now the child is upon a higher standing point, from which it overlooks a more extended circle. It systematizes its knowledge according to a law which lies within itself. It increases and extends its language as well as its ideas, from within. It no longer takes lessons in language simply from the external world, but it is its own teacher, *i. e.*, it forms ideas spontaneously and devises words by which to express them. It speaks and thinks in ideas which, from the most

simple abstractions, always ascend to higher ones, and which increase their contents by analysis, and their compass by synthesis.

It is self-evident that the progress described thus far could take place in this manner only in the beginning, *i. e.*, in the very first development of human language at large. The child in our days finds an already developed language. Its earliest and greatest task is only to familiarize itself with the same, in a manner that it becomes its *native* or *mother tongue* in the strictest sense of the word. That is, that it becomes the source of its ideas, and the means of its mental clearness. It cannot do, and need not to do much for this purpose. It finds every thing prepared, and it becomes accustomed to give to its ideas the same names as those do who surround it. Most names for higher classes of ideas the child hears earlier than it is able to find their true meaning in a synthetical manner. It hears and retains, for instance, much earlier the name "tree" than "*apple tree*," or any particular *kind of apple tree*. Therefore, in order that the child may always become more and more conscious of the contents of its ideas, *i. e.*, obtain perfect clearness, it has to proceed analytically (from the general to the specific) rather than synthetically. In the main points, however, the progress of development of the conceptions, the comprehension, and the language of the child, is also, in our time, similar to the original one, described above, with the only difference, however, that the language already developed facilitates and accelerates the formation and fixation of his ideas. This must be so, as the whole process is based upon general psychological principles. The mental progress of the child consists, therefore, in this: "The child gains gradually in clearness of its ideas in the same ratio as it grows in copiousness of language." Its thought and language become continually more clear, self-conscious, and correct. The ideas received from others, imitated, or formed by its own self-activity, will always more and more become its mental property. It systematizes, connects, and enriches the same from day to day. It is, however, even yet observable in our time, how talented children, in such cases, when either their native language is sometimes not immediately at their command, or words are wanting for certain ideas, will complete the latter by words of their own creation, very often in an ingenious manner, and mostly in harmony with the spirit of their native language. This always steadily increasing wealth of materials for a knowledge of the world and nature, leads finally to the seeking and discovery of those general laws which are the basis of the phenomena of all natural things.

By this, the mental government of man over the exterior world becomes complete. That which, at the beginning, as an overpowering chaos confused and almost crushed the childish soul, that which was afterwards perceived only in detail, and later yet, systematized and brought into order and comprehension—all this is now subjected to the government of general law, and thus the seemingly boundless arbitrariness of everything existing is reduced to severe necessity. Now the youthful mind commences to watch the secret laboratory of the Creator, and to anticipate the union of freedom and necessity in the highest *spirit*, guided by his visible revelation. Also, here the perception (apprehension, recognition, knowledge) plays the most important part, which exercises the greatest influence upon feeling and the will, in regard to excitation, as well as in regard to the proper guidance and strengthening of the same. For, if the perceptions are predominatingly *sensuous* and *concrete*, nothing but a *sensuous* feeling and desire can be expected. When, in the imagination, *the idea* predominates, feeling and desire become rational and self-conscious. Our feeling and desire becomes rational if the perceptive powers have reached the point where the insight of the conformity to law of everything existing is gained, where reason induces man to look at everything in the light of higher general laws, and where man is capable of recognizing the harmony of the exterior world with the spirit.

If we are to distinguish and to name the principal periods of the development of the mind of man, upon the basis of the description given of it thus far, it is, above all things, clear, that the development of the human mind progresses from the *simple* to the *compound*, from the *specific* to the *general*, from the *concrete* to the *abstract*, from the *perception* to the *idea*, from the *phenomenon* to the *law*. But, as this very progress has its principal type in conception, as was proved, the characteristics of the several periods of development will have to borrow their designations principally from this aspect of the development of mind.

If we keep in mind the earliest and latest state of mental development (*i. e.*, *greatest want of freedom*, and *dependence* on every external impression, on the one hand, and *greatest freedom*, and *mastery over* the outer and inner world conformably to self-discovered laws, on the other hand), *three stages* or epochs present themselves at once, corresponding with the *childhood*, the *boyhood*, and the *age of youth*.

The first stage (childhood) is the one in which man is yet entirely

under the dominating influence of the external world, and of the charms of the senses. Perception, desire, and feeling are in this period overrulingly *sensuous*. The perception manifests its activity in the formation of sensual intuitions (*Anschauungen*), and in reproducing and combining the same (*Einbildungskraft*). Anything not falling within the circle of the senses, is, for the child, either not existing at all, or it is only approximatively accessible, by means of sensible illustrations (figures, stories, parables, allegories, etc.). The sensation of the pleasant and the unpleasant is, in this period again, determined by sensible impressions. It is thus principally the sensuously pleasant or unpleasant that produces in the child the feeling of pain or pleasure.

In a similar manner are the desires of the child, in this period, directed principally upon sensual things and activities. What is pleasant for its senses, that it wishes to possess or to carry out; what is for them unpleasant or in opposition, that is avoided and detested. It is, however, with all this, not to be denied—for it is of great importance that it should be understood and acknowledged—that there are within the child already, in this period, *other inclinations* and *impulses* of not purely sensuous nature, which exercise a great influence upon the development and direction of the mental life. Particularly should be mentioned here, the *love* for parents and other persons from which the child receives acts of kindness. It is true, at the beginning, it has also a sensuous element; but soon a higher nature is observable, which might even make the child capable of sacrifice for those which are the object of its tender love. It is the sunbeam of an inner life which attests the higher origin of the soul of man. It contains heavenly light and fertilizing warmth for the life of feeling, and is thus, for education, of incomparable value.

Another impulse of a higher nature is the *conscience*, which awakens also in this period. For it is not something that is made, formed, or acquired; but it is likewise a necessary product of the peculiar powers of the mind of man. *Conscience* is an involuntary direct perception, that an exertion, a desire, an action, is in harmony or in discord with that which has been recognized as corresponding with a natural law of our spiritual nature, and which has, therefore, been recognized as being good and praiseworthy. It is thus an interior monition which makes the one who has done right feel that he is in harmony with himself; and the one who has done wrong, feels, in consequence of it, that he is in hostility with himself. The first beginnings or intonations of conscience correspond, as a matter of course, as yet with the mental dependency of the child. It is not

yet conscious of the conflict in its own breast. The judgments of others—of its parents—are as yet its law. Thus far it has not been disquieted by discord with itself, but with its leaders, and the models placed before it for imitation. Its moral centre of gravity lies yet beyond itself. The authority of its parents is yet acknowledged, an authority afterwards assumed by its conscience, as the voice of an invisible judge. The involuntary inner monition, that its actions are not in harmony with the will and the laws of its parents, disquiets its conscience. But even here, the external leads by degrees to the internal. The place of the parental will will be assumed by the law slumbering within itself, awakened by the voice from without. With the awakening of its self-consciousness, the child will always understand more clearly that, by a violation of its inner moral feeling (law), it comes not only into an unhappy conflict with external authorities (such as parents, etc.), but also with itself, *i. e.*, with its own moral being, which is destined to imitate the Divine.

It is self-evident, how highly important the strengthening and proper guidance of this consciousness of right must be for education, as it contains, at the same time, for every man, the only secure, direct restoration of the harmony between virtue and happiness.

The *second stage of development*, corresponding with *boyhood* (commencing with about the seventh year), strips off gradually the shackles which were put on the child by external impressions, and brings the always growing spiritual strength into a certain equilibrium with the external world. It is, then, the stage of development of the awakening understanding which opposes the external power of sensuous impressions with the internal power of comprehension and the sense of order. The exterior world is the material out of which the boy forms more and more self-actively his own world of ideas. He is, indeed, borne and carried on by the powerful stream of sensuous impressions, but he no longer follows this outer attraction without a will of his own, but only gradually, like a skillful swimmer, who uses the waves as a bridge, in order to reach his self-selected aim. It is consequently the *idea* which presents in this period the most important force involved in the mental development. It is the idea which ripens the perceptive powers, and elevates the activity of the will to well considered, cautious decision.

The *third period* of mental development (*the age of youth*, beginning with about the fifteenth year) generalizes the *idea*, investigates everywhere the conformity to underlying law, and recognizes the law itself, *i. e.*, it is the stage of rational thinking (*rationality-Vernunftkenntniß*). Arrived thus far, man becomes capable of

subordinating also his will to the control of reason. Man elevates himself in this period upon a standing point from which he holds free sway over the exterior world. This is done partly by the *idea* (*Vernunftbegriff*), partly by the *ideal* (*Vernunftbild*). The fundamental power of the former is *reason*, *i. e.*, the perception of those general and fundamental laws underlying the phenomena. The fundamental power of the latter is *fancy* (*Phantasie*), *i. e.*, the power to represent the general rational ideas (*Vernunftbegriff*) in intuitive (*anschaulich*) pictures. This stage of development is, therefore, the period of *reason* and *fancy* (*Phantasie*). The youth endeavors to answer the questions as to the first cause of all things—the “Whence?” the “Whither?” and the “Wherefore?” He attempts to answer them either by syllogisms or through the ideal. The syllogism causes *conviction*; the ideal, direct *satisfaction*, and consequently, *contentment*. The former gives to the will instruction how to reach an aim; the latter directly shows it the aim itself. It is, therefore, no matter of surprise that the *ideal* *inspires* and *inflames* the soul directly to actions, while, on the other hand, the *idea* alone leaves it cold, by instructing it only about *truth*, *i. e.*, about the harmony of a conception with the general laws of thinking, as they are deeply rooted in the thinking subject.

The *ideal* is the field for *art*. This period of development is, therefore, principally, also the *art age*, *i. e.*, the period of the greatest susceptibility and inspiration for art and its productions, which is particularly manifested in the love of youth for poetry.

All these characteristics of the three principal periods of mental development go on with corresponding changes in the physical development.

The *physical characteristic of the first period* shows itself in the extraordinary growth of the child, and in its bodily dependence on its mother. The growth of the body is, in childhood, the most marked. The child which, at its birth, measures about eighteen inches, and has a weight, on the average, of eight pounds, reaches, at the end of childhood (seven years), more than double the length (about forty-two inches), and moreover five times its original weight; out of which follows, that the functions of digestion are predominately active at this period. It is a continual receiving and assimilation of nutritious matter, which is, in this period, predominant among all the bodily functions. The dependence on the mother is manifested by the fact, that the baby receives its food at the breast of the mother, by whom its life also was wholly supported as a fœtus. Gradually, it is true, it frees itself from this source of food, and its dependence on the

mother gradually decreases. It is, however, nevertheless an undeniable fact, that the physical and mental prosperity, the whole character of the child through the whole childhood, is principally dependent on the mother, and is in a prosperous or languishing condition, according as this support is good or bad. In this fact lies the extraordinary educational influence of the mother upon children, which cannot be supplied by any other influence.

The characteristics of the physical development in this period are thus similar to those in the mental development, namely: a predominating receiving and appropriating of materials from without, under the preponderating influence of the exterior world.

In the *second period*, the body reaches or attains a certain symmetry in its proportions, and that solidity in the osseous system which enables the boy to resist the exterior world, and fits him for exertion in manual labor. The appearance of stronger teeth indicates a gradually growing equilibrium between external influences and the reaction on the side of the young body, as far as they prepare the body for receiving more solid food, particularly animal food. In the same proportion as the soul takes the external world to itself, and it forms also its physical organ, *i. e.*, the body, out of the most different nutritious matters. Muscles and bones attain almost their permanent proportions. The brain ceases to grow. The physiognomy receives its permanent form. The body, however, possesses thus far not yet that freedom and ripeness which fits it for powerful action upon the exterior world. The powers of generation are yet slumbering. A certain immaturity is as yet in all parts of the body. The latter is, so to speak, as yet a closed bud that will burst open in the *third period, in the age of youth*. Breast and pelvis, as well as the organs of breathing, and the sexual organs, develop themselves perfectly, and often with such rapidity that great caution is needed in order to prevent their development from becoming injurious to the life of the whole organism. It is, therefore, often the case, that just at this period is sown the germ of diseases of the lungs. The development of the larynx, also, the features becoming more defined, the appearance of the beard and body hairs, and of the last molar or wisdom tooth, all announce the attainment of the full size and that strength which gives the self-conscious power to act upon the outer world for human purposes and to the full measure of human accomplishment, although the greatest perseverance in exertions depending upon longer exercise, experience, absence of passion, and discretion, is, as a general thing, the property of a later period in life, *i. e.*, of manhood.

DR. GRASER'S COURSE OF INSTRUCTION

IN THE

COMMON SCHOOLS OF BAYREUTH, IN BAVARIA.

DR. GRASER of Bayreuth, has developed a system of instruction, the principles of which he claims, are founded in the nature and purposes of education, and of man as its recipient. This system has been introduced into the common schools of his native place, and has attracted much attention from a class of teachers in Germany. Dr. Bache gives the following sketch of its general principles, and of its development in one of the common schools of Bayreuth :

After considering the constitution of man, Dr. Graser lays down the principle, that he is destined to live in accordance with it, and in the pursuit of holiness, (godliness, divinität.) The child must be educated in reference to this destination. Man requires strength of body, hence physical education, and of soul (virtue,) hence moral education. His bodily strength must be rendered available by dexterity, his virtue by prudence. Both must be directed by intelligence, hence intellectual education. Besides, he must have a just sense of the harmony in the relations of life, or a feeling of fitness, or beauty, hence aesthetical education. As a condition of his being, man stands in certain relations to external nature, to his fellow men, and to God. Instruction in nature, man, and God, must, therefore, form the materials of his education. Nature must be viewed in its productions, the objects of natural history, or its phenomena, the objects of natural philosophy, or physics. To complete the study of nature, geography, arithmetic, geometry, and its applications, and drawing, must be called in, and the practical application of the study includes technology and domestic economy. The study of man requires that of the theory of gymnastics, dietetics, history, and geography. To approach to God, man must know him. The first form of godliness is truth. God's truth, then, as revealed, should be man's study. The second form is justice; jurisprudence in higher education, or the laws of the land in power, should, therefore, also form a part of man's studies, and as accessory subjects, history and grammar. The third is love, taught through morals or practical religion. The fourth is beauty, requiring the study of painting, music, poetry, and decorum. Dr. Graser next endeavors to modify the several subjects of education, according to the special wants of those who are to receive it, which he considers to depend upon their political situation. Thus, for his country, he divides men into three classes, the people, or governed; the nobles; and the reigning family, or governors. The first he considers as more concerned with material objects, the others with the ideal, or spiritual, and hence adopts two divisions of the subjects of study, as calculated for their schools.

In the arrangement of instruction, his principle, that the school must prepare for actual life, is brought into play. He admits no separation into branches of study, no natural order of succession in the branches, but insists that all instruction shall be grouped according to the wants of some particular mode of life. Taking society as the state of man's existence, he begins instruction with the paternal mansion of the child and his family relations, and attaches to these all the elementary knowledge of morals, manners, speech, number, form, objects, drawing, and writing, which would be found necessary in this sphere. He next widens the sphere to include the place of residence, with its community; extends it to the circle or judicial district, to the province, to the country, to the assemblage of the German states, the division of the earth, the entire earth, the universe.

The application of Graser's principles to a common school will be best understood by following up the course of instruction as far as it has been developed in one of the schools of Bayreuth.

The *sixth*, or *lowest class*, is instructed in what relates to family life. The exterior of the house. Its interior. Its inhabitants. Their wants.

The classification followed in Würst's reading book will show, generally, the way in which these subjects are taught.

1. The paternal mansion, considered as the dwelling place of the family. Houses and huts. Stones and lime. (Story of an accident from playing with lime.) The walls and the roof. Doors and windows. (History of the discovery of glass.) Earth, fire, water, and light. Comparison of building materials. Gloom, darkness, light, shadow. Property. Owner. Rectitude. Goodness. Decorum. Politeness. (Story of the polite and the rude boy.) Pilfering. Theft. Robbery. Robbers. 2. The inmates of the house. Enumeration of them. Exterior distinctions between the men and animals. Distinctive qualities of the different domestic animals. The poultry. Further distinctions between men and animals. Voice. Speech as a characteristic of man. Power of induction. Moral order of the family. (The intractable child.) Uses of the domestic animals, obligations toward them. (Tormentors of animals.) Noxious domestic animals. Conduct toward them. Flies. Spiders. Review of conduct toward animals in general. 3. Wants of the inmates of the house. The dwelling itself. Furniture and clothing. Arrangements for their preservation. Inviolability of the property of children and servants. Activity and offices of parents. Duties of children toward their parents.

This course is commenced between six and seven years of age, and occupies about six months. I shall go into some particulars in regard to parts of the instruction. 1. The dwelling-house. The teacher shows a model of a simple dwelling-house, of which the gable end may be removed, and is a rectangular block, surmounted by a triangle. The teacher takes off the triangle, and counts the number of its sides audibly; this part of the house has how many sides? is his question. Three. He shows that it has also three corners, or asks how many corners, leaving to the more intelligent pupils to lead the class in the answer, and when the answer is obtained, causing it to be repeated by all. Watching the class, if he finds inattention, he addresses the question where it prevails, giving the pupils as much as possible to find out, in order to keep up their attention as long as their physical constitution will permit. A change of subject, physical exercise, or rest, should be allowed when the attention is exhausted, the habit of which may be gradually established by training. This inductive course, combined with repetition, is always employed, and in what follows I shall merely indicate the order of the instruction. The figure in question is three-cornered. Interior corners are called angles.* It is a three angled figure, and called a triangle. Next, the four-sided figure is similarly treated. Then the triangular cap is set upon the rectangle, forming a five-sided figure. This part of the model is now placed before the children to draw upon the slate, with the following preliminary instruction. Each group of three or four children, or, if convenient,

* In German, the space formed by the meeting of two lines viewed from the interior, or from the exterior, has different names, and the compounds of these, with the numerals three four, five, &c., constitute the names of the figures, as *drey-eck*, *vier-eck*, &c.

each child, is furnished with a rectangle of pasteboard, or thin wood, in which five holes are pierced, corresponding to the five angular points of the pentagon to be drawn. These are marked on the slate by inserting the points of the pencil through the holes, and the child is practiced in joining the points by hand. Practice in this constitutes his first drawing lesson. Returning to the rectangular part of the model, the positions of the vertical and horizontal boundary lines are pointed out, and a plummet and common mason's level are shown, to give a notion how these lines are established in practice, and a correct idea of their actual positions. Attention is next called to the horizontal side of the triangular cap, then to the sloping sides. A comparison of the angles which they form with the horizon, and that formed by the horizontal and vertical lines, leads to the distinction between acute and right angles. The objects of a triangular roof, and of the rectangular lower part of the house, are next stated. An obtuse angled polygonal roof is substituted for the one already mentioned. The form gives an illustration of the obtuse angle, placing it upon the model leads to counting as far as seven. Dividing the house into stories by lines, to counting to nine. The children are next led to enumerate the parts of the house as shown in the model, and with the names of which they are of course familiar, as the doors, windows, &c. The distinction between squares and rectangles is made obvious. The parallelogram and rhomb are also here introduced. The distinction between curved and straight lines, &c. Different simple drawings of cottages are made. Counting is continued to ten. Addition is commenced by referring to the number of panes in the windows of the model, covering up those not to be added, and proceeding from smaller to larger numbers, within the limits of ten. These are extended to one hundred, stating to the children the mode of formation of compound numbers, to assist their memory. Subtraction is introduced by reference to the same illustrations. Mental arithmetic alone is practiced. In adding numbers which exceed ten, the tens are first added, then the units, carrying to the tens, if necessary; thus, in adding twenty-two and thirty-nine together, their process would be, twenty-two is two tens and two ones; thirty-nine, three tens and nine ones; two tens and three tens are five tens; two ones and nine ones are eleven ones, or one ten and one one; five tens and one ten are six tens, and one, sixty-one. Multiplication is begun also by a reference to the window-panes, which afford, usually, many combinations. Division is similarly treated, the question being such as the children would take an interest in solving, and their coins are early explained to them, and made the subjects of their exercises. Fractions grow naturally from division. The foregoing instruction is interspersed with other matters yet to be described.

In fact, there is no fixed order of exercise, or school plan, according to Graser's method, but the teacher is relied upon to advance the different parts of the instruction duly, according to his observation of the progress of the class.

The elements of physics, natural history, technology, and domestic economy, are thus introduced, it being understood that the same mixed method of question and answer, and of direct and inductive teaching, is used throughout. Men did not always live in houses, but once in caves and huts. The inconveniences of such places from cold, damp, &c., are pointed out. The materials required for a house, as stone, mortar, wood, iron, &c. Most of the children have seen the operation of building, and can tell the materials required; those who have not observed, will probably not let an opportunity pass afterward of so doing. Whence the stone is procured, quarries, quarrymen. The hewing of stone. Limestone and lime; the objects being presented to them. The conversion of the limestone into lime. The slaking of lime, making of mortar, its hardening, laying the stones. Digging of the trench for the foundations, &c.

Next the wood is taken for the subject of a lesson. The distinction of wood from fruit-trees and forest trees is shown. Shaping of the wood by sawing. Beams. Planks. Boards. Laths. Trade of house carpenter. Of joiner, &c. In the same way iron is treated of. Bricks and tiles. Glass.

In recapitulating these matters, or in presenting new ones, the elements of grammar are begun. The nouns and adjectives are easily distinguished from the other parts of speech by the induction of the pupils themselves, when directed in the right way.

Used as incidental matters of instruction, but not as forming its ground work,

it appears to me that the foregoing subjects are of value, and that useful hints may be gathered from the way of treating them; hence, I am led to remark upon certain sources of difficulty in their execution. The instruction may be rendered wholly ineffective by the teacher treating the subject in a mechanical way, so that what is intended to excite the observing and reflecting faculties, especially the former, shall become a mere memory of words. It may be rendered actually mischievous by the teacher inculcating erroneous ideas of natural phenomena and natural history. The teacher's guide should be prepared with care, and revised by adepts in the sciences, to avoid such mischief, which I have known to occur in many cases.*

Elementary ideas of right and wrong, of goodness, of "fitness," ("the beautiful,") are inculcated in the following way: The dwelling being still under discussion, the attention is called to the parts of the door, its lock, &c. The object of the door and its fastenings. Who may rightfully enter a house. The right to put out those entering wrongfully. A story is told here of a poor child begging for admission to a house during a storm, cold, hungry, and ill clothed. The child is received and supplied. The moral is drawn from the children, and benevolence, love to man, is inculcated. In entering a strange house or room, leave must be asked. The contrast of good and bad manners in making or answering the request is brought home to the children. The subject is next followed up by supposing an unlawful entry made into the dwelling, and the difference between theft and burglary, or stealing and robbing, is brought out. The smallest possible theft of any kind, or pilfering, is immoral. A story is told to illustrate the fate of the pilferer.

Next the inmates of the house and out-houses form subjects of instruction, the mode of treating which will easily be conceived by referring again to the general enumeration of the arrangement of the subjects. Exercises of speech and thought, natural history of domestic animals, and much elementary technological information, are thus introduced. Proverbs are committed to memory, inculcating moral lessons or duties.

The next head furnishes an opportunity to examine the wants of the inmates of the house, the topography of the dwelling and its grounds, as introductory to geography, the construction and uses of the furniture in continuation of technology, and to introduce the drawing of simple articles of furniture. Speech is considered as the means of communicating between the members of a family. Other modes of communicating ideas by signs and gestures are adverted to. The sight may be addressed through pictures as substitutes for verbal descriptions addressed to the ear. Hieroglyphics or signs may be substituted for pictures. Trials of these are resorted to, as, for example, the curve of the fore-finger and thumb forming a C, may be imitated on the slate, and understood to stand for "come here." A number of signs, having reference to letters subsequently to be formed, and to their actual use in the spelling of words, are taught to the children, who at first are delighted with these acquisitions, but after a time find the accumulation of signs very troublesome. This is supposed to prepare the way for a zeal in acquiring writing and reading. To connect the written with the spoken language, Dr. Graser goes back to the origin of the former, and imagines that the forms of the letters result, in general, from an attempt to imitate the position of the lips, or lips and tongue, in sounding the component parts of a word. This requires a difficult and in many cases a most fanciful† connection to be formed in the mind of the pupil between the sound and its sign. Four different

* To show that this is not imaginary, I may mention that, in a school where the subject of the caustic nature of lime, and of its heating during slaking, were under examination, they were explained thus: the limestone was turned into lime by heat, in which process it absorbed a great deal of heat, which made it burning, or caustic; when water is thrown upon it, the water unites with the lime, and this heat escapes.

† I have called this fanciful, for so it appears to me, but speak in no spirit of disrespect. This method is connected, in Dr. Graser's school, with the instruction of the deaf and dumb with other children. The maxim prevailing in the principal schools of Germany for the instruction of the deaf and dumb is, that they must be restored to society by enabling them to understand speech and to speak. Hence the first attempt is to make them understand the motions of the organs of speech, and to imitate them, forcing air through them so as to produce the sounds. The perseverance and zeal expended in attempting to carry out this idea are almost incredible. In some of the institutions for deaf mutes much of the instruction is actually communicated through the means of speech.

series of lines are ruled by the pupils upon the slates, on which they write; one is a set of two parallels for the standard letters; another of three parallels for the letters which project above the standard lines, the interval between the upper two being less than that between the lower; another set, also of three parallels, for the letters which extend below, and a fourth for those which extend in both directions. Words are formed as soon as possible, and of a kind intelligible to the child, and sentences of the same character. I doubt much if the pupil receives any real aid from the connection assumed between sounds and signs. The determinate sound of the letters in the German renders the spelling easy, when the true sound and the signs of the letters have been connected in the memory.* The previous practice of drawing has prepared the hand, so that there is a remarkable facility in requiring the manual part of writing. The selection of intelligible sentences carries out the habit of understanding every thing as it is brought forward. Reading the written hand soon becomes familiar, and the transition to the printed letters is easy. In all this instruction the blackboard is used for illustrating the lessons. Elementary principles of grammar are inculcated in connection with the writing and reading.

In the next class, occupying also six months, the instruction is connected with "life in the community." This includes the political organization of the community, with the reasons for it; the geography of the place; the continuation of the exercises of thought and speech; the commencement of Bible history; an extension of instruction in morals, technology, and natural history; of the elements of form; of grammar; of drawing and writing; so at least they would be called in the other schools. The plan of arrangement is as follows:

LIFE IN THE COMMUNITY. History of the formation of communities, with their wants and obligations. Original existence of man. Union of several families. Fatal accidents in communities. Necessity of mutual aid in misfortune. Necessity of a magistracy. Arrangements for safety. Taxes. Laws and punishments. Wants of the community. Roads, bridges, &c. Watchmen. Servants. Council-house. School-house.

2. IN REFERENCE TO MAN. The five senses. Their abuse exposes to punishment. Information in regard to the organs of sense. Their injury or deficiency. Their preservation and exercise. The mind. Perception not required for thought, or for distinguishing the true from the false, the good from the evil. The soul. Man has reason and will. Stories of good actions. The good is not always rewarded in this world, but there is a God.

3. RELATION OF MAN TO GOD. Attributes of the Deity. God is the creator, the supporter, the governor of the world, the father of all men, the high and righteous judge, a spirit. Duties to God. Honor, love as of a child, trust, thankfulness, reverence. Constant remembrance of God. Conscience. Stories related. The evil conscience. Conscience makes a man anxious and uneasy when he does wrong. The moral to be inculcated is, that man has within him a monitor which warns him against doing evil. Story of a pleasant evening. There is also approval within one's self of good deeds. Necessity of a revelation to man. Stories from the Scriptures related. The creation. Cain and Abel. The deluge. Those saved. The prophets. Expectation and coming of the Messiah. The three wise men. The child Jesus. John. Jesus the teacher, saviour, and founder of the kingdom of godliness.

4. RELATION OF MAN TO NATURE. The native place and its environs. The village as the dwelling of the community. The cardinal points. Position of the buildings. Streets. Roads. Springs. Stories of the village. Review of the position of the village. Natural history. Beauties of nature. First walk in the garden. Fruit trees, shrubs, herbs, flowers. The fields, hills, valleys, woods, and forests. Morning ramble in the woods. Morning song. Insects. Stories of cruelty to insects. *Natural philosophy.* Heat. The sun. Sunrise. Song. Division of time. The calendar. Vapor. Storms. Thunder and lightning. Rules for protection.

5. RELATION OF MAN TO SOCIETY. Age and youth. Infirm persons. The able bodied and the sick. Duties toward and protection of the sick. Employments. Laborers and tradesmen. Peacefulness. Willingness in service. Uprightness. Respectfulness. Disposition to work. Poverty and riches. Contentment.

The same elements of instruction are, in the next class, grouped about the next political division, the circle, the course occupying, as before, six months. Beginning here, the division restricts some portions of instruction unnecessarily. In general, however, I was satisfied with the progress of this class. I had no opportunity of judging of the results of the following division, namely, "life in the province," no class being in that stage of progress.

In the next following, or "life in the kingdom," the political circumstances became too abstruse for the intellectual development of the children, and the attempts at induction in regard to the government failed almost entirely. All

* I have a specimen of writing from one of a class who had been five months under this instruction, remarkable for the correctness of spelling and execution. It was written from dictation. The pupil was seven years of age.

the circumstances, except those relating to the army, were out of the pale of their ordinary experience, and the complex mechanism of government was beyond the power of their reason to grasp. The German language is taught grammatically in this class, and, besides the geography and natural history of Bavaria, its history, the biography of its most distinguished men, arithmetic, mental and written, geometry, drawing, singing, and morals from the Bible. At this stage of progress, it is quite apparent that the branches require a different mode of instruction, that they must be separated, and the progress of each regulated according to the adaptation of the mind of the pupil to its reception, and not according to any extraneous theoretical circumstances.

The two highest classes being joined under a teacher who pursued altogether the old method of instruction, I had no opportunity to put to the test the judgment formed in the lower class, which I have just expressed. Social or political circumstances do not afford, I am satisfied, a just method of arranging the details of instruction, though a knowledge of them should doubtless form a part of education. The reasons why the arrangement of Graser produces satisfactory results in the lower classes are, first, that elementary instruction does not require a systematic division of its subjects, in order to apply them to cultivating the intellect or morals, or for communicating knowledge: and second, that the subjects are within the pale of the child's experience, and refer to his every day wants and perceptions. Just the reverse, however, is the case in the higher divisions, and hence a different method becomes absolutely necessary.* Still the leading idea of the system, that to develop the intellectual, moral, and physical faculties of man is not sufficient, but that he must be educated in reference to the life in which he is to take a part, strikes with the force of truth, independently of the details which may be devised to carry it into effect.

The institutions which Dr. Graser considers necessary to give the entire public instruction of a nation are :

POPULAR SCHOOLS.

1. The elementary school.
2. The real school. ("real gymnasium.")
3. The real institute, ("real university.")

SCHOOLS FOR HIGHER INSTRUCTION.

1. The elementary school.
2. The gymnasium.
3. The university.

The character of the instruction appropriate to these establishments may, according to his views, be thus expressed. In the elementary school, it should be popular and inductive; in the real school, practical and scientific; and in the university, scientific and practical, or applying science to practice.

* This view is also taken by Dr. Krüger, whose experience and skill as a teacher I have already so often referred to. See his journey through Germany. (*Reise durch Deutschland, &c.*, pp. 132, 133.)

JOHN HENRY WICHERN AND THE ROUGH HOUSE

AT

HORN, NEAR HAMBURG.

JOHN HENRY WICHERN, whose name will ever be associated with one of the most interesting educational and reformatory movements of the age, as founder and superintendent of the *ROUGH HOUSE*, (*Rauhe Haus*), near Hamburg, was born in that city on the 21st of April, 1808.* His father was a notary and sworn translator, and gave his son the advantages of the best education which Hamburg afforded. He attended the *Johanneum* and the academic gymnasium of his native city, and afterward, till 1830, pursued a course of theological study at Göttingen and Berlin. Soon after passing his examination in theology at Hamburg, he went practically to work, visiting the poor and the needy in the corners and the streets of the city, and undertaking the direction of a free Sunday school for poor children, in which he soon assembled four or five hundred scholars and about forty volunteer teachers. Wichern declined the propositions made him at this time to enter upon the duties of a clergyman, as his thoughts were already occupied in planning such an institution as he opened near Hamburg, in the *Rough House*, at Michelmas, 1833.

The *Rough House*, (*Rauhe Haus*), was the name, by which a small property, on a lane leading out of the village of Horn, four miles from Hamburg was known, consisting of small thatched cottage, shadowed by a large chestnut tree, and two or three acres of ground partially cleared up, through which straggled a little brook. In the prosecution of a plan, suggested by his missionary labors among the poor of Hamburg, of establishing a House of Rescue for destitute, vagrant, and vicious children, not yet convicted by the courts of crime, Mr. Wichern, aided by a voluntary association of like minded men, and by a small donation of three hundred dollars, took possession of this rough cottage with his mother, and in a few weeks received into his family three boys of the worst description, and adopted them as his children. One by one, he added to their number from the same class until his family circle, with himself and mother, embraced fourteen persons—twelve of them, the least hopeful of the juvenile population of the city. And there under that thatched roof, with that unpromising ground, with the help of his devout mother, with a well spring of Christian charity in the hearts, and words of kindness on the lips of both, Mr. Wichern succeeded in inspiring those children with the attachments of a home—in cultivating filial affections, almost dormant—

* We are indebted for the principal facts of this Memoir to the *Conversations-Lexicon*.

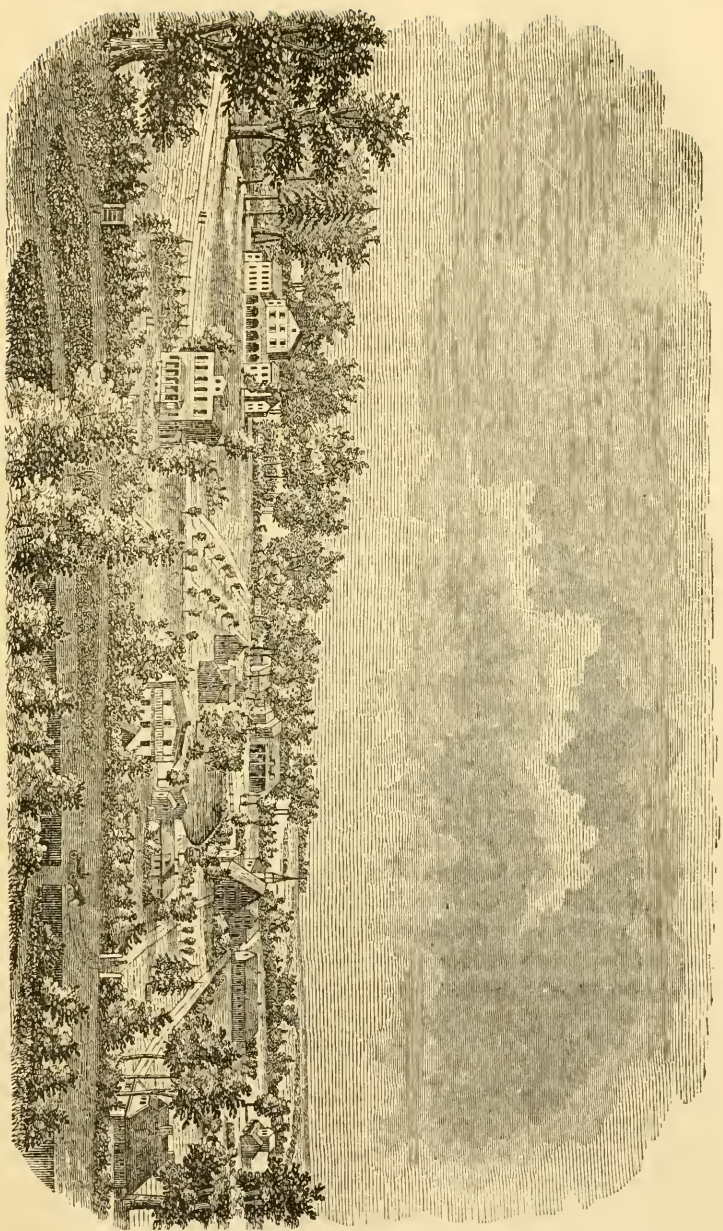
in forming habits of profitable industry, and laying the foundations of a good moral character on which they subsequently built up a useful life. From these small beginnings, without the aid at any time of large governmental grants, and of but one large legacy [of \$13,500,] the institution has expanded, until in 1854, the grounds included thirty-two acres, portions of which are tastefully laid out in walks and shrubbery, and all of which are highly cultivated; to the original Rough House have been added fourteen buildings of plain but substantial construction, scattered in a picturesque manner about the grounds, and the principles of Family Organization, Christian Training and Industrial occupation have been preserved and improved, until it has become the working model for a new order of preventive and reformatory agencies in every country of Europe.

Since 1840, as the foundation of asylums for destitute children has followed in Germany, France and England, Dr.* Wichern has aided various enterprises of a similar character. He had already united under the name of the Inner Mission almost all active efforts in Germany for the moral and religious improvement of the destitute and vicious, when chiefly through his instrumentality, the Central Committee for the Inner Mission, was appointed at the first Ecclesiastical Convention, (*die Kirchen-Tag*,) at Wittenberg, in Sept. 1848. Through this committee of which he was a member, Wichern gained a much wider field for his activity. At the annual meeting of the *Kirchen-Tag*, and on his travels in every part of Germany he aids by word and deed the establishment of societies and institutions for the promotion of education, and the care of the sick, poor and imprisoned.

Upon his return from a journey to England in 1851, the Prussian government employed him to visit the houses of correction, and prisons of the kingdom, and to attempt their improvement. Prevented by these active duties from literary exertions he has published but little. His work on "the Inner Mission of the German Evangelical Church" (Hamb. 1849,) presents his principles concerning free christian charity and its relations to the ecclesiastical and social questions of the day. Since 1844 he has published the "Flying Leaves of the Rough House," (*Fliegende Blätter des Rauhen Hause*,) in which are contained a portion of the addresses which he has made at the different ecclesiastical conventions.

The accompanying diagrams, copied from a number of the "Flying Leaves," exhibit the outward aspects of the Rough House, as they appeared to the Editor of this Journal in 1854,—and the article which follows, will present the principles on which it has been conducted.

* In 1851, he received from the University of Halle, the degree of Doctor of Philology.



Ravine-Haus—near Hamburg—Perspective.

Entering the grounds, which are enclosed only by a hedge, at the gate which fronts the chapel, on the right, (1,) is the original Rough House, the cradle of the institution, and just back of it the large chestnut tree, beneath which so many happy reunions have been celebrated. In the Rough House are accommodations for a family of twelve boys, the chief of this family and several of the brothers. There is also an apartment where the new comers are received until they can be distributed into their appropriate groups, and the business office. Passing up the gravelled walk, is a side path to the left, which leads to the (2,) Book Bindery, (*Buch-binderei*,) and (3,) the Stereotype Foundry, in which some of the inmates are employed under trained workmen. Further to the left (4,) stands the Swiss House, (*Schweizer-Haus*,) erected in 1834. This is the Porter's Lodge and the Printing Office, with accommodations for a family of twelve boys, and their chief, and two brothers. Directly beyond the lodge and the bindery is the lake, into which the labor of the boys has expanded the once straggling brook, and on its borders droop the willow and the ash, beneath which (16,) stands the Fisherman's Hut, (*Fischerhütte*,) erected in 1846, for the residence of a group of boys, with two brothers.

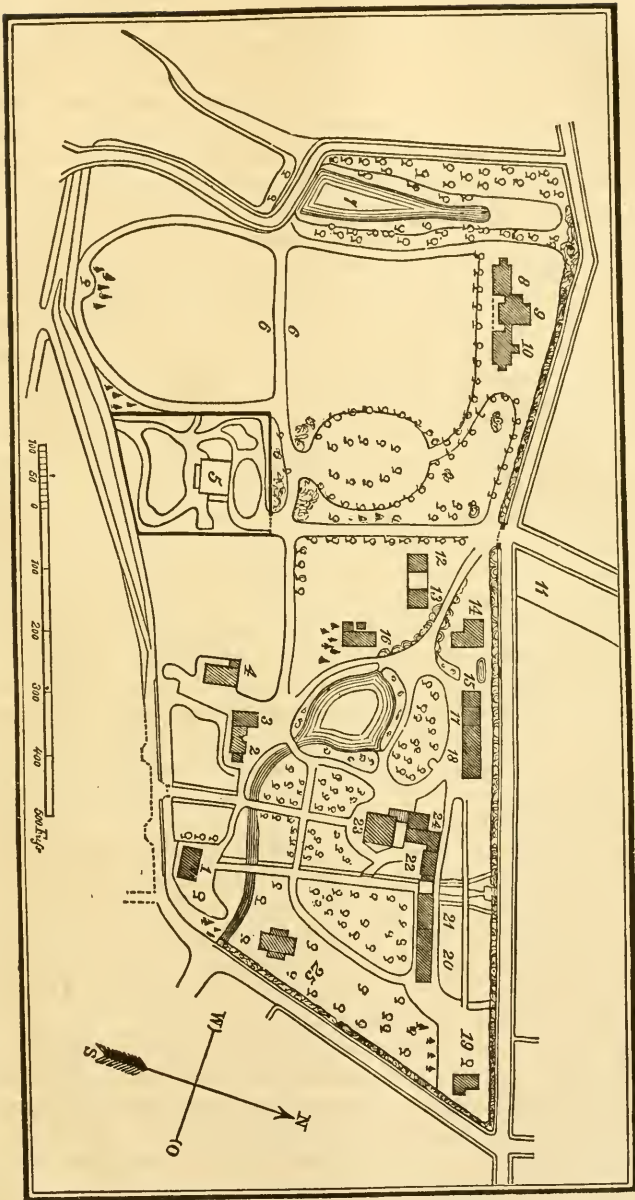
On the right and just beyond the Rough House, stands (25,) a new dwelling erected in 1853, for the residence of a family of twelve boys, and a circle of brothers and assistants. The structure is very convenient, and the cost was about \$1,500. In the northeast corner of the grounds, (16,) is the Bee Hive, (*Bienenkorb*,) erected in 1841, with accommodations for a group of twelve boys, and a circle of brothers.

Directly in front of the gate by which we entered, and in full sight, is (23, 24,) a group of buildings, in which is the chapel, (*Anstaltsküche*,) erected in 1835, the school-rooms, the library, the preparatory department for the girls, and (23,) the residence of the director of all this portion of the institution. Here too is the linen room, the store room, and the only kitchen on the premises. Adjoining the church is (22,) the dwelling for two families of girls, and to the right (20,) the Wash House, (*Wascherei*,) and Drying House, (21.)

Passing to the left from the church, and its associated buildings, we pass on the right (18, 17,) the House of Industry, (*Arbeitshaus*,) with workshops for carpentering, shoemaking, slipper manufacturing, tailoring, weaving, &c., with apartments (15,) called the Shepherd's Cot, (*Hirtenhütte*,) for a family of boys, and a circle of brothers. Beyond and back, screened by the trees, are (14,) the barn and stables; and on the left (13,) is the bakery, (12,) and residence of the farmer.

In the northwest corner, fronting on a beautiful lawn, and with a back ground of oaks, (8, 9, 10,) are accommodations for a number of lads of respectable families, not guilty of crime, but found difficult to manage, with chambers, school-rooms and library, for the teachers and brothers, hospital and bathing accommodations for the whole establishment, and the book-store, and counting-room.

Beyond the lawn (6,) stands (5,) the Mother House, (*Mütterhaus*,) the private residence of the family of the Superintendent.



THE GERMAN REFORM SCHOOL.*

CHARACTERISTIC FEATURES OF THE REFORM SCHOOL.

THE German Reform School is of recent origin, and belongs to a class of institutions, which, however they may otherwise differ, agree in this: they deal with a portion of the juvenile population whose education, from whatever cause, presents peculiar difficulties, and who, without some special aid in this direction, would become dangerous to society. These institutions claim, therefore, not merely an educational, but an ecclesiastical, and political interest. They attack, at its very root, a great social evil, which is slowly eating away the life of the nation, and, for that reason, rouse the most active interest far and wide. We are accustomed to designate the class of youth referred to, in general terms, as "depraved through neglect." But this term, although frequently applicable, is far from being universally correct; for we often count among such institutions, Children's Homes, Orphan Asylums, or Institutions for the Education of the Poor; and we must own that these establishments admit occasionally depraved youth, and thus act as a preventive of such depravity. The admission of the depraved is not the special purpose of these institutions, as their names and essential characteristics show. No one will assert that a child is corrupted, or will become so, merely because he is an orphan, or poor. The term "depraved through neglect" does not even apply to the inmates of Houses of Correction; for these should receive such children as have proved unmanageable and degenerate through certain influences and circumstances, and in spite of all the care of their fathers and mothers. There are many parents so afflicted with perverse children. They are found in all substratums of society—in the higher, quite as often as in the lower classes. When these misguided youth come in collision with the police, which happens but rarely, they enter into the criminal stage which is generally ruinous. The Houses of Correction (or Improvement) and the Penitentiaries, are now opened to them. The parents and guardians, despairing of their own influence, seek the assistance of these severe schools, where, kept from evil company, the work of education may be commenced anew, and the incipient criminal saved, perhaps, from the extreme penalties of the law. An unceremonious method frequently employed when the boy is old enough, is to put him

*This paper is drawn up by Rev. John Henry Wichern, the founder of the *Rauhe-Haus*, the model on which the German Reform Schools have been organized.

aboard ship, or send him across the Atlantic. If he belong to the higher classes, and his age, strength, and military education warrant it, he is sent to Bavaria, or into the Dutch army. If too young for such attempts, he is placed in one of the *boarding schools* provided for this class of offenders, or he is put under the care of a clergyman. These experiments are rarely successful. How are the wants of a much larger class to be met?

In every grade of these establishments—from Orphan Asylum to Penitentiary—there are examples of vicious boys, who must be kept apart from their companions, lest they contaminate them. There is the question, then, presenting itself to every parent, guardian, or friend and instructor of youth: how is help to be found for the undutiful, education for the would-be ignorant and naturally perverse, and restraining, yet loving care, for the evil-inclined? How are these children of sin to be kept from temporal and eternal ruin? This need appeals most powerfully to Christian love; and the idea immediately suggests itself of an establishment guided by tenderness—yet maintaining the strictest discipline—which shall ardently endeavor to save those necessarily abandoned by other educational methods; by the family, clergy, schools and institutes. The children here alluded to, are to be considered as pre-eminently the “lost and gone astray,” and as in the most dangerous condition.

The term Reform Schools will fully describe institutions of this nature. The Reform School must be a house of education. It must, by the character of its pupils, and by its aim, be perfectly distinct from all other educational foundations. The Reform School is not a home for little children; it is not an orphan asylum; far less is it a poor-house, or refuge for poor children. The purpose of these institutions is indicated by their names. The Reform School may be recruited from the orphaned and unorphaned, from the neglected and the tenderly nurtured, from the poor and from the rich. For similar reasons the Reform School is distinct from the House of Correction, or of Improvement—and entirely, and in its very nature different from the Penitentiary for young criminals. It is true that the morals of the inmates of the Reform School and Penitentiary do not essentially differ. It is a fact to be remembered, that the pupils of the Reform School often rank much lower, morally, than individuals sentenced to prison for one misdemeanor which came under the cognizance of the law. The pupil of the Reform School has transgressed heavily and often, yet by chance has escaped from justice; while the other may suffer for a comparatively small offense. There are greater transgressions and moral failings which the law does not reach, and can never punish. Notwithstanding the moral similarity of the inmates of the school and penitentiary, there is a great and essential difference between the institutions and those under their discipline. The Penitentiaries and Houses of Correction are established by the State, their object is *punishment by law*. The Reform Schools are founded by Christian love and Charity, their object is not punishment of past offenses, but complete forgiveness.

In the Penitentiaries the inmate is always detained by force. The parents resist this detention; for it is a disgrace to them. On the contrary no judicial sentence keeps the pupil in the Reform School. He is there by the will and authority of his parents, and by the Christian kindness of those

who, as heads of the establishment, take the place of parents. The Penitentiary receives criminals alone. The Reform School is a school of reformation only while it remains without direct relation to the punishing law, while it receives no criminal, or person needing judicial correction. The educational principle of the Penitentiary is law; that of the Reform School is mercy. The Penitentiary is, and must be, powerless to educate through *liberty* and the influences of a Christian family intercourse; for the fundamental condition of such education, the freedom of the individual, is wanting. Deprivation of freedom is the basis of their existence and discipline. The free development of the faculties is wanting, the means for which is so necessary for the true training of the child. The officer of the Penitentiary is fettered as completely as his charge. Iron restriction is the very essence of such an institution. But the Reform School, which is founded and nourished by freedom, can only accomplish its object, the saving of children, by guarding jealously the freedom of teacher, pupil, and the whole educational corps. This would be destroyed if the pupil should be obliged to receive a judicial sentence before entering the school, as in the Penitentiary and House of Correction. The children of the school would be pupils no longer, but prisoners.

This characteristic distinction is so important for the correct appreciation of the Reform Schools and their efficacy, that we must dwell on it a moment longer. It must not be overlooked that, in the House of Correction and in the Penitentiary for youthful criminals, religious teaching finds a place, and often exerts an influence. But its power for good is necessarily limited because fettered, and if in fetters free, it is nevertheless overshadowed by the ban of the law, under the weight of which, the inmate struggles without hope of relief. This weight remains, and rightly, even when the child or adult repents truly for the crime committed. The training in the Penitentiary and House of Correction is modified by the law, which governs all with unchanging severity, and whose stern justice never flinches. In all essential points the rule of discipline must differ from that of the free Reform School. If these distinctions could be forgotten, the education would be a contradiction, and the real purpose of these separate institutions would fail. We must insist on this point, in order to distinguish the characteristics of the Reform School from those of a third class of institutions. The public authorities must punish by law. Hence it is observable how little they have been able to effect in the training of children. The State may then welcome private co-operation in its educational aims, resign the sentenced child to the care of institutions founded and directed by private individuals. This has been done extensively during the last twenty-five years, especially in France.

The establishment of METTRAY, so well-known in Germany, with many others of the kind, has proposed to the civil authorities to receive children under sentence. These institutions of France are now harboring and training thousands of the neglected and depraved. Of course, these establishments, filled with children sentenced by law, cannot be considered Reform Schools in the German sense of the word. They are a variety of the House of Correction, in which the intention of the State is fulfilled by private endeavor. We shall hereafter designate them as Free Houses of

Correction. In France they are called after that of Mettray, *Colonies Penitentiaires*.

This class of institution embraces, then: asylums, orphan homes, houses for poor children, *reform schools*, and houses of correction, both private and public. In all, the same elements of destitution, neglect and depravity appear. In the true Reform or Rescue School, depravity is only accidental. In the schools last mentioned, the pupils have become youthful criminals who are under the discipline of law, and who, with their liberty, have lost their place in society. Between these, the free Reform School, the fruit of Christian benevolence, holds a middle place. It is the complement of the Christian family, and aids it in educating the neglected, and saving endangered souls. A diversity in the means of the Reform Schools will naturally result from the attempts to reach the various kinds and degrees of neglect and error. In certain States they will prove in greater or less degree serviceable to country districts, and in others, to the interests of cities and villages. Institutions in cities will differ from those established for smaller towns. Many are filled from among the poor and humble, while others are adapted for the assistance of the higher classes. While most Reform Schools must aim at elementary instruction only, others may prepare pupils for the gymnasium. There will be institutions belonging to and dealing with a certain district. There will be others of wider range and more universal character. Other sub-divisions are possible, directed to the special wants of a certain class, for vagrants, for fallen girls, etc. Various as these establishments are, they are alike in this, viz.: they are organized like a family; they work for the improvement of those under their care as a Christian home may work; and they are based on the principles of humanity and benevolence. As the object of these institutions has been recognized as that of the reformation of the young, they bear the name of Reform Schools, or Reform House. Most of the German *Rettungs-Anstalten* are known by their special locality; as Beuggen, Düsseldorf, Tempelhof, Lichtenstein, Castle of Arenberg, Rauhe Haus, etc. A professed enmity to such names, though really to the spirit of the Reform School, has led to the adoption of other designations. The institution of Bremen is called, *Ellener Hof*; that of Lubeck, *Fischerbuden*; of Celle, the *Liner House*; the establishment of Rostock bears the name of *Gelsdorf*; that near Reval, *Antonsburg*; the one near Flensburg is called, *Martin's Foundation*, etc. In Russia these institutions are termed, "Houses for Poor Children." In France they are known as "Colonies Agricoles," further designated by their location, as Mettray, St. Foy, Oullins, etc. In America they are called "Farm Schools." In England, where great activity is shown in this field, they are known as "Reform Schools," or "Houses of Reformation," "Rescue Societies," "Refuges," etc. They translate the German designation by "Reformatory," or, quite incorrectly, by "House of Salvation."

We do not intend to treat the subject of Reform Schools exhaustively; but only to point out their characteristics, and though we may glance at the institutions of other governments, we shall mainly direct our attention to those of Germany proper, and the adjacent countries, German by their language.

The main difficulty of the subject lies in the absence of a literature.

The only comprehensive treatise is that of Pastor L. Volter, which treats only of Wurtemberg.* The work published by J. K. Zellweger † offers much satisfactory information, but nothing bearing on the present article. The annual reports of these institutions alone remain to us, and these are of slight literary value. It is an evidence of the progress of the subject, and the interest it excites, that Prof. Palmer, Dr. Stoy, and the publications of the Rauhe-Haus, discuss the principles underlying these schools; but a full historical and scientific treatment can only be had after a more extended appreciation of their social importance and influence, when greater attention is paid to their plan and method of management, by the friends of education.

II. HISTORY OF GERMAN REFORM SCHOOLS.

The first provision of this kind was made in those Protestant cities of the Netherlands, in which the reformation in the church was succeeded by a political and social transformation. This struck at the root of those abuses that had increased under a vicious treatment of the poor, and by that system of street-begging, allowed and encouraged by the Catholic church. The establishment of new workhouses at Amsterdam, Leyden etc., was rendered necessary by the legal prohibition of vagrancy. Many of the cities of Northern Germany, Hamburg, Lubeck, etc., followed this example. Energetic measures were taken against young thieves, who were now placed under the care of the magistrate, and received religious instruction.

It is important to notice that every workhouse or poorhouse was now furnished with special departments, in which children, obstinately disobedient to parents and teachers, were subjected to training. James Doepler gives some valuable information with regard to this subject in his *Theatrum Penarum* of 1693. The boys in these establishments were employed in mechanical work. Parents could send hither all wilful and wicked children to be treated for their mischievous propensities. If the parents paid the board of their sons, the boys were put in certain rooms, and not required to work. Afterwards, the orphan homes, originated by A. H. Francke, offered similar aid to neglected children.

But in many places the object of orphan homes has never been strictly kept in view. For instance, the large Frederic Orphan House of Berlin, which at the close of the year 1865 contained 1,531 children, admitted from 1850 to 1860. Fifty-seven per cent. of these were not orphans at all, but were received because their parents were either ill or vicious. Out of 2,915 children received in ten years twenty-eight per cent. had been abandoned by their fathers and mothers. In the year 1857, the number of these forsaken children reached 600.

In the Poor Houses and Orphan Asylums of other cities of Germany are found many such abandoned boys and girls. The great number of children of this class, collected in the smaller Work and Poor Houses of the kingdom of Saxony, Holstein, etc., will soon demonstrate the necessity of establishing Reform Schools in connection with the Poor Houses; for to bring these

* *Geschichte und Statistik der Rettungsanstalten für arme und verwaiste Kinder in Wurtemberg.* Stuttgart, 1845.

† *Schweizerische Armenschulen nach Fellenberg'schen Grundsätzen.* Troxen, 1845.

children into the society of drunkards and vicious persons sent to these places, can only result in their total depravity. Many establishments of the kind were formed at the close of the last century, when the state authorities issued stricter police regulations against beggars and vagrants, and when the charities of the public became more completely organized. The punishment of petty crimes has brought the young offenders under severe control; and a great number of Houses of Correction have sprung up in states and cities, under the direction of the government.

Many private establishments have also been founded from motives of benevolence. They still exist in Germany, Switzerland, Scandinavia, in the German provinces of the Baltic, and in Belgium (since 1848), in France (1818), England (1840-1850), in Holland (1818), and in North America. They bear various names, but all have the same object, the care of neglected and depraved children. This educational movement is characteristic of the latter part of our century, and is still increasing. In the center of the long line of our modern institutions stand the Reform Schools of Germany.

It is impossible to enter on the history of these institutions without speaking of Pestalozzi. We must remember how, in the humility of a guileless heart, full of enthusiasm, he labored for the home education of the people, and, since 1775, for the elevation of the neglected children of his country. Nor must we forget that Legrand, the friend of Oberlin, at that time one of the five directors of the Swiss republic, assisted at the foundation of an institution in Stanz, established by Pestalozzi. With all the careful combination of work with instruction in Stanz, Pestalozzi never found room for religious training. From his earliest years he had labored to lessen the miseries of those around him. Their happiness was his sole aspiration. Yet, noble-hearted champion as he was, he stood in the van of battle without the only weapon strong enough to defeat the enemy. In spite of all his loving ardor, a melancholy failure attended his work. In his old age he saw these hopes realized in the first Reform School on the German frontier; but they were realized by others, who, not loving the work more, had yet sought divine aid in their labors. This he himself acknowledged, when, an old man of eighty, he received the greeting of song and flowers from the pupils of the Reform School of Beuggen. He gave back the wreath to the father of the household, the venerable Zeller, his long-trying friend, with the confession, that he now witnessed the embodiment of his own aspirations. When in 1826 he saw the inner workings of a Reform School, he exclaimed "This is what I wished for!"

With the name of Pestalozzi must be associated that of Fellenberg, of Hofwyl, who, with the assistance of Wehrli, labored to incorporate industry into the training of poor and neglected children.

The distinguishing peculiarity of the Reform School is the union of Christian teaching with primary education. The growing and changing needs of the time are influenced by the power of religion—affecting, not one portion merely, but the entire life. From the very first, all are conscious of belonging to the kingdom of God, and, though in the centre of Christianity, they strive to do the work of Missionaries. This view explains how the idea of a Reform School started into independent being in several places at the same time.

The originator of the Reform School was John Falk, of Weimar, the friend of Goethe and Herder. His first effort was purely original, a stroke of genius. He was Councilor of Legation, when, seeing the devastation and misery caused by the war, he devoted himself to the aid of the suffering. The Duke of Regusa, in 1813, had begun the work of destruction at Weimar. It was just before the battle of Leipsic. After the battle, bands of roving marauders laid the country again in ruins. In one year, the little State of 100,000 inhabitants quartered over 900,000 soldiers. Want and misery reached their highest point. The war soon drove the people from their homes. Pestilence followed. At this time, Falk was suffering great bereavement. One after the other, six daughters were taken from him; and at last, his only son, a boy of nineteen, died. He was childless. Then he resolved to become a father to the orphans of the war. To the care of the wretched and homeless he would now devote the rest of his life. His friend Pastor Horn joined him. They formed a society called "Friends in Need." In 1818, they had found homes for 300 children in the families of farmers and mechanics. Those who were without religious education were assembled in a day school, the confirmed attended an evening school. As the pupils of the Normal School were then needing assistance, he gathered sixty of them, and gave them instruction during the evening in the art of teaching. He took neglected girls as well as boys. They were taught reading, writing, sewing, and housework. In this way Falk became the center of an ever-growing circle of missionary labor. In his work of 1823, he says:—"The principal object of our Society during eleven years, has been the salvation of souls. Not the conversion of the heathen of Asia and Africa, but those of our own, in Saxony and Prussia." His local usefulness reached its height when he determined to build a house of prayer, aided by those of his pupils who were apprenticed to mechanics. The corner-stone of this "Luther hof" was laid by his own hands in 1823. The building was finished by his scholars, at a cost of 15,000 thalers. The money had been collected principally in North Germany and Holland. Falk survived the completion of this work but a short time. He died in 1826, after great suffering, but with full faith in his Saviour. He was fifty-six years old. The closing labor of his life was specially important, by the influence it exerted on Middle and North Germany; but his work was of too personal a nature to last beyond the life of its author. A small Orphan Home at Weimar is all that now exists.

The foundation of St. Martin, a similar institution, established in 1819 by Reinthaler, the friend of Falk, has done great good. Reinthaler took children out of the streets and prisons, and taught them by his "historical liturgical" method. During the first twenty-two years, 3619 children were instructed. But these institutions could not continue. For a time Reinthaler's school stopped. In 1867 it reopened with but fifteen boys. It is now maintained in part by the income of a bequest of Reinthaler (8000 thalers), and partly by the city of Erfurt. King Frederic William IV. presented the fine building now occupied by the school.

In Silesia, several small Reform Schools were created by means of the previous efforts of Falk and Reinthaler. Some of these are still in

existence. There were establishments at Goldberg (1829), Luben (1833), and in several other places. The arrangements made by the Counts Adalbert and Werner von der Rieke, at Düsseldorf, are much more extensive. This work, although simultaneous with that of Falk, was entirely independent of it. The father of the young Counts above mentioned, who died in 1810, aged 80, had established a Normal School at Overdyk, on the Rhine, in 1789, and had founded besides a Society of the Friends of Education. The French occupation destroyed this work, which was, however, destined to reappear in another way. After the war of 1813, great destitution prevailed among the inhabitants of the Rhine country. The highways were filled with begging children. The young Counts von der Rieke, who had inherited the spirit of their father, resolved to provide for the poor. The old Count had left his sons the seminary building at Overdyk. Here a refuge was opened with four children, in October, 1819. The number soon increased to sixty-eight. All good things grew with the institution, which was soon divided into two departments for the older and younger scholar. The attention of Count Adalbert was directed to the large old Abbey of Düsseldorf, near Düsseldorf. He bought it for 51,573 thalers, trusting that God would provide the means of paying for it. In June, 1822, the higher division, numbering forty-four children, was removed to the Abbey. The primary department has always remained at Overdyk. In the course of time, the estate increased. It now includes 493 acres of land. There is a fair capital, with an annual income of 20,000 thalers, partly the contribution of friends. During the early years of its existence, particularly, the sympathies of the charitable in North Germany were expressed by ample provisions of money and material. For Düsseldorf and the "Luther hof" were then the only institutions of the kind in Germany. The Kings Frederic William III. and IV. made large contributions, considerable sums were sent from England, and the Count himself advanced money without interest. Thus, the institution was able to assume large proportions. It has been in existence forty-eight years; 2581 children have been educated, and afterwards have learned a trade. Count von der Rieke presided over the school till 1847, and then entrusted its administration to a Board, of which he is a member. During that year, Düsseldorf contained 179 pupils, 69 of whom were girls. It has greatly increased since. Counting both departments, there are over 300 children in charge, making it the largest Reform School in Germany. The children have rooms in the Abbey; they receive school instruction, and learn to work. The boys are employed on the farm. Since 1859, a seminary for the training of teachers has been added, from which 132 graduates have been sent out. Düsseldorf has been created a separate parish, and thus has corporate privileges.

The third establishment important in the history of Reform Schools, is Beuggen. It is situated at the very southern part of Baden, on the borders of Switzerland, and actually belongs to both countries. The Rev. Mr. Spittler, of Basle, was greatly instrumental in the erection of this school. He also founded the Mission House of Basle. The project was carried out in the midst of the calamities of war. Resolutions were passed

amid the roar of the cannon of the battle field of Kuningen, which struck fear to the hearts of the people of Basle. It was in 1816 that Spittler and Zeller, returning from a visit to the Mission House, resolved to work for the establishment of a Normal School in connection with a Reform School. After several attempts to obtain the necessary funds for the work, the Grand Duke of Baden consented to rent them the Castle of Beuggen, at the nominal sum of thirty florins. Here the first Reform School of South Germany was founded, in which seventy children are now instructed. A training school is connected with it. Many of the teachers educated there have since become the Directors of Reform Schools elsewhere. In 1864, forty-three years after its foundation, 672 children, and 277 brethren had been admitted; while 153 teachers had been sent out from the establishment.

The reformatory work in Wurtemberg was associated with the school of Beuggen. The Reform Schools in connection with the Normal Schools at Lichtenstein (1836) and Tempelhof (1843) are among the larger institutions of the kind. Lichtenstein was founded by the Prussian School Inspector Zeller, after a visit to Beuggen, which afterwards came under the direction of Louis Völter. It is situated near Weinsburg, and includes a Reform School for boys, and another for girls, with forty-six pupils in both. A Normal School, number thirty-five pupils, is carried on with the School for boys. The whole is directed by an inspector. The Tempelhof Reform School, numbering ninety-two scholars, has a Preparatory Department, and Private Seminary for teachers, connected with it; both of which are designed to supply the schools of Wurtemberg. Among the high-born persons who have supported the Wurtemberg schools, we must mention with due honor the Duchess Henrietta.

The institutions of Gustavus Werner belong to this class. There are eight of them: the Chief Home at Reutlingen, with its seven Branch or Associated Schools. These Asylums possess three hundred and twenty-three acres of land; a large industrial factory, with an annual working capital of thirty thousand florins. In 1862, four hundred and thirty-eight pupils were accommodated here, but financial losses have reduced the number to one hundred and eighty-five. Seven hundred children in all have been educated there. In 1867 Wurtemberg contained thirty-two institutions of the kind: twenty-six Protestant, five Catholic, and one Jewish Reform School. These could accommodate 1667 children, and in 1867 actually did contain 1269 pupils. The total number of children received since 1820 is 10,099. There are besides many Societies, whose object is to bring neglected children into Homes, or Schools. All these institutions and societies work under the direction of a Central Committee of Charity, organized in 1817 by Queen Catherine, the foundress of St. Pauline, the first Reform School in Wurtemberg, Stuttgart.

Wurtemberg has done more for reform and education than any other German state. It is strange that the efforts of Protestants here should have ceased in 1848, for the two Schools established in 1856-59 have no importance. On the contrary, the Catholic church has shown great energy. In 1848 it possessed but one Reform School, but now has five, in which about two hundred and seventy pupils are educated. These Wurtemberg insti-

tutions adopt children for the purpose of guarding them from neglect and vice; this is a characteristic feature. The report of the anniversary of 1867 confirms this: The Schools are termed "Institutions for Neglected Children," and they are further distinguished from the foundation of Schönbühthof, which admits boys from the House of Correction.

The Farm and Reform Schools of Switzerland must be considered together, for they differ only in a few unimportant particulars. From 1810 to 1830, seven Schools were erected. During the next ten years twelve were founded, and from 1841 to 1846 ten more. In 1846 there were twenty-nine schools with seven hundred pupils. Since that time fifteen new institutions have been established, so that Switzerland has now forty-four schools with 1543 pupils. The name of Professor Spleiss ranks first among the early laborers in this field. The "Swiss Patriotic Society" and Baron Wessenberg founded the Reform School at Bächtelen, near Berne in 1839. Berne has fourteen of these institutions, among which are several Schools for Children condemned for crime. Zürich has four, St. Gall four, Lucerne and Appenzell one each. Sonnenberg, near Lucerne, is a Catholic foundation. The School at Oldburg in Argovia is for both confessions. The rest are Protestant.

Reform Schools were established in South Germany in 1848—first in Bavaria, and afterwards at NeuhoF, near Strasburg, and in Baden. The name of Karl von Raumer is connected with the Bavarian schools. He established in 1824 the first Reform School at Nurnberg, under a director from Beuggen. Almost at the same time Pastor Kraft of Erlangen, whose house was a centre of all missionary enterprise, undertook a similar work. Aided by his family, and a student, who had become acquainted with the institutions of Wurtemberg, he founded a Reform School for girls in Erlangen, under the direction of a lady educated at Düsseldorf.

In Bayreuth the dedication of a monument to Jean Paul (1841) induced the Mayor of the city to found a school. The establishment of the Reform School at NeuhoF, near Strasburg in Alsace, is a beautiful evidence of Christian faith. A pious carpenter, Phil. James Wurtz, was the founder of it. He died at the age of eighty-three, in the midst of the children of his school.

In Baden a Society had been formed, with Baron Wessenberg at the head, which formed a Protestant School at Durlach, and a Catholic one in the Convent of Mariahof (1843), each numbering fifty pupils. While the interest in Reform Schools was fast increasing in the south and southwest of Germany, it seemed to be dying away in the north. After Falk's death, in 1826, Lutherhof was suspended. St. Martin's, at Erfurt, and Düsseldorf showed little vigor. At that time the bond of German union was wanting. There was no national sympathy between the countries of the north and south.

Besides the work of reform carried on in Southern Germany, there were some institutions started in Berlin and in some of the provinces, the fruit of political expediency. One of these was founded by M. Rother, assisted by some members of the Berlin magistracy. It is situated before the Halle-Gate, and was first opened in 1825, under director Kopf. The inmates were sent by the Berlin magistracy. The institute contains forty-

eight pupils at an annual expense of two hundred and twenty-three thalers paid by the city. They are under the care of the civil authorities, for it is a kind of Private House of Correction. Parents may send their children here, as in other Reform Schools; but the discipline is necessarily severe. For many years the pupils were employed in the manufacture of screws. For a time the boys, strictly watched, printed the papers relating to the public debt. The scholars are also obliged to work in the house and garden. The institution is divided into two separate parts, and contains in the one sixty-nine boys, and in the other thirty-eight girls. Within the last forty-two years, 1,619 children have been admitted. The capabilities of the establishment will soon be increased, for a new building (200 feet in front, 80 ft. deep) has been erected at a cost of 140,000 thalers. It is furnished with every convenience, with large enclosed play-grounds. The children are divided into twenties. Every "twenty" forms a "family," over which a special educator presides.

It was natural that the example of the capitol should be followed by other places. Many different societies worked to lessen the number of young criminals, which had alarmingly increased. New Reform Schools were organized after the plan of Berlin, at Memel, Frankfort, Posen, Königsberg, etc. Not one has ever equalled the model. This is to be regretted, for through these Schools, communal aid could be given to a large class, who now fall into crime from want of care. These institutions, with the exception of Stettin, disappeared, when the government erected special Houses of Correction for young criminals. Such departments were soon established in Saxony. A House of Correction was founded at Hamburg, 1829. It opened with nineteen inmates. In 1833 it numbered two hundred. There are twelve houses of this class in Prussia, three in Saxony, and one in Wurtemberg, one at Hamburg and one at Bremen.

It would appear as if in the north of Germany the distinct interests of the Reform School proper had become absorbed in those of the communal establishments. This was the more to be feared from the condition of the church at that time. Religious feeling only could call the true charitable school to life. The people were accustomed to contribute liberally to benevolent objects of a more general character. They were not used to denying themselves for the sake of furthering missionary work. A few scattered communes alone made any attempt of the kind. The ground for such labors had first to be won. It was a very different field from that of Wurtemberg and Basle, where the spirit of self-sacrifice had been fully awakened. Still there were many persons who worked on, hoping for co-operative aid, which came at last. Falk and the school at Düsseldorf had much influence on the work, but the great movement began in 1848.

Rauhe Haus.

The success of the North German Reform Schools is closely connected with the history of the *Rauhe Haus*,* which was the first of many similar institutions in this part of the country. The *Rauhe Haus* was in its first

* A full notice of the *Rauhe Haus*, drawn from the annual reports of the founder and the published account of visitors both American and European, will be found in the *American Journal of Education*, Vol. III., 5-603, and in Barnard's *Reformatory School and Education*, p. 18, 107.

inception designed by some of its friends as a House of Correction for the city of Hamburg. It was proposed to take the children from the Work House for Young Criminals, founded a few years before, and put them under the care of the new Reform School; but the leaders of this educational movement introduced an article in the constitution which declared that "the new institute did not intend to fill a vacancy in the public institutions." By this they lost all aid from the city, but preserved that distinctive principle of the Reform School—missionary work among poor and neglected children. In this they were in accord with the directors of the schools of Weimar, Düsseldorf and Beuggen. The Rauhe Haus has admitted (to 1867) 783 children, 176 of whom were girls: 688 have been discharged. The number of pupils in 1867 was 129. There were about forty Brothers connected with the establishment, and the entire household numbered 450 persons. New buildings have just been erected at a cost of twenty thousand thalers.

The experience gained in these institutions confirmed the belief in the efficiency of their labor. The great motive power was a conviction of the need of organizing the household into families. For this work individuals must be selected and trained. These were soon known as the Brotherhood of the Rauhe Haus. This Brotherhood represents the various social and religious interests which gradually formed the leading idea of the Inner, or Home Mission, as the object of the whole.

Three points in the Inner Mission should be especially noticed as afterwards becoming important: 1st. The tendency of inner missions to carry out the interests of Christianity by opposing infidelity and worldliness. Proper men were found in the Brotherhood, willing to devote themselves to the work. 2d. The necessity of their independence of those civil authorities who only hinder and restrain the full development. Finally: The complete poverty of the association, and its dependence on God and the charity of His servants. Thus the Rauhe Haus has prospered. Its example has set the same principles working in many similar establishments.

In order to gain a more definite idea of the influence of the Rauhe Haus in this regard, we must consider two periods: First, from the date of the foundation (1833) to 1848, when the system had not been fully developed. This was a period of great difficulties; a time of consolidation, of organization, and of preparation for future action. Every energy was used in assembling, training and sending out Brothers, as the instruments of reformatory education. There was at first great difficulty in finding proper persons. The first were sent by request from Beuggen, in 1834. Of the 1350 Brothers who applied for admission—of whom 460 actually entered the institution—two only were from Hamburg; the others were from the different countries of Germany. Applications for missionary Brothers have come exclusively from those distant countries where the German tongue is spoken and the Evangelical Church is found. The first Brothers were called into the Baltic provinces of Russia, while others found their sphere of labor in the far West of North America. The former became directors of Reform Schools in Mitau (1837), Narva (1838) and Reval (1842).⁷

The Reval establishment in Russia is organized on the plan of the Rauhe Haus. There have been 259 children admitted since 1843; 206 of these have left the school: so that there are now fifty-three children, divided into three families, under the direction of Brother Bauer. A society of Brothers has also been connected with the school, and experienced instructors residing in Reval have undertaken their education. Six Brothers are necessary for the care of the three families. The education of the Brothers is especially difficult here, for a successful teacher in Russia must possess a knowledge of the language, and of the Esthnic dialect as well. Notwithstanding this drawback, thirty-three Brothers have been trained at Reval, and sent out as parochial teachers, organists, etc. They labor in both city and country, and are stationed from St. Petersburg to the Black Sea, and to the boundaries of Eastern Siberia.

The Brothers sent to America in 1845-7 have been followed by many others. They occupy positions as preachers, teachers, directors of Poor Houses, and as founders of churches and schools.

The first field for Reform Schools was offered by the connection of the Rauhe Haus with Switzerland. The Brother sent there returned to take charge of the new school founded by the "Swiss Patriotic Society" at Bächtelen, near Berne. Bächtelen has been organized on the plan of the Rauhe Haus. It consists of four families, with fifty boys, and contains a training school for teachers, with thirty pupils. There is also a farm of 150 acres, which feeds thirty to forty cattle. It has admitted 250 boys since its foundation, 205 of whom have left. Since its establishment twenty-six new schools have been founded; with twelve of them Bächtelen directly co-operated. The Berne Reform School in Landorf, with forty children in four families, admits condemned criminals only. The Victoria Reform School in Kleinweber, near Bau, founded on a bequest of 600,000 francs, contains seventy-two children in seven families. Aarwangen, for condemned children, has forty-five children in three families. There are three other schools in Zurich, Lucerne and Vaud, each numbering 200 pupils, divided into three families. The one in Lucerne is a Catholic foundation. In the other Evangelical Reform Schools the directors (House Fathers) have been trained at Bächtelen. The school of Geneva, founded on the model of the Rauhe Haus, will be mentioned hereafter.

The influence of the Rauhe Haus was first visible in France in 1839. M. Demetz, then a Councilor of the *Court Royale*, now Honorary Member of the *Court Imperiale* of Paris, having satisfied himself that the proper mode of treating the depraved was not known in France, visited other countries, and gained a thorough knowledge of the Rauhe Haus system. Convinced that this was the true method, he returned to France and founded the Reform School at Mettray,* near Tours, over which he still presides.

Mettray was the first *Colonie Agricole Penitentiare* in France. The plan is much modified from that of the Rauhe Haus. It is divided into families, which live in separate houses. It is a Catholic institution, and contains

* For history of Mettray see Barnard's Reformatory Schools, etc., p. 147-200, and *American Journal of Education*, p. Vol. III. 667-736.

700 pupils. To obtain the necessary assistants, lay brothers are trained like those of the Rauhe Haus. They first assist in teaching the children, and are then sent to new institutions. The success of Mettray has led to the establishment of 411 similar organizations, of which twenty-three are penitentiary schools. All carry on agriculture and an extensive system of mechanical labor.

A Reform School was founded in Sweden by Baron Gyldenrok, after visiting the Rauhe Haus.

While the Rauhe Haus influenced the countries round Germany, and prepared the way for the introduction of its system and principles, Germany itself was for a time comparatively unaffected by its reformatory work. But after 1840 a change was manifest. This was brought about by a more thorough acquaintance with the working of the school, the interest felt in it by prominent men of the time, and its connection with the Foreign Missionary Society. The subject of home missions began to be agitated. A strong wish was expressed to unite with the Hamburg school in working for the depraved. Large and small societies were formed for missionary work, the first of which was at Celle, in Hanover. Between 1843 and 1847, the first Reform Schools of North Germany sprang into existence. Rostock was founded in 1843 by Professors Krabbe and Hoffman and Senator Passow; Celle, by Pastor Hugues, in 1844; Lubeck, in 1845, by Dr. Lindenberg; Bremen, in 1847, by Drs. Treviranus and Post. The directors of these various schools were all from the Rauhe Haus, and followed its plan of family organization. Most of them practice farming with success. The school of Celle led to the establishment of a second one at Schladen, Hanover, in 1852, directed by a former pupil of the Rauhe Haus. In Mecklenberg, through the exertions of Professors Hoffman and Krabbe, aided by many prominent clergymen, a general society was formed, which soon absorbed the special organizations.

Reform Schools were established at Stralsund, Pomerania, in 1847, by Count Krasson; at Rügen, Brandenburg, and at Berlin by Schmidt, in 1847; in Athaldensleben, Saxony, by Von Nathusius. A Reform School was projected in Flensburg in 1833, but established fourteen years later by Volquarts. The New Brotherhood was founded at Duisburg in 1845 by Pastor Fliedner, one of the former teachers of the Rauhe Haus. This school now contains 120 Brothers, and 250 children have been admitted since its foundation; their number was thirty-five last year. A hospital for the poor is attached to it, accommodating twenty-two persons. The expenses in 1864 amounted to 17,000 thalers.

In 1846 the festival of Pestalozzi was the occasion of the foundation of several institutions for youth. Many of these, mistaking the spirit of the reformer, expressed their opposition to decided Christian training. In 1847 a correspondence relating to Reform Schools and Brotherhoods was carried on between the Rauhe Haus and two Catholic bishops of Moravia and Austria, but with no definite result.

The second period in the history of the Rauhe Haus commences with the year 1848. Ten Brothers went to Silesia to help nurse the sick during the raging of a pestilential disease. More than 10,000 children had become orphaned. The Prince of Pless offered for their accommodation the houses

at the Baths of Charkow. The system of family organization was directly introduced under the direction of a Brother. A second institution was established in Warschowitz. Both were intended for those Protestant orphans whose parents had died of the typhus fever. They were afterwards dissolved. The Catholic orphans were taken care of by the orders of Prince Bishop Diepenbrok. It was impossible for the Rauhe Haus to furnish all the assistance that was required. Several new Brotherhoods were therefore founded, viz.: at Züllchow, near Stettin (1850), at Reinstedt in Saxony (1850), and at Puckenhoff, near Erlangen (1851). It was the object of these organizations to train laborers for the Reform Schools. The inspectors were from the theological class of the Rauhe Haus. A few of the schools connected with the Brotherhoods merit a more particular description.

The institution at Züllchow is under the direction of Gustavus Zahn, the poet and author. In 1865 the Brotherhood had eighty-nine regular inmates, twenty-nine of whom are now working in different educational establishments. The Reform School founded in 1831 discharged the girls in 1847. In 1864 the whole number of children received was 412. In 1850 the inmates had numbered thirty-nine. At this time about sixty pupils are assembled in four families. A fine garden of fifteen acres is cultivated, and a small farm with twelve cows is taken care of by the scholars. They are also employed in making plastic representations of biblical history for Christmas, and in the sale of religious pamphlets. A hospital, belonging to the order of the Knights of St. John, is united to the institution. The Brothers of Züllchow attend to the sick. The Provincial Institute for Idiots is also under their care, with a special director. The appropriations for its support amount to 11,000 thalers per year. Its situation and extent make it the center of all reformatory enterprise in Pomerania.

The Reform School and Brotherhood at Lindenhof near Neinstaat, which was reorganized under Nathusius in 1850, were at first conducted by assistants from the Rauhe Haus. They are now directed by Dr. Hardiland, formerly a missionary to Borneo and South Africa. The number of boys admitted to the Lindenhof from 1850-57, were 255. Two hundred left, so that the number of pupils is now fifty-five. There are six brothers in the home. Ten of the forty-six regularly graduated brothers, are directors of Reform Schools, while six are assistants. Sixteen work at a trade, four are assistants in asylums for the blind, others are teachers and foreign missionaries. The annual expenses of the institution amount to six thousand thalers.

The Reform School for boys recently founded (1851,) at Puckenhoff, near Erlangen, which is connected with that school for girls previously established by Pastor Kraft, has also a Brotherhood joined with it, under the direction of men, educated in theology. This institution enjoys the patronage of the university of Erlangen, but has had but few students up to this time. The Reform School numbers thirty-two pupils, eighteen boys and fourteen girls. The whole number of inmates is forty-five. Annual expenses of 2500 thalers are paid by free contributions.

The Protestant foundation of St. John, near Berlin, is an agricultural branch of the Rauhe Haus, under the same director. It numbers one

hundred inmates, including twenty-four brothers. It owns 120 acres of land, and is provided with excellent buildings. Neglected children are received, and even those needing especially careful management. It forms an independent parish, with about 10,000 thalers revenue. During the last three years over 60,000 thalers have been spent for new buildings.

A French Brotherhood was established (1865,) near Geneva, by Dr. Bertin. It is under the direction of a French clergyman, M. Tophel, and has a Reform School for boys connected with it.

The accompanying table (A) exhibits the gradual development of the Reform School of Germany.

PROGRESSIVE DEVELOPMENT OF GERMAN REFORM SCHOOLS.

COUNTRIES.	1813-30	1831-47	1848-67	TOTAL.
1. Saxe-Weimar,	1	.....	.....	1
2. Prussia,				
(a) Province of Prussia,	3	2	19	24
(b) " Posen, . . . . .	.....	1	5	6
(c) " Silesia,	1	6	24	31
(d) " Pomerania, . . . . .	.....	3	28	31
(e) " Brandenburg,	1	1	35	37
(f) " Saxony,	1	2	15	18
(g) " Westphalia, . . . . .	.....	.....	13	13
(h) " Rhine,	1	1	10	12
(i) " Schleswig, . . . . .	.....	.....	1	1
(k) " Holstein, . . . . .	.....	.....	.....	.....
(l) " Lauenberg, . . . . .	.....	.....	.....	.....
(m) " Hanover, . . . . .	.....	2	4	6
(n) " Hesse, . . . . .	.....	1	2	3
(o) " Nassau, . . . . .	.....	.....	3	3
Catholic Schools, . . . . .	.....	.....	9	9
3. Wurtemberg,	7	19	6	32
4. Baden,	1	2	12	15
5. Hamburg, . . . . .	.....	1	.....	1
6. Lubeck, . . . . .	.....	1	.....	1
7. Bremen, . . . . .	.....	1	1	2
8. Mecklenburg-Schwerin, . . . . .	.....	1	.....	1
9. Mecklenburg-Strelitz, . . . . .	.....	.....	1	1
10. Hesse-Darmstadt, . . . . .	.....	1	2	3
11. Bavaria, . . . . .	.....	3	75	78
12. Kingdom of Saxony, . . . . .	.....	.....	17	17
13. Lippe, . . . . .	.....	.....	1	1
14. Bernburg, . . . . .	.....	.....	2	2
15. Reuss-Schleiz, . . . . .	.....	.....	1	1
16. Reuss-Greiz, . . . . .	.....	.....	1	1
17. Anhalt-Cöthen, . . . . .	.....	.....	1	1
18. Oldenburg, . . . . .	.....	.....	1	1
19. Brunswick, . . . . .	.....	.....	1	1
Total,	16	48	290	354
In Switzerland, . . . . .	.....	.....	.....	44
Alsace,	1	.....	1	2
Russian Provinces, . . . . .	.....	4	.....	4
Total,	17	52	291	404

In this table three periods are distinguished, viz: The data of the establishment of the first Reform Schools, between the years 1813-1830; their introduction into central Germany, between 1831 and 1847; the efforts of the inner mission after 1848. The total number of Reform Schools, given as 404, is probably greater, as those of recent erection could not be added for want of reliable information. From annual reports we learn that one half the institutions of Germany number 5,235 pupils; the total number in 404 schools may safely be estimated at 12,000. The average cost per pupil is variously given at fifty to one hundred thalers. At the smallest estimate of fifty thalers, the yearly expense would amount to 600,000 thalers, which is contributed by the benevolent.

Societies in aid of Reformatory Education have not been specially mentioned, yet a few words may be added with regard to them. One hundred and twenty-six children were taken care of during 1862, by a society of Baden. In Wurtemberg there are eighteen such societies, besides that of the ladies of Stuttgart. The Educational Societies founded by Pastor Brain at Neukirchen, (1850,) have labored with great success. Each of these societies has its special agents, generally young clergymen, who visit christian families throughout the country to induce them to take charge of neglected children. The society of Neukirchen provides for 132 children, 117 of which are in 100 families in the district. There are similar societies at Eberfeld, with 148 children, and Barmen, with 86; also smaller societies at Romsdorf, Solingen, Schmelm, each providing for 12 to 30 children. All these societies in Rhenish Prussia, maintain from 450 to 500 children, and when those in Baden and Wurtemberg are added, the number swells to 12,000. This seems a great result of the labor begun in 1848, and is greater yet when we consider the progress in other countries.

In England alone, 291 institutions of this class were founded between 1840 and 1850, containing nearly 23,000 pupils, and expending annually about £289,000. The Ragged Schools are not included in this estimate. In 1866, there were 1168 of these in London alone, containing 41,291 pupils, taught by 3,241 teachers, the greater part of whom received no compensation for their labors.

The results in Germany are the more remarkable when we consider how the revolutionary feeling of the time predicted the certain downfall of all Christian schools. This spirit was so violent that, in France and Switzerland, the populace demolished the buildings belonging to the institutions, and similar outbreaks were feared in Northern Germany. But now a firm faith in God, and in the blessings attendant on His service, awoke. The languishing schools revived. Hundreds were established, and grew prosperously. It was then said that reform was a fashion, which would soon pass away. But in this noble work of educating and caring for the bodies and souls of the neglected, all classes united, old and young, men and women, rich and poor, peasant and citizen, servant and princess. Societies, communes, governments, all worked together. Private persons opened their houses and princes their palaces to receive the children, and accustom them to the life of a christian family. Fearful pictures of sin did not appal them, but only incited to fresh acts of

charity. All gave what they could for the building of Reform Schools, some their hard-earned pence, others thousands. The very poverty of the institutions gave them a strong hold on the hearts of the people.

King Max of Bavaria, in a decree of Nov. 20, 1851, expresses his pleasure in the establishment of Reform Schools in various parts of the Kingdom. He thinks that their unrestricted management is an essential feature, and that the State should only aid the administration and progress of the organizations at certain times. A Catholic priest of Bavaria, who read one of the publications of the *Rauhe Haus*, was induced to found a school on its plan. The united efforts of both Catholic and Evangelical Churches, resulted in the erection of 75 Reform Schools in Bavaria. In Baden, 15 schools were organized. The northern provinces of Prussia began the work with success, which has been shared by Saxony and other lesser states. The great missionary work of the 19th century has not reached its consummation. Indeed, it has scarcely been begun in many places most in need of it. Obstacles exist everywhere, chiefly resulting from that deep national struggle for belief in revelation. For this reason, the leading principles of the work of Reform should be presented in detail, as clearly as possible.

III. PUPILS AND THEIR CLASSIFICATION.

The work of each institution must be simplified as much as possible. Elements must be classified; conflicting ones removed, those that agree brought into distinct departments. This limits the work of each institution, concentrates its power and divides the labor into separate groups, thus forming an organized system.

(1) The first question to be considered is that of the religious denomination of Reform Schools. We may regard them as independent Christian enterprises, belonging to some particular Church, or as confessions of a certain faith. They are in this way distinct from the houses of correction belonging to the State, in which religious differences do not receive much consideration, although within a few years, divisions have been made as in the Reform Schools. There is now but one mixed Reform School in Germany and Switzerland. In Baden, the Archbishop insisted that there should be a separation of faiths, and that the Roman Catholic portion should be submitted to his authority, but this was not done. It appears that the Roman Catholic Church has taken hold of the education of the neglected children most zealously, but we know very little of their views and plans in the matter, owing to the want of reports. Dr. Hirscher's treatise is therefore an interesting authority. He describes the Reform School as a penitentiary, not as much for punishment as for correction. The rules of the institution must be severely maintained; every error punished. Hard work and hard discipline are indispensable. He considers religion as a means of education which works by fear. The avenging justice of God is strongly brought forward, while the pardoning mercy through Christ is more lightly touched upon. Perhaps these views have not been generally adopted in the practice of the Roman Catholic Church.

In France the schools are of a religious character, but are more Christian than sectarian. This is particularly the case with Mettray, and many of the farm and penitentiary schools founded by private persons.

In 1848, eighteen of the forty-one schools of France were under the charge of laymen, fifteen cared for by priests and friars. Of the 404 German Reform Schools, 324 are Protestant and eighty Roman Catholic.

(2.) Another point to be noticed is, that Reform Schools are needed for both boys and girls. Difference of opinion exists as to the practicability of uniting the sexes in the same institution. The character of the children and the accommodations of the buildings must be taken into account. Many of the schools of Wurtemberg, Baden and Bavaria, unite the two sexes. In some of the establishments they are placed in different divisions under special teachers. Tubingen and a few other schools, the boys and girls occupy different parts of the building. The Roman Catholics have consolidated some of their institutions, but have placed the boys and girls in separate buildings. Heiligenbrun admits girls only. Four or five only of the forty-four schools of Switzerland are for girls. In Baden, some of the schools are separate in this regard, others not. In the north of Germany, the Reform Schools are devoted to the sexes separately. There were formerly a few instances where the sexes were placed in one establishment, as at Stettin; but this did not answer, and a separation was made. The pupils of the northern Reform Schools are morally more dangerous than those of the southern. The arrangements of the latter organizations would be ruinous in the north. Occasionally, as in the Rauhe Haus, both sexes are in one school, but the construction of the buildings ensures perfect supervision. The newly erected buildings of the Rauhe Haus, were planned in such a way that any trouble is guarded against, and an secret interview is out of the question.

Whenever the children are particularly vicious, the separation of the sexes is generally to be preferred, although the economical wants of the kitchen, washing, sewing etc., make it often desirable to have the girls in the same establishment with the boys. The number of girls in the Reform Schools is much smaller than that of the boys; there are fewer women in the penitentiaries. This is a general fact. But the quality makes up for quantity here, since the depraved girl stands on a lower plane than the vicious boy. The most dangerous tendencies of girls are secret, their cure more difficult. There are not enough Reform Schools for girls, but this is a want which promises to be soon filled. In France, the boys and girls are carefully separated.

In 1862, eight public institutions contained 2026 boys; twenty-eight private schools numbered 4578—total, 6604. In the twenty-three private institutions for girls, were 1718 children; and in the two public schools 160—total, 1878.

(3.) Another question to be considered is the age of the pupil to be admitted or discharged. The regulations of various Reform Schools differ, and the character of the institution is in a great measure determined by their rules. It is not often that children are admitted before the age of eleven or twelve. Before that time, parents will endeavour themselves to

train their children. Some exceptional cases have been presented at seven years; these instances are rare, and difficult to manage. As a rule, the admission should not be delayed beyond fourteen years. The pupil should be under training about three years. Experience has proved that a lasting effect cannot well be produced in a shorter time. The age for admission must not be more than fifteen, or else the school would have inmates seventeen years old, which must be avoided. It is desirable that they leave the Reform School at sixteen, for they would lose the elasticity necessary for those new relations of life for which they must prepare themselves. Girls may be kept later. Accordingly, the Reform Schools generally contain pupils from eleven to sixteen years of age. Boys of the wealthier classes are not usually sent to the Raube Haus before the age of fourteen. Their parents delay in fruitless attempts at reformation.

(4) There is also a social distinction among the pupils of the Reform School. We must not forget that these establishments are not Poor Schools in principle, though many poor children are admitted to them. There is undoubted evidence of the fact that the middle and higher classes stand greatly in need of the aid of the Reform School, and will rarely apply for it. Within the last fourteen years, 550 boys from respectable families have been received at the Raube Haus, and the question arises, how shall children from these various spheres of life be grouped? It would not answer to bring the children of the higher classes into immediate contact with the ignorant and degraded. It would be very injurious to the pupils to class them together, as if in a penitentiary. The object of the Reform School would be lost. Children from the wealthy and educated classes would consider the necessary change in diet, dress, and social relations as a punishment. Now, punishment is not the principle of the school. It aims to help the pupil by sympathy, forgiveness, and loving care. The school must represent to the scholar his own home as far as possible. There should be the same manner of living and way of dress. The intercourse and demeanor must be that of a cordial and familiar household. The instruction of a pupil in the gymnasium must be energetically continued, that the preparation of the boy for his future vocation may not be hindered. Every agency of moral and mental culture should be employed to elevate the being of the pupil. This cannot be done in those schools in which the arrangements are chiefly made for the poorer classes. A different organization is required. This can be had only in those institutions where the means for the highest scientific and literary training are provided. It is necessary to classify the pupils according to their social rank, and place them in corresponding institutions.

(5) Mental and physical health is an indispensable condition for admission to the Reform School. An idiotic or epileptic child is a great hindrance. An epileptic inmate may infect the others, and should be dismissed at once. An idiot is a burden, restraining the progress of the scholars. A few years ago, great sympathy was excited for the idiots. Efforts were made to found asylums for them, and the directors of the Reform Schools of Reinstedt and Züllichow were asked to cooperate. The result was the establishment of asylums for idiots, under the supervision of the directors of these schools. The treatment of idiots and epileptics

should always be left to special organizations, and never connected with reformatory work.

The Reform Schools should, as far as practicable, remain independent of the Communes, or they will become private penitentiaries, compelled to admit young criminals. Even if it should seem desirable to aid the State authorities in this way, the least appearance of a penitentiary must be avoided. Success depends on it. These remarks apply to Reform Schools for girls; but an added caution is necessary. The exposed must be kept from intercourse with the specially depraved and fallen, who abound in large cities. The danger for the innocent is imminent; for association with the vicious is fraught with temptation. Many of these children, taking advantage of their connection with the pupils, seduce them also. The womanhood of the girls must be protected, and the fallen on no account admitted to the Reform Schools. There should be Magdalen Asylums, or special institutions provided for them. These are much needed in Germany, and it is to be hoped that we shall soon follow the example of England and Holland, where energetic efforts have been made for the reform of such young persons. London, as well as other English cities has many institutions of the kind for girls under sixteen years of age, some of which contain 100 inmates. One of these establishments has admitted 4000 young girls during the fifty years of its existence; another 700. Some of these institutions are specially designed for the daughters of the better class. One of these received during seven years, 673 girls. One of the Magdalen Societies maintains fifteen homes, and six family organizations for girls not yet prostituted. The excellent asylums erected in Holland, through the exertions of Pastor Heldring, deserve honorable mention. Hence, it appears that the proper pupils of Reform Schools should be classified into different institutions.

We now briefly recapitulate the noticeable points in respect to classification:—

First. Protestants and Catholics must be divided.

Second. The two sexes should be separated.

Third. The age for admission should fall between twelve and fifteen.

Fourth. Pupils must be in good physical and mental health. Idiots and epileptics should not be received.

Fifth. Criminals and fallen females belong to special institutions.

Sixth. Boys from the wealthier classes should be educated by themselves.

Two exceptional classes remain: those young children who may be cared for by private families, and those who belong to the Reform School proper. We will consider the latter class. These children have not led solitary lives; they have been mostly with bad companions, leading or led astray. Their sins are various, petty thefts chiefly, and begging, if belonging to the poorer class. Success in stealing is joined to growing cunning and daring. Resistance to and defiance of authority results. Such scholars are expelled from school. Parents lose their influence, brothers and sisters lament. The child is often absent from home, and at night. Anxiety is increased. Those who attempt to save the lost are insolently repelled. The poor family share their sorrows with their neigh-

bors; but the rich conceal their grief, to which shame is added, and fear lest an honorable name be sullied. The pastor is consulted, friends offer advice. The child is sent to other schools, but in vain. The evil grows. No means of punishment has been left untried. Perhaps the mother sickens and dies of anxiety, the father of disappointment. The police rarely become acquainted with these facts, and the young delinquents may yet be saved from the interference of the law if a Reform School is open to receive them. Three thousand such applications have been made to the Rauhe Haus from every quarter. How many parents there may be who dare not express their need. How shall the Reform School be organized in order to save such children? Is the Reform School really the right place for them? Would there not be greater hopes of success if a family could be found willing to undertake the training of such a child? We must now consider this question under the following head:—

IV. THE FAMILY, OR REFORM SCHOOL.

Notwithstanding all that has been said and written in favor of Reform Schools, and the fact of the many successful institutions of the kind in existence, there is much to be said for the family. Where the children are simply poor, orphaned, in danger from neglect and exposure, with no pronounced evil tendencies, the family is undoubtedly the best place for them. This is the excellence of the educational and preventive societies on the Rhine, in Wurtemberg and Baden. These Societies also provide for children in Reform Schools, if, in the opinion of the committee, the pupils are not suitable to be taken into families. These are the specially depraved, the class now under consideration. The opponents of Reform Schools declare that such children should be placed in families. But what family would undertake the work. If we exclude those who would receive children for remuneration only, the number of families willing to engage in the work of reformation would be very small. What Christian family would be willing to receive a thieving, unchaste, obstinate, or lying inmate, and give loving aid to one, of whom parents and teachers had long ago despaired? Would it be right to bring such a child among the well-trained sons and daughters of an innocent home? Such experiments have ended in sending the boy or girl to the Reform School. This is undoubtedly the wisest decision.

What then are the necessary arrangements of a Reform School? Educational questions of a similar character have to be solved both by the Reform School and the Prison. The difference between pupils of Reform Schools and the inmates of Prisons has already been shown, yet in one respect there is a strong likeness between them; viz. the morally dangerous element always presenting itself in numbers. The danger resulting from the congregating of children is that the faults of each may be increased by the contagion of others. Such considerations have led to solitary confinement in the case of adult criminals. It would be natural to make such local arrangements in Reform Schools, if the principles of Dr. Hirscher were accepted. He considers Reform Schools as Penitentiaries. The idea of solitary confinement may be carried out in the case of individuals. In *La*

Roquette, Paris, the system is carried out by means of 500 cells. This is the Pennsylvania method, and has been applied to young criminals. They are separated day and night. This complete isolation is by most prison directors considered too severe, and the method of silent work in company during the day is generally preferred.

This plan of silent work in company is carried out in America.* Nearly all the Houses of Refuge and some of the Reform Schools of the United States pursue the method at immense expense; for instance, the House of Refuge of New York, founded in 1824. The building is spacious, and can accommodate 1,000 children. The entrance is by the central hall. There are four wings, each 230 feet long, separated by high outside walls. The children are divided into four classes, and each child bears the number of its class. Each child has its bedroom. Scarcely any labor is done in the open air. The children are together in the work shops. Absolute silence is imposed, not a word or song permitted. Dinner is brought on railways into the central hall, and thence it is conveyed to the different wings. The meals are taken in military order, while the children are ranged each behind the other. Every child is locked up in the evening behind oaken doors with double padlocks. Inspections are made during the night. On Sundays, clergymen of different denominations hold service by turns. There were eleven Houses of Refuge in America in 1860. They were mostly founded by private means, but are aided by the State. Over 20,000 children have been admitted. The average number is 5,000. We shall again refer to *La Roquette* and the American Houses of Refuge; but are these Reform Schools? Although these establishments are in America founded by benevolence to save the erring, they are not Reform Schools. They are, as their titles show, Houses of Reformation, or Houses of Refuge for juvenile delinquents. They receive their inmates from the hands of justice. The law sentences the child for years, or months; he is discharged when his term expires, not when his improvement warrants. The whole treatment is regulated by law. The officers or directors of these establishments are trammelled by restrictions, and there is none of that liberty so essential in a true Christian education. The German Reform Schools are entirely different in aim and organization. The American institutions are Houses of Correction. The "Rettungshaus" is a family, the head of which is a House Father. The members of this family are not bound together by mechanical rules, but by sympathy and kindness. The new-comer is no stranger; nor will he who leaves be forgotten. In this home community that undeniable danger of infection arises, which seems to require such institutions as *La Roquette* and the American House of Refuge. Now the serious question arises how to avoid the danger proceeding from the association together of a number of depraved children. What means must be employed in those cases, where the pupil, because of his vicious inclinations, must be separated from his companions. How must he be guided, how influenced by other means than punishment, bolts and bars, silence and severity? This is a most difficult problem.

The way the child is received into the school is of the greatest impor-

* The statistics, classification and discipline of American institutions are not given with minute accuracy in the following paragraph. *Am. Ed.*

tance. His welcome should be a cordial one. All children have a feeling of dread and uneasiness on being brought to the school, which is often the fault of the parent. The child ought to be told that the House Father knows all his former life. The first meeting should not be a business interview; for by it the new-comer forms his opinion of the person who is to take the place of father to him. The right moment and way must be found to tell the child, that, on his entering the school, all that he has ever done is freely forgiven by his friends, and that God's forgiveness will be given if he ask for it. This divine pardon he must try to gain. Nobody knows, or will know, what his offences have been. Nobody will ever remind him of them, except the House Father, who will never do this, unless he himself makes it necessary. Besides the child must be told never to utter a word to any one about his past delinquencies, and, if he disobeys in this, punishment will follow.

The promise of forgiveness on the one side, and obedience on the other, and the requirement of silence from the scholar, constitute the form of admission into the household. The door of the school is now opened. The child must see that perfect confidence is placed in him. He must be convinced of the affection of his new friends, he must feel that the past is indeed past forever. This is one of the most essential points in the educational method of the Rauhe Haus. There are no demonstrations, explanations, or wearisome rules given; but the pupil is made to feel that a new life is open to him. Contrast a trembling boy entering the American House of Refuge, condemned to absolute silence, placed under lock and key, regarded with suspicion and dislike, with one receiving a brother's welcome in the German Reform School. He is full of hope for a better life, and has no dread of punishment. It is easy to see the difference between a House of Correction and the family organization of a Reform School. It is an undoubted fact, that the pupils of the school feel bound to keep their promise of silence in regard to their past lives, and thus one great danger, resulting from association with others, is removed. The possibility of breaking this promise remains; still the instances where previous experiences have been exchanged are rare. Yet a peculiarly skillful supervision over the pupils is necessary. There must be a special care of each, and great attention is given to this. Such supervision can be realized only in a family organization, and all that the true family may do in this regard may be done by the family system of the Reform School.

The next question is, then, how far may the family be represented, or rather imitated; for family life can not in reality be brought into connection with the education of the children. The family is of God's ordination; it exists but once for every man. Father, mother, brothers, sisters can never be replaced by other relations, or compared to them. To claim that any system can take the place of the family, would be to be utterly ignorant of the dignity of that sacred union. So he who holds the place of the father in the school, should clearly understand the extent and limitations of his power.* But each child ought to receive, as he would from his father and mother, a loving personal care, corresponding to his needs and feelings. This is not easy. The affectionate supervision of the school

* The *Haus-vater* should not be called "father."

will always be different from the feeling parents have for their children. God gives the little ones, to love and cherish whom is the parents' joy. The individual pupil does not come to the Reform School as the new-born to the family. He is a half-grown child, and on his entrance at least does not seem worthy of love,—is rather an object of aversion. The possibility that a perfect stranger should love such a child, seems doubtful. Indeed the love of Christ for the sinful is necessary. Love for Jesus' sake must be the living principle of every action of the Haus-vater. The greater this love for Christ, the greater is the affection for every child of His. One difficulty in this personal love and care results from the absence of that divine order of the natural family, by means of which the children come one by one, at such intervals that the elder may gradually attain independence, and share the care of the younger brothers and sisters. This gives to the love of parents for their children its individuality. Greater confidence in and sympathy with the elder, greater care and tenderness for the little ones.

The services that children must receive from the family are so great that God has limited the number of them. All the power of parental love is satisfied by this ordinance of God. The law of nature, which is a reflection of the law of God, finds no fulfilment in an educational institute, far less in a Reform School. In such an institution the House Father finds himself surrounded by a group of half-grown children. The difference in their ages is slight, and the change of pupils is constant. There is no cessation in the work of educating, no accomplishment of it as in the family. There the training of the parents ends at last, but the training of the school never ends. The duties do not decrease, as in the natural family, but increase. The responsibility is greater from day to day. Considering the constant growth of educational labor, it becomes necessary to limit the number of pupils. This restriction in numbers makes the resemblance to the family closer. Experience proves twelve to be the proper number, and fourteen or fifteen the exception. As every member of so small a circle can be perfectly observed, it is quite possible, though difficult, to give personal affection to each child. New comers, particularly, should receive every kind and delicate directions. It will also be possible to watch carefully, those who from various circumstances require peculiar supervision.

The second feature of family life to be imitated in our school is the companionship in living, working, eating, added to all the enjoyments and recreations of home. In this way the child soon feels contented and happy in this well-ordered community. The house is such a community in which a regard for persons and things is suitably combined. The child finds himself not alone, but connected with others mutually aiding each other. All are dependent parts of a well-balanced whole. While this community is restrained by its directors, each member feels that confidence is reposed in him. This love and trust, balanced by a healthful restraint, are the necessary conditions of every home, and of societies as well.

If we consider the organization of existing Reform Schools, we shall find that those originating from or influenced by the Rauhe Haus, have

the family system more or less developed. This is the case exclusively in Northern Germany. In the South west and in all the institutions of early date, the pupils are not organized on this basis. This is unfortunate, particularly if the number of children is too great for the powers of the *haus-vater*, and if more is demanded of him than he is able to perform. The object of the institution is unattainable by a large number of pupils. The intimate relations of family life are impossible. Can a better arrangement be devised for these large establishments, and is any change in the organization possible in order to bring the family system into practice? The same question has arisen in regard to the administration of orphan asylums. Education in large masses proved unsatisfactory. The experiment has been tried of dividing the pupils and placing them in families in the city and country. But for some reason the old system has been readopted. We cannot discuss the question of Orphan Asylums here, only we must remember that they are not Reform Schools. These establishments cannot bear the expense of placing the pupils in families. Their protegés must be educated together. Now the question is, whether the children shall be placed in smaller institutions, or the larger establishments adopt the family system, which seems incompatible with numbers. We are now speaking of private Reform Schools, maintained by the liberality of individuals. It could easily be shown that State institutions, or Houses of Correction, in which all classes of depraved children are admitted in large numbers, have not proved successful.

Belgium has taken great pains to establish *écoles agricoles de réforme*, at Ruyssede, Wynghene and Beernhem. Since 1851, these foundations have been under the direction of the excellent Herr Ducpetiaux, Inspector General of Belgian Prisons.*

A more striking example may be seen in the London institutions, where, in 1850, 60,000 children are kept in the establishments of government. Plans have been formed for a radical change. These large houses of correction are the very reverse of the American systems, but demand nevertheless an education of the whole as a whole.

Since the family organization cannot be adopted, there are but two ways open, viz: The institution becomes a school, divided into classes, or it is changed into a working establishment. It is usual to balance the labor and the learning, but the best arrangement cannot take the place of the family system. This seems as yet to be an unsolved problem, which must be decided by means of the Reform Schools. To resolve the larger institutions into many smaller ones does not dispose of the difficulty. Our large cities and great territorial divisions, make great establishments necessary. No one would think it practicable to divide the schools of Hamburg and Berlin, into smaller ones. So the organiza-

*The Belgian Institutions are for both boys and girls, sentenced for crime or beggary. They are under the administration of the Minister of Justice. In 1847, 26,247 Children were on the prison roll, which circumstance caused the erection of the Reform Schools. Ruyssede (1851,) has 500 boys, who are employed on the farm, and at trades, receiving school instruction. Wynghene (1855,) fits 104 boys for seamen. It is organized with the family system. Beernhem (1853,) can receive 400 inmates. The 200 girls are under the care of a Sisterhood. At Ruyssede, a department was formed to fit teachers, but the great expense of the plan rendered it abortive. The pupils are educated as assistants. The result was not satisfactory. A State Institution must conform to circumstances which in a work of private charity do not exist.

tion of the Rauhe Haus was changed. The great mass was divided into smaller parts called families. The children are not classed according to age, improvement or morality. The good and bad, the student, or ignorant boy, all varieties of trade are put together. These families are merely *groups* for the purpose of intellectual and social intercourse and enjoyment. The title given to these groups, 'family,' has been violently opposed, but without reason; for it is not claimed that these little societies take the place of the true family. In order to understand the matter perfectly, we must remember the separate families of the Rauhe Haus, (each numbering twelve,) occupy small houses of their own. The space devoted to them is a garden of sixteen acres. Twenty houses are scattered over it. A separate house for each family is in strict harmony with the system of the institution.

This division of a number of children into several groups, each with a certain independence, may be carried out in various ways. But the plan of division requires care and thought, or else the unity of the classification, and the success of the work may be destroyed. The simplest arrangement seems to be, for children residing under one roof, to divide the building in such a way that each family may have its own apartments and separate entrance. This is done by institutions owning a great building, which could not well be changed for the system of separate houses. The abbey of Düsseldorf has introduced this method. In Züllichow, however, a larger house was built in 1850. Its lower story is divided into four parts, each with a separate entrance, dwelling room, one room for the assistant, a bed-room, washroom and wardrobe for each of the twelve boys. This arrangement is considered more convenient than the houses of the Rauhe Haus. The first of these Rauhe Haus dwellings, was built in 1834. It was not intended for different groups of children, but on the increase of pupils, was occupied by three families, in three sets of rooms. The desire for this family system became so strong among the pupils, that for years they have been placed in separate houses, and the arrangement has answered admirably.

The difference between houses and apartments is amount of room. Family life is not the same in the narrow limits of a room or two as in the house with its belongings. The form of life must, however, be the expression of an inner want. Are not the wants created by the surroundings of life? For example, take the tent life of a regiment of soldiers, or the workmen of a factory, whose families live in their own little houses, surrounded by cheerful gardens, and contrast the barracks of a garrison where men live together in rooms, or in a work house, like that described in Schinkel's Sketches of Manchester.

A large institution may undoubtedly have its inmates in one building, with separate rooms, like the soldiers' barracks; but the success depends on the spirit animating the whole. A large Orphan Asylum has been built and organized, after long opposition, on the Rauhe Haus plan; but the fine large rooms are generally deserted, while the children play together in the halls in a way to be entirely avoided in a Reform School. Still this is better than the constant association of large numbers; but the idea is not fully realized as when the little families are so situated that no direct

communication is possible, and where each can live in great retirement; consequently with greater comfort develop their own individuality. While many of the rooms open on one hall, in which as well as on the common play-ground, the children can play together, the separate households have their own play-grounds, their own flower and vegetable gardens. They are like neighbors—distinct yet united; a condition from which pleasant relations may result. This arrangement appears preferable for Reform Schools, for the dangerous elements of the various groups are kept apart, and it is easy to separate those pupils unfit to associate freely with the others. A great many houses may be distributed in this way over one large garden. We add a chapel, the large central buildings, the additional structures necessary for agricultural pursuits, etc., placed at different distances. There are flower gardens, vegetable gardens, an orchard, stable, fields and meadows. It looks like a cheerful German village, with its streets, slight irregularities and apparently undesigned accidental modifications. The arrangement of the Rauhe Haus is on this plan.

It is interesting to notice how the French have replaced the name of village by *colonie agricole*. The plan and object of the *colonie* is easily seen by the outward arrangements. The School of Mettray, and those of similar plan (Zutphen, in Holland), have but one straight street, on each side of which houses are erected at right angles. Its resemblance to the Rauhe Haus consists in this, that the houses are built after the Swiss model, which the founder of Mettray observed on his visit to Germany; but the want of the cheerful picturesqueness of the German village is surprising, although its regularity is greater.

Different in appearance, though the same in principle, is the "Christian Family" at Laforce (Dordogne). Its little dwellings are grouped around a church. The State Institution of Ohio resembles the Rauhe Haus in appearance. A circle of ten houses has been formed around a church, in which all meet for worship. The little village is in the midst of gardens and woods, and bears the name of *State Reform Farm Village*. It is for juvenile criminals. It may here be added that in Russia, Switzerland, and in many parts of Germany, Reform Schools of thirty or forty pupils have been organized into families, with separate houses. In some other places houses are built with projecting wings, which are divided among the different families.

The great want in these isolated organizations is the influence of woman. But the occupants of these separate dwellings are not limited to the surroundings of their homes. They associate at work, at school and at church. There is unrestrained intercourse every day. The experiment has been tried of placing a married pair at the head of one of these little families. There are serious objections to such a plan, and it is found to be impracticable.* Besides, the expense would be greater. There are many

* The Philanthropic Society of St. George (1788) opened an institution near London with twelve children, under the supervision of a married pair. By degrees there were four families thus organized. In one of these divisions were tailors, in another shoemakers, etc. In 1792 the society relinquished the plan because of the impossibility of finding suitable persons for this position. An entire change was made in the arrangements, by the advice of Mr. Gladstone, in 1849. The institution was transferred to the country. The society rented the estate of Redhill, near London, for the term of 125 years, and erected buildings after the plan of Mettray. There are now five houses, a church and a school. Prince Albert laid the first corner-stone of the establishment.

circumstances to be taken into consideration, some of which may be noticed. The parents may have children of their own, and in a large institution would not a separate organization be required for the training of the fifty or sixty new-comers? The buildings would have to be larger; each house would require a kitchen of its own. Then the question of a suitable director becomes complicated. Not only must a fitting man be found, but the right wife for him. This has been proved to be infrequent. But grant that an excellent husband and wife could always be found, would not their position as head of a family dissolve the unity of the institution? There can be but one head, the House Father, who can never divide his authority and responsibility with twelve others. His influence would be destroyed. No establishment can succeed without this centralization of authority. It is not an inspector and director that is needed for the Reform Schools, but a House Father and House Mother, by whom the character of a house and its inmates can be established. The family with a great number of children becomes sub-divided into smaller groups. It may become very large when the discharged pupils, as men and women, gather families about themselves. If a Brotherhood be connected with the school, the members of which, even when absent in other fields of duty, are always considered as belonging to the institution, then the whole, with its far-reaching ramifications, will still retain the character of a family. Events have proved this. The central home remains the source of strength and support of the whole, and presents the picture of a great patriarchal household. The centre of the household work must be the House Mother. All the care of the daily needs, the eating and drinking, the clothing, is in her busy hands. She silently provides, helps, softens, rules. In a family organized on this plan, the female element is not wanting. Its existence is desirable. On a large farm, the mother of the family overlooks and directs, assisted by her daughters and servants. So in institutions, the girls may work under the direction of the House Mother, and while the boys are working in field or garden, the girls are employed in the kitchen and laundry. Both elements are necessary for a proper furtherance of the general good. Still the Reform Schools cannot all have the two sexes represented. There are cases where the House Father has no wife, or where his wife is obliged to live away from the institution. But in spite of some difficulties of this kind, the work has progressed regularly, for it is the spirit that moves and rules.

From these considerations, we conclude that the education of neglected children should be given up to Reform Schools in preference to families, if the institutions are organized in the proper way to insure personal care and the social intercourse necessary for the young. What other conditions are needful we now propose to inquire.

V. LOCATION AND EXTERNAL ARRANGEMENTS.

The acquisition of suitable localities for Reform Schools is generally the greatest difficulty at the beginning of the work. When the school is to be established near a great city, the land is costly, and even in the country special aid is necessary to enable the founders of the school to gain possession of the needful space. This assistance may be a gift of the

ground or sale on easy terms of land and large buildings. Volter mentions nine institutions in Wurtemberg which were enabled to purchase domains and public buildings far below their value. The castles of Beuggen and Arnsburg were the gifts of their princely owners. The Abbey of Düsselthal was bought. These have been mentioned already. We know of no similar bequests in the north or centre of Germany. Reform Schools have been usually begun in old houses bought for the purpose. These were afterwards re-arranged, and new buildings added. Only a few of the old institutions are so situated in cities that agriculture is impossible. In Wurtemberg, only two or three houses belong to this class, viz.: Silesia and Goldberg. The three Reform Schools of Berlin—Urban, *das Grune Haus* and the Gossner Haus—are situated in the suburbs, and possess more or less garden land.

All the German Reform Schools, and those of Switzerland, Russia, Sweden, Denmark, Belgium and France practice agriculture and horticulture to a greater or less extent. The directors of the schools endeavor to extend their area as much as possible. There is always a stock of cattle and poultry. The House Fathers work the lands of the large institutions, aided by gardeners, overseers and the pupils.

The buildings of the Reform School belong to that special branch of architecture which considers first the definite purpose and use of the construction. They can never be properly built unless the educational workings of the schools are perfectly understood. A wall or a door in a certain place, the situation of a kitchen, may render supervision easy, and prevent not vexation only, but temptation, besides promoting the general well-being.

As a model of its kind, we would mention the edifice at Tuttlingen, in Wurtemberg, built in 1827, by the architect Baumgärten. The houses at Stammheim and Ludwigsburg have been built after its plan. It is intended to accommodate sixty pupils. It is 137 feet long, 28 feet deep, with two wings projecting 13 feet. The arrangement of the rooms of the institution of Urban, in Berlin, is generally preferred. Its cost was 140,000 thalers. The best arrangements for single dwellings, after the Rauhe Haus plan, are found in the houses of the St. John's Foundation in Berlin. These were erected by Hoffman, Inspector of Public Buildings, after the so-called Beehives of the Rauhe Haus. The Elleneshof of Berlin affords a good example of building of moderate size.

Reform Schools should never be in or near large cities. If this be unavoidable, a large garden should be attached to the institution, as at Berlin. On the other hand, it is not best to remove them too far from a city; for the parents and friends of the children will find it difficult to keep up the proper degree of intercourse, and the personal interest and aid of individuals will be in a great measure lost. Besides, pupils, after they leave the Reform School, can be apprenticed where they may be under the protection of the school, and their attachment kept up by Sunday visits. The permanent result in regard to many pupils depends on this after care, and this consideration should be decisive.

Those Reform Schools situated in the country should be at a moderate distance from any village, and avoid any intercourse with the inhabitants.

There is very little sympathy felt for these Reform Schools in the country districts, and entire isolation would increase the estrangement. Besides, the teachers should not be so situated that intercourse with men is impossible. The pressure of his work is heavy on the house father, he needs friendly aid and the conversation of outsiders. It is not well for him to be alone.

Plan and Construction of Building and Grounds.

We will now present a plan of arrangement for a building for a family of ten or twelve boys. The necessary modifications for females will readily suggest themselves. The house should be so situated that all four sides can receive the sunlight. If there be no regular cellar, the first floor should be raised high enough to prevent dampness. The main entrance is generally used only by the teachers and visitors. It leads to a reception-room, which is reserved for the meeting of the Board of Managers, and for ordinary business interviews. For the house parents (*haus eltern*), rooms on the first floor should be fitted up, in such a way as to ensure their privacy. The suite should consist at least of a bedroom and sitting-room, with a private study for the house father, where he can work in quiet, keep his papers, and hold private conversation with any of the children. The room of the house mother must lead directly to the kitchen. This room should be of good size, and so arranged that the children can come for their meals and lay the table. A provision-room should join the kitchen, and communication with the laundry and bleaching-ground must be easy. If a maid-servant be kept, her room must be near the kitchen, within reach of the house mother, and removed from the boys' quarter. The room of the house father must be easy of access for the pupils. A large sitting-room should be set apart for the pupils, which may also serve as a school-room. The table may be used for both dining and study. Adjoining this room should be a large work-shop, which must contain tools for carpenters', tailors', and shoemakers' work. The school-room and work-shop should be separated by folding doors, so as to be converted into one large hall on special occasions. Doors lead from the sitting-room and work-shop to a verandah and the garden and playground. A dormitory is set apart for the twelve pupils and their teacher. This should have closets for bathing and wardrobes. Adjoining, is the private room of the assistant. There should be a sick-room situated at some distance from the bedroom, and one or more spare rooms. A visitors' room may be desirable, but is not necessary. In order to avoid all luxury, at the same time to preserve the family character, no separate room for prayers has been designated. The sitting-room is the proper place for family worship. It is more important to provide good school-rooms, which may serve for the worship of the entire family in larger institutions. If the enlargement of the establishment was contemplated in the beginning, the kitchen should be made at first suitable for the use of a large family. The furniture of all the rooms must be simple, neat, and plain, but inviting. The walls of the sitting-room should be hung with a few good pictures, a map of Palestine, and of the country in which the institution is situated. The bedsteads should be of iron, the wash basins and cups of tin, kept perfectly clean.

Especial care should be given to the proper laying out of the garden, which had better be under the direction of a gardener. Everything that looks like a prison should be avoided. There should be no doors heavily barred, no high walls, particularly about the playground, which should be cheerfully situated near the dwelling, and not far from the garden.

The architecture of larger institutions has been greatly improved by the late Belgian architect Dumont, aided by Ducpetiaux of Brussels. They erected the buildings of Ruysselede and Beernham, of which plans are published in the *Exposé de la situation des écoles de reform de Ruysselede, par M. Ducpetiaux. Bruxelles, 1861.*

The Educational Corps.

To get suitable instructors is the first condition of success in Reform Schools. In the beginning, the founders of these institutions became their directors, the heads of the family. Life devotion to their great cause was personified in them. John Falk, Count von der Recke, Zeller, Reinthaler, all abandoned their positions in life to become more devoted to the work of educating the neglected. Among them we must rank Pestalozzi and Fellenberg; in France, DeMetz, the Lutheran pastor Bost, and others. It would be desirable, in all cases, to have found persons of intellectual force to give themselves up to the Reform School as Fliedner and Löhle did to the deaconess institutions. It is well to secure the good will and good offices of men of high social position, even as amateurs, and the more constant support of theologians and pastors, who are in a position greatly to aid this enterprize. But the highest success can only be permanently obtained when the business of conducting this class of institutions is considered as a chief, and not as a side object, with devoted and competent persons. In this way only can the brotherhood—inseparable from the idea of the Reform School, the test and the training field of assistants and directors—be properly supplied and maintained. Life-devotion will not alone suffice to found and direct institutions. In the history of reformatory movements, mechanics and peasants have been found who had sacrificed house and home, and all other work, for this cause, and they had made all necessary collections with remarkable fidelity. But their want of intellectual power or executive ability, or of good advisers in critical emergencies, have often multiplied difficulties, and, in some instances, not only produced hindrance to sound development, but a lasting injury. These instances are, however, so rare, that they need not be further considered here. The great question remains to be answered—the great problem must be solved—how to obtain true *house-fathers*, not for one or a few institutions, but for ever,—for all the four hundred Reform Schools that have gradually arisen, and which now exist in the German-speaking States.

Not only must directors or *house-fathers* be provided, but how shall the numerous assistants and other functionaries be obtained. Although every institution may not need an assistant, yet in at least one half of them an assistant is desirable, and in all which are arranged on the family principle several are indispensably necessary. An organization like the *Rauhe Haus* is utterly impracticable without thirty or forty assistants, and

in others from ten to twenty are required. In all existing schools at least 300 assistants must be provided—or at least 700 men, with 400 married women as wives, and 400 other persons of special qualifications in devotion and training, are required to do the work of reform schools;—and the corps must be increased by a number as large as there are special institutions for neglected girls, of which there are now at least forty. This number must be kept constantly full—all vacancies of officials by death, or exhaustion, or sickness, must be provided for. For a time, in the infancy of the enterprise, the training school at Beuggen, and still later, the brotherhood of Rauhe Haus could supply the demand,—but now, with 400 institutions to provide for, other sources must be provided.

The simplest way out of the difficulty was to employ the public school teachers, or turn the normal schools into training schools; but serious objections were raised against this. The older teachers—those who had been years at work—were best fitted for the position of directors. To these—often married men—a doubtful and precarious support could alone be offered. For this he was required to give up a sure salary, the prospect of increase, and at last a pension from the State. Several Brothers of the Rauhe Haus accepted positions without the promise of any salary. The teachers, instead of a stipend, had more constant labor, longer hours of work, no leisure out of school, a continuous routine of duty all day, including Sunday and holiday, from early morning till late at night. Instead of comparative ease, he was to be weighed down by the responsibility; he must give up all hope of increase of wages, all expectation of a provision for his widow.

In Wurtemberg the government has recently placed the House Fathers on the same footing with the public school teachers. But this is only in Wurtemberg. The duties of a House Father are very different from those of a teacher. Of course he must be a teacher; but beyond this he must be a spiritual guide, and, further, must be able to teach a trade and rule a great household. A House Mother is a pressing need; and the question is whether the wife of the teacher is qualified to aid in the work. These wants are being satisfied one by one. The great need is now of those teachers who, with their wives, have the true missionary spirit, which no amount of training can give. Without this spirit the Reform School can never perfectly fulfil its object. But must the body of House Fathers be recruited from the ranks of teachers alone? Where else shall we look for them?

The same difficulties arise in reference to the assistants, whose services are indispensable. The quantity and variety of work in a Reform School makes personal aid an absolute necessity, from an educational point of view. The assistants represent the House Father, who cannot do all things in person. There is often need for prompt, yet prudent, action on their part. Oral instruction, though necessary, cannot take the place of the personal influence of the teacher. This is all-important in these institutions. Where shall such assistants be found? They, too, must share the missionary spirit—must show their manhood not by words, but actions. The proper supervision of a Reform School does not consist in mere inspection, but in living, working and playing with the children. The

assistants must be men of ability, full of a child-like, yet serious, spirit. Young teachers, just past their examination, would make excellent aids. Unfortunately there is a prejudice against all labor—manual labor particularly in training institutions—which prevents their graduates having technical skill or authority.

To meet this want, the societies of Wurtemberg, in 1861, determined to train those pupils of the Reform Schools who seemed suitable. A beginning has been made, but the results are not yet known. The same motive led to establishing preparatory schools in connection with the Reform School. But the most important step was taken by the government of Bavaria, in 1858. On the motion of the Director of the Gymnasium, Von Jan, the friend of reformatory education, it was decreed that the assistants in Reform Schools who would prepare themselves as teachers of the poor should not be required to attend the normal schools, if they could pass the final examinations of the teachers' seminary. Some three or four years ago, the Prussian government allowed the directors of Reform Schools to pass the State examination of teachers. This has been somewhat modified, in consideration of the other duties required of such persons; but the examination, if passed, does not render the House Father fitted for any other teaching but that of Reform Schools.

The only sure way of training House Fathers and assistants is to establish special institutions for the purpose. Soon after Beuggen and Lichtenstein established their training schools, the Rauhe Haus founded the "Brotherhood," with the object of meeting the wants of Reform Schools and kindred institutions.* Similar training schools were connected with Düsseldorf, Züllchow, Neinstedt, Puckenhof and the St. John's Foundation at Berlin, in Bächtelen near Berne, in Reval, in Milan near Geneva, all of which pursue the object of training principals and assistants.

In 1867, an institute was established in Wurtemberg for training male nurses, but the instruction in reformatory methods was not excluded. Applicants for admission into the Brotherhood must be over twenty and under thirty. They must bring evidence of a pure moral character, and of their devotion to the missionary life of the institution; they must reach a certain educational standard, be prepared in some trade, and express their willingness to accept any missionary labor. On entering the Brotherhood, they give up their former occupation. Several years of theoretical instruction, together with practice among the pupils of the Reform School, enable the Brothers to undertake the work in other establishments, and finally to become directors of Reform Schools. Though the Brotherhood have supplied the wants of many schools, they have not satisfied all. The Brotherhood of the Rauhe Haus has sent out from the commencement nine clergymen and fifty Brothers, besides a number of Brothers temporarily connected with other organizations. Many of the pupils, after becoming principals of Reform Schools (in Prussia), have passed the State examination for teachers, and thus gained the privilege of that profession.

* The original name was "Assistants' Institute," in the sense that those persons therein trained in work were members of the Rauhe Haus, not educated for other institutions. As many said that young men could not be educated for an independent sphere of action, unsuitable persons were deterred from entering. So the name was changed to Brotherhood, because the assistants of the Rauhe Haus are called Brothers.

The Rauhe Haus, to aid young institutions, sometimes lends assistants for a year or two. When the Brotherhood and Reform Schools are united, they are under the direction of a divine, who bears the title of "Inspector."

For the training of female assistants there exists the institution of Mrs. Jolberg in Baden, and of Wilhemine Canz in Wurtemberg. The primary object of these, as well as that of the Frankenstein establishment for deaconesses, is the education of teachers for infant schools.

The same want of assistants for Reform Schools has been felt in other countries as greatly as in Germany. In England (1840) steps were taken to found rural institutions for the 50,000 poor children scattered through Poor Houses. Drs. Kay and Tufnell established the training school at Battersea, for the purpose of preparing the necessary assistants. In 1850 the government gave the beautiful old castle of Kneller Hall for the establishment of a second institution.*

It has already been stated how Ducpetiaux, in Belgium, obtains his assistants. The education of lay brothers in Mettray is similar. Demetz, understanding the need of an establishment of the kind, founded the training school before a single child was admitted to Mettray. In his report of 1865, he says: "Ideas are not wanting among us, but men capable of applying them, especially when they relate to serious subjects." Similar training schools have been formed by lay associations in other parts of France, where assistants from the order of the clergy were expressly refused.

The Roman Catholic Church of Germany places its Reform Schools for girls under the direction of a sisterhood. In Wurtemberg the boys' school is under the same supervision. Hirscher says that the "director of a Reform School should have the education of a clergyman, the loving and sacrificing spirit of a saint, the prudence, tact and experience of a man of the world." How the question is solved practically we do not know. But there should be a special call to the work; for religious enthusiasm is the true qualification.

VII. RULES AND REGULATIONS.

When the house has been erected, the garden planted, and the teachers found, the next consideration must be the rules. The Reform School, like the family, has its prescribed order, through which all move in harmony. The main point is not, however, the regulation of a single part, but the united progression of the whole. Life is the essence, law the outward form.

Many expect that the management and order of a Reform School is the most important part of the education. It is like a perfect instrument skillfully welded, which changes the old into the new, and converts the wicked child into a good one. Statesmen, churchmen, schoolmasters, parents, philanthropists, all talk about it. According to their understanding of the subject, *reform* can not only be effected in a certain period of time, but depends on the disposition of the principal and his assistants, who

*The institution at Kneller Hall has been discontinued, and the Training School at Battersea is not restricted to the purposes originally entertained by Dr. Kay, (Sir James Kay Shuttleworth) II. 2.

can hasten the result by a more judicious application of the methods. Ignorant persons, holding this opinion, have sometimes offered money to accelerate the changing process, and the success of the institution is measured by it. Nor are these persons alone in their judgments; many professing Christians agree with them. They believe that morality and religion can be acquired mechanically. They forget the freedom of the man, and that the child in the school must have the same absence of restraint; that it must be allowed to develop its being naturally, or the spirit of the Reform School is obscured or lost.

The source of authority in the School, as in the family, is the House Father, who is aided in his direction by the House Mother. His power must not come from without,—the authority attaching itself to his position,—but should be the spontaneous expression of his character. The parents of the house are the living law, which emanates from them and is recalled by them. Their rule is like that of the Good Shepherd, who will bring back the lost to the fold, and will never cast out those who come to Him.

The spirit of the house should be the first object; the next should be the order of the household, which should not be too rigid, but consider the interests of the individual as well as of the whole. The characteristic of the Reform School is its Christian life. This is not essentially different from the life of any Christian family.

The regulations of the School are in nothing artificial. They are based on the wants of the pupils. This must be particularly considered. To carry out the government of the household understandingly each pupil must be considered. The first rule of entrance has been spoken of. Nothing must remind the inmate of his former life; he must meet kindness and complete forgiveness; he must feel that he is a child of Christ. The intercourse must express confidence; therefore, the Reform School has no walls or fences, no locks and bolts, no espionage. Everything must express love,—nothing awaken doubt of it. This love is best expressed to the child by a watchful care over him. A child entering a House of Correction hears of nothing but punishment, feels nothing but force, sees nothing but bolts and bars. All the regulations are based on the condemnatory law.

There is nothing more required of the child in the Reform School than in the well-regulated family. As in the family, the daily routine centers in certain periods. These are the beginning and close of the day, and the meal-times. All are assembled at table. The meals should be simple, appetizing and nourishing. They are taken after previous periods of work. The intervals are filled by various occupations, school instruction, work and play. Whatever is needed for the household is procured by the pupils when it is possible. So they learn the value of their own exertions, and the need of mutual aid, the pleasure of serving one another. The whole life is a service. The highest is but a servant. To rule is to serve. This the children see exemplified in the directors of the house, and they gain a fondness for serving in their turn. The most important form of the day is that of prayer, when all meet together and quietly prepare for Sunday. Sundays, holidays and festivals gladden the year.

The celebration of the birthdays is not forgotten. The poor of the vicinity are remembered, and each pupil is encouraged to save for charitable purposes. The child should be made to perceive how pleasant intercourse with his father and mother is becoming. Not to interfere the least with this relation, the House Father and Mother are never called father and mother by the pupils. Many parents find again in the Reform School the long-lost love of their children.

It would be easy to extend each division of this subject, but enough has been said to show how various are the enjoyments shared by the members of this family, how improving the duties imposed. Everything in the rule of the household has its time and place; everyone conforms to that time and place. The elements of family order are impressed in this way on the pupils. In the parental household the government is necessarily mobile,—easily broken by the children. But in the Reform School this is not so. There can be no arguing the reasons for obedience, but silent conformity to the rule. The pressure of this moral force is remarkable. Many an obstinate and ungovernable boy, whom a father's severity, a mother's prayers, or a teacher's discipline could not move, seems transformed in the school. He yields to the gentle but powerful current, and is borne unresistingly along. Children whom bolts could never keep within their homes, come into this life of freedom, and never transgress. No special means of discipline are needed. Force would dissolve the bonds of this new life. No wall or roof would be too high for one who was resolved to escape. But they are free,—they can go if they choose. Only a silent, tender, all-pervading spirit keeps them.

Of course this new order of things comes very hard on many children, although they are attached to the household. The difficulty proceeds from physical disorder and want of cleanliness. Among the poorer classes, poverty, neglect, the condition of the dwellings, causes bad habits and blunts the senses of the children. The school must change all this. The order of the house must be insisted on. Punishments are rarely advisable; patience, forbearance and persistent, gentle teaching cure the evil by degrees.

The manners and customs of the different countries must determine in some degree the daily routine. But every house has introduced family-prayer, hours of work and play, and the observances of the Sunday. The practical equalization of study and work presents some difficulties, as yet, which experiments will soon settle.

With regard to meals, while the poverty of the children must be remembered, anything like beggary in the establishment must be avoided. If there are in the school wealthy children who pay their board, this must be taken into account, that parents and children may be satisfied. All should have milk daily, and meat should be furnished two or three times a week at least. It has been observed in small institutions that meat increases the physical health of the children, although their moral improvement is not affected by it. As the schools have gardens and orchards, the children can have plenty of fruit and vegetables.

The *clothing* should be clean and warm. They should not wear a uniform. Good carriage of the body should be demanded. The Reform

School only admits healthy children, yet many are scrofulous, and need great care, a regular and simple diet, clothing warm and clean, personal neatness, well-aired rooms, with a change in occupation. These are the conditions from which health results.

Every reformatory institution should have a special room for the sick. Every indisposition should be cared for at once. The attendance of a physician should be required even in cases of slight ailments.

VIII. WORK AND INSTRUCTION.

In the Reform School, work, study and recreation should be so equalized as to promote and help each other. The problem of popular education is solved in these institutions as no where else; for elsewhere the element of freedom is wanting. The success of the training would not be complete, if the pupils had instruction beyond the walls of the establishment, that is if they attended a public or parish-school, for the necessary order in the division of the day would be lost. And there would be failure too, if the school were merely a school, and the other employments made secondary to instruction.

Again, if the institution requires the pupils to devote themselves to labor, by which money is made, the aim of the Reform School would be lost. The practice of parents to employ their children in factories where wages are earned, is too often the cause of wickedness and neglect. All monotonous and stupifying labor should be abolished from the Reform Schools. Under this head may be classed the occupation of pulling flax, horse-hair, manufacture of pasteboard boxes, etc. Still more ruinous is the practice of sending pupils to work in factories.

It should be made a rule that the family divisions of a Reform School should prepare with their own hands, as far as may be, whatever is needed for use. This may be done quite extensively, if the proper attention be given to the work. Success in this depends mainly on the director, who must be a person of administrative power, and have had special training in the technical parts of various trades. The house-mistress must superintend the household work in every detail, and overlook the sewing. Both should put their hands to work, whenever necessary. A sufficient number of persons should belong to the establishment, in order that the system of labor may be fully carried out. When this is done, the results are most important. The work is classified, performed with earnest diligence, and finished with skill. When the directors understand their calling, this system of labor can be carried out in a small institution of twelve children.

The importance of such a work is two-fold. First, the training of the mind and hand in any technical work. The established rule of any craft will not appear arbitrary to the boy, but necessary and pleasant to submit to. The quick, successful handling of a plane, hatchet, or plough, distinguishes the boy. He feels pride in becoming a good farmer or joiner. Work puts a definite goal before him. By determination he can reach it. He tries and succeeds. It is the same with the girl in her feminine crafts. These results cannot be attained without great diligence and perseverance. Repeated trials are necessary. All find the need of mutual

and, without which no one can succeed. The pupil will suffer at first from the restraints laid upon him by his work, but all grows easy when he finds that endurance, thought and determination have attained the wished-for result. Then the work is done without compulsion; the will is strengthened and purified. Where the pupil is anxious to know the intricacies of the craft, the whole man is called out, and education begins. What else could take the place of healthy labor in this respect?

The second point gained by such labor is that it becomes a preparation for the future calling. There can be no more efficient means of furthering a good education for those who in the future must depend on manual labor for their support. They have learned that labor forms part of human existence, that a higher want is satisfied than the desire of earning money merely, that he who can work possesses a capital which he is in no danger of losing, and which gives him power and reputation. The result of such a system of training is, that most of the scholars leaving the institution are able to earn their living, which could hardly have been expected of any one of them when they entered. The statistical table in the 12th Division will show this sufficiently.

Nothing perhaps has been more instrumental in bringing about these results in the Rauhe Haus than its family system, which influences so energetically the various divisions of labor. No family will tolerate a "lazy" member, but urges him on to diligence. The family considers itself morally responsible for the existence of such a member, who would bring disgrace on it. The utmost is tried to bring him into a better way. This fact shows one of the results of this organization.

We must now briefly consider the *work done in the establishment*. The first object must always be the dwelling-house and its belongings. This is required of the family of every small mechanic, and to some extent from others, at least as far as the daughters of the house are concerned. The abode of the children is thereby endeared to them. Here in the sitting-room, bedroom and kitchen their earliest wants are satisfied. Every day begins with a local renovation, restoring the original order and cleanliness to the rooms. The House of Correction cultivates these virtues to some extent, although a high degree of perfection is impossible.

The Rauhe Haus goes farther than order and neatness, and cultivates the sense of beauty by embellishing the place of abode. There should be flowers and pictures in every Reform School. Among the lower orders of our population a germ of this love of ornamentation is found, which finds gratification in common pictures. This innate sense of beauty should not be despised, but raised and purified. All those tasteless pictures, which are often the object of misguided piety, should be excluded. Children readily learn the habit of giving each other pleasure. They gain that affection for their dwelling-place, of which the families from which they sprang were ignorant. In a very simple way the ideal side of family life may be cultivated. The world owes this to Christianity. It is a very important point in education, one which we cannot insist too strongly.

The domestic duties may be divided into two classes, viz: daily personal duties, like making beds, etc., and those voluntary, extraordinary

ones, which are suggested by the attachment of the members of the family. Among these are birthday and Christmas preparations, and the decoration of the house on festive occasions. After these domestic labors come the manual labors proper. These consist in the manufacture of various implements needed in the house,—of clothing, shoes, etc., and working in the field or garden. The Reform Schools of Germany and Switzerland are, in different degrees, small agricultural colonies. Where farming, a trade, and domestic labor go hand in hand, and the common life is made pleasant by mutual aid,—not compelled, but given voluntarily,—an element of vast educational and social importance will be developed. The proper value of work is learned, and the knowledge of the meaning of property acquired. These are great benefits.

One of the chief aims of the Reform School is to impress the pupils with regard for the sacredness of property. Many of them have been led astray by transgressing the law of property. This is more easily accomplished with children than with grown-up thieves, to whom the idea of the sacredness of property is unintelligible and ludicrous. The practical lesson enforced by a life of labor is of the greatest importance. The institution may cultivate this feeling still more, by giving the pupil some palpable result for diligent labor, placing him gradually in possession of some amount of property, be it ever so small, which naturally takes the form of a savings-box. Having and saving are ideas essentially belonging to every child. The pupil of the Reform School should be trained to a practical understanding of the two ideas. The system first introduced into the Rauhe Haus has been imitated by the saving-tables of the children of other institutions. As Pastor Wilhelm Baur does not mention it in his report of the Rauhe Haus, a short account may be of interest; for the method has had the best possible effect on the work and social intercourse of the children.

The beginning of a savings-box is made at the time of entering the school, when every child receives eight schillings (Hamburg currency), from the House Father. The parents of course are not prohibited from giving presents of money to their children. This can be done when visits are made. Notice must be given to the authorities, and the money at once put in the place assigned for it. Besides this, a few pennies are added at the end of every week to the account of each diligent child. The little sum increases month by month, and is recommenced at the beginning of the year. In some fortunate cases this sum may annually amount to eighteen shillings. It does not count as a reward of labor, but is a gift merely. The chief point is gained in putting a little property into the hands of the children. It is true that they have not the control of it, but every child has a savings-table, giving an exact account of income and expenditure. The money is at the free disposal of the child, after consulting the proper persons, for buying flowers, birthday gifts, or giving to the poor. The total amount belonging to the children is at present 706 Prussian dollars, 395 of which belong to former pupils of the institution. Out of this money, the repairs for damages are to be paid, and in this way an excellent method of punishment for carelessness is provided. Each child has clothes, a small garden, and tools confided

to his care, for which he is made responsible, and so the idea of property is in various ways impressed on his mind.*

As the family is thus connected with the labor of its various members, and the work distributed through the day maintains the existence of the family, so the school must be a link in the chain of the organization, and not an appendix merely. This would be the case if the school were not composed of the children of the institution, but when they formed a part of some other school. By the temporary dismissal of the pupils from the institution, they would not only be exposed to temptation, but would endanger the well-being of the village school, and give additional trouble to the master, to which he might justly object. In cases where the House Fathers were men of no education, there certainly was no other way of satisfying the demands of the school authorities than to appoint a separate teacher, or call in the assistance of the village school. In many places the utter incompetency of such arrangements has been reorganized, and more competent House Fathers appointed.†

When the House Father can be the teacher also, everything assumes its just proportions. The only danger is that the establishment may assume too much the character of a school. This has sometimes been the case when the House Fathers have been school-masters. The temptation is great to overlook their present duties for their former ones. This danger is increased where men hold the doctrine that the school may take the place of the family, and be essentially the educator. In such instances the danger of the school's absorption of all other means of discipline is imminent. If the establishment should lose its labor system, it would be deprived of all its blessings, and cease to be a spot where, by gentle means, the working powers of the hand are developed, the character formed, the idea of self-help awakened, and the desire for mutual aid promoted. The question is to find the relative value of school instruction, social intercourse, and manual labor, and give to each its proper place.

The value of the school in reformatory establishments is evident,—it is one of the indispensable agents in the improvement of children. The school is likewise a peculiar field of labor. The teacher must work himself, but only in order to induce the children to work with him. He must awaken the interest of the pupils in the exercises which the school demands, and guide them on. The school tasks required of the pupils develop the will as much as any other labor; the aim only is a different one. In school the work is constantly growing, and new ground is being conquered. The elementary instruction only provides the wherewithal to do this; but as instruction advances, new acquisitions are being con-

* Even in those Reform Schools which receive children from the better classes, manual labor is by no means to be neglected, though it may be limited by various circumstances. Interesting facts might be given to show the willingness with which boys of this class undergo great hardships, but this would lead too far. But this we must say, that the experiments made at the Rauhe Haus confirm our conviction that much good might be done if other institutions for the children of the wealthy would give their attention to the subject. In this way the foolish idea of the disgrace attaching to labor could be eradicated, and the value of work properly recognized.

† In some institutions good educational results are obtained, because the House Father is a man of excellent character. This is another proof how much in education depends upon the person of the educator. Still these instances are rare, and are mostly of those men who without learning have had practical experience in the working of a school.

stantly made from the treasures of nature and history. The teacher is among the children as the wealthy owner of all these mental riches, which they desire to possess. At the same time he is their friend, who shows his love by teaching them how to make the coveted treasure their own. But, in the Reform School, the teacher is at the same time the father of the family and the pupils are his children, whom he inspires with the desire of acquiring knowledge.

If we consider the difficulties which are thrown in the way of every teacher in every school, and think of the struggle which he must go through with many of his scholars to make them understand his intentions, and reward his love by learning diligently, then we must look to find greater difficulties still in a Reform School. We must see this clearly, in order to understand thoroughly what the duties are of a House Father and teacher combined. For this purpose we must recall the character of the members of such a school. It is composed of those who, before their entrance into the institution, were notorious creators of disturbance, those who have been expelled from school, and those who could not be tamed by any discipline whatever. The classes are composed of elements which, taken singly, any teacher would wish to banish from his school, and which combined present the greatest difficulties. If there are amongst the pupils such as have become good scholars, through the discipline of the House of Refuge, they will soon leave, and their places be taken by the intractable. As there is no fixed period for the admission of the pupils, there will be a continual change all the year round. It is one of the characteristics of the school that the members hate it in varying degrees. The House Father has the most difficult task before him; but to answer the end for which the reform school was founded, it must be fulfilled, and there only can it be done. But for this a House Father, in the fullest sense of the word, is required. A parental relation must exist between him and his pupils. The family must form the basis of the school, and the family spirit must pervade it, to enable the teacher to overcome successfully all the difficulties before him. If the reform school does its duty, a great benefit must accrue from this family relation. The children belong to both; the same influences are brought to bear on them in the one as in the other. The system of manual labor is also inseparably connected with and affected by family and school.

The aim of the reform school is much the same as that of the well-organized public schools of Germany. Various grades of instruction will, however, be distinguished, according as the pupils are from city or country. As regards elementary knowledge, the aim is distinct: well-accentuated reading, clear hand-writing, and a practical knowledge of arithmetic. The results are truly astonishing. The girls usually write better than the boys, for the hands of the latter have become clumsy by constant hard work. The selections in the Readers, afford an opportunity of gaining a knowledge of history, geography &c.

The children should likewise be impressed with the importance of their future position as citizens, when some practical proof of their patriotism will be demanded. For this purpose a knowledge of the history of their common country is required, as well as of the country in which they were

born. The future soldier must know for whom and for what cause he is to bear arms, and what his nation has already accomplished on the field of battle. It is the object of the school to awaken the most ardent patriotism, and train the young people to true liberty.

The tendency of the age is so materialistic, and all the education given to the working classes is so thoroughly pervaded by this spirit, that an opposition to it is urgently demanded. Our education must become more ideal. One important element in the training of the imagination and feelings, is music, particularly vocal music. We do not mean to exclude the singing of good church tunes, but refer chiefly to the popular songs (*Volkslieder*.) The greatest care should be bestowed on this branch of instruction. There is nothing which can take its place, and through it the noblest emotions of heart and soul are awakened. The most tender, nay, religious, feeling is expressed in the national songs. The enthusiasm of the ancient and modern German poets is borne aloft on the wings of music. The love for the Fatherland, its heroes; for summer with sunshine and flowers, bright mornings and balmy evenings, for the green forest and its dreamy loveliness, finds its echo in melody. The gently-swelling and powerful chorus opens a new world to the children. The singing-master, to be the interpreter of the new ideas, must himself be a singer, with the feelings of a poet and hero. He must carry the young mind with him, not by explanations, but by the subtle magnetism of feeling. We know how far below this ideal most House Fathers come; but we know that the standard has and can be reached.

It is important that the songs taught should be pervaded by true patriotism. In some schools religious songs are sung exclusively. According to the opinions of a few narrow-minded people, these are the only kind to be tolerated among Christians. These opinions rest on a mistaken view of human nature. The just demands of the human mind are left unsatisfied by strictly religious food. A young man is tempted, as soon as he leaves the discipline of the school, to throw off all restraint, and go too far in the other direction.

The greatest difficulty is presented in the religious instruction which is divided into catechism and Bible history. Remarks on this subject are given in another place (Chapter XI.)

In briefly reviewing the course of instruction given, we find that it is confined to religion, reading, writing, arithmetic, singing and free-hand drawing. All can be readily mastered by the application of four hours a day. Whatever is left undone in the summer, can be finished during the winter months, when there is less out-of-door work.

As regards the instruction given to the children of the higher classes, who form a separate community in most Reform Schools, little need be said here, as it does not differ materially from the instruction of the gymnasiums and real schools. We would only say that such instruction is absolutely necessary. Pupils coming from such schools and not unfrequently returning to them, must not have their education interrupted.

IX. TIMES OF REST, FESTIVAL DAYS, GAMES, ETC.

At the close of every stated period of work or study, the influence of the family, as such, again presents itself. The strict adherence to rules of

discipline, so absolutely indispensable during the school or working hours, is now dropped. Now the children may indulge their own fancies, kept in bounds by the good old German family customs. Each day begins and closes with morning and evening worship, and the family, after every period of bodily and mental exertion, becomes a place of recreation and renewal of strength.

The task of those who have the charge of the children during these intervals, is by no means an easy one. It consists in making the association of the children, at meal-times, for instance, of such a character that in a free and natural way both bodily and mental food are given. A cheerful, yet instructive, conversation becomes the best seasoning of the meal. At these times the hitherto hidden influence of the House Mother and her female assistants makes itself felt. By their care the table is spread with simple, yet palatable, food. There is usually a little interval between the labor or study after each meal, especially in the evening, on Saturday evening particularly. There are the general and special festivals.

The regular succession of work and recreation is an essential condition for a healthy Christian life, for nations and families, as well as for individuals. Wherever these periods of rest and refreshment do not exist, or are granted only as nature imperatively demands, there life in state, church or family, goes wrong. It is one of the worst symptoms of our present national state, that by the rapid social and industrial development, the times of rest and recreation for the greater number of persons is reduced to the smallest possible period. On the other hand, those classes of society, who may have the enjoyment of sufficient intervals of rest, plunge into dissipation.

The children of the Reform School are entirely ignorant of the rational way to fill the intervals between work. The way in which this is done characterizes every family, and the Reform School as well. The imaginative side of life may now show itself in the special festivals of the individual, and the general family celebrations. The evening, after the day's work is done, should be the pleasantest time. Saturday evening and Sunday ought to be the festivals of each week. In the great patriotic festivals the life of a nation finds expression, and in the great Christian festivals the joy of Christians is poured out. The Reform School must as a family, and part of a nation, satisfy all proper demands in this direction.

Many duties devolve on the House Father, trifling in appearance, but important in reality. We cannot enter into all the details, but will mention that among them must be classed the maintenance of a polite deportment among the members of the household throughout their whole intercourse, and personal cleanliness and propriety in dress, etc.

We must briefly dwell on the plays and games of the children. As a general rule, a child shows its true nature in play. It is the expression of its joy expressed in perfect freedom. Here lies the magic power of play. A child, especially a girl, lives through a whole mother's life with her doll. She enters into the joys and cares with touching earnestness. Every girl in the Reform School should have her doll as long as she

desires. There are, of course, here, as everywhere, cases of children who do not care for play—more among the boys than among the girls. Great skill is required to create the wish to play in such a child; for commands are of no avail here. Love and gayety, the spirit of play, are beyond a rule; they are born of liberty. He will be an incompetent father or useless assistant who cannot play himself, and enter heart and soul into it, becoming a child with the children. To play with the children is just as important as to work with them. Free as the sports must be, they must not degenerate into aimless romping. All the mischief and malice dwelling in the little ones breaks out during these free hours, and the House Father must check all outbreaks of passion. Certain games recur at regular intervals.

The national or provincial peculiarities expressed in various games have a great charm for children. They should be encouraged as much as possible. It would be a sad sign if such amusements were not allowed in a Christian Reform School. In a penitentiary, games, of course, cannot be tolerated; but in the school, where the past is forgiven, the cheerful influence of games must find a place.

There ought, also, to be bodily exercises of a stricter kind, such as gymnastic exercises and military drill. The latter should be accompanied by the drum, or by the singing of a martial air. Swimming ought to be practised whenever an opportunity offers.

Another important source of amusement is the little garden, which every child ought to own. These gardens may either encircle the playground or form a place by themselves, but must not be too far from the dwelling-house. Some Reform Schools have made a great mistake in banishing these gardens to old shady places, or to a soil where nothing would grow. He who knows to what great results little things often lead, will not consider this subject unworthy of consideration. How does the child stand like a little prince before his flower-bed, watching day by day the development of the plant; its growth from tender shoot to bright green leaves, and at last the opening of the long-expected flower! All the hopes of a child often center in the thought how it will gladden the heart of a parent, on the next visit, with the flower now sleeping in the bud.

Other occupations fill the long winter evenings, and the treasure of song gathered in school-hours is now voluntarily drawn upon to while away the time. Many of the evenings preceding Christmas are occupied in preparing gifts for that happy time. These pleasant employments are varied by reading. Every reform school, therefore, should possess a good library for general use, containing instructive and entertaining works in history, biography and travel.

No opportunity should be allowed to pass of combining instruction with amusement. We know from experience what a source of enjoyment the annual visit to the Zoölogical Garden of Hamburg is to the children of the Rauhe Haus. Occasional lectures on physics, chemistry, and the wonders of the microscope, accompanied by experiments, will also prove useful and amusing. Besides, there is Sunday, supremely a day of rest, rich in spiritual blessings.

X.—PUNISHMENT AND DISCIPLINE.

No one will form the opinion from what has been said that there is never any disturbance in the family life, in the hours of labor or in the school. It is, of course, the first duty of the teachers to prevent such disturbances. But when the vicious tendencies that have been sleeping for a time break out anew, assuredly the delinquent must be made to feel that if his former transgressions are forgiven, these new sins must be punished. Whose duty is it to inflict chastisement in such cases? There are schools where the discipline of the school is managed by a committee. In some instances, quarrels between the adult members of the institution have been brought before this committee; and we know of cases where the House Father has actually been reprimanded in the presence of his assistants. In other establishments the corporal punishments have been entrusted to the principal of the institution, who has to hand in a report as to his manner of dealing with the pupils. It is carrying power too far to expose a House Father before his inferiors, and the very foundations of his authority are shaken.

The power of punishing ought to be in the hands of the House Father. It is the inalienable right of the father of the family, and it ought to remain exclusively with the head, and not be given to the assistants, except in special cases. The infliction of corporal punishment should be allowed to the assistants in a very limited degree. Their duty is to report all flagrant cases of insubordination to the House Father. The children ought, on the other hand, to feel that they may always appeal to the House Father, in whom they place the fullest confidence.

No punishments should be inflicted but such as a father would give his own children, and chains and handcuffs must never be employed; for the school would at once lose its character, and become a mere House of Correction. Consequently, there can be no code of punishment laws, but only the general rules existing in every family. Of course there must be corporal punishment in the school; no torturing, but the good, old-fashioned caning, always inflicted by the House Father himself. Used in moderation, and only in extreme cases, it is indispensable in the Reform School.

Another efficient punishment, which must be employed still more rarely, is solitary confinement—an actual incarceration. This mode of correction has often been the only one found capable of bringing some obstinate offender to his senses.

There are some cases in which all discipline is in vain. We do not mean the once running away of the pupils. In all cases they must be sought for and brought back; and the conduct of those committees was unjustifiable, who not only did not look for the truants, but refused to admit them when they were brought back. But what is to be done with a child who escapes not once, but twenty times, and without any apparent cause? Repeatedly rescued from want and misery, he again and again returns to it, and willingly exposes himself to cold and hunger. No rules can be given; but the Reform School must always receive the child when he is brought back. His conduct shows how much he needs the help of

the school. There is nothing to do but to rejoice at his return. His comrades will, in most cases, form a living wall around him, receive him affectionately, and show more tenderness than grown up persons would be able to do.

What is to be done when the children conspire together and form some secret organization, where vices of every kind are practised? These are difficulties of a serious nature, which must nevertheless be solved in some way. It is easy to say that the offenders should be given up to the police; but it is not the intention of the Reform School to dismiss such children, but to remove the causes of their wickedness. Great earnestness and courage are required for such emergencies. The guilty children must be deeply impressed with the truth that, though they deserve the Divine wrath, they yet, by the love of Christ, may be pardoned. This very love empowers the House Father to receive them repeatedly, in spite of all their sins. It may sometimes happen that the whole family are asked to co-operate in the restoration of the lost ones, and that such an event ultimately proves a great and lasting blessing to the whole school.

There remain two disciplinary measures for very extreme cases. Instances when public crimes are committed have happened, and may happen again. We know of several cases of attempted arson and murder. The House Father, as head of the family, is not obliged by law to inform the authorities of such crimes. Although he may keep the knowledge to himself, he will owe it to the criminal, in most cases, to give him up to the punishment by the government. Regard for the other pupils imperatively demands this course, and it will be for the ultimate benefit of the criminal. Again, when all attempts to reform a child have proved failures, and the well-being of the other children is endangered, he should be dismissed. In the Rauhe Haus there have been ten such cases during a period of thirty-four years.

XI. RELIGIOUS EDUCATION OF THE PUPILS.

The importance of religious instruction in the Reform School has already become evident. The Gospel—God's pardoning grace through the blood of His divine Son, Jesus Christ, and the grateful love that binds the ransomed soul to the Redeemer—is the foundation of all such institutions. They aim to create a new life in the hearts of the pupils by the power of the Gospel. Mere human effort cannot do this; but it can do something towards it. We will divide this chapter, and describe—*A.* Instructions intended to embrace the whole establishment; *B.* Instructions intended to develop the religious life of the individual.

A. According to the general rules of Christian life, each day must be begun and closed by the reading of the Bible and prayer. At such times the family becomes a congregation, gathered before their Heavenly Father. The House Father is the priest and servant of God, through whom He speaks to each, and offers His gracious invitation to become one of the family of God. These exercises should be short, so as not to weary the youthful mind. In the morning they should consist in reading and explanation of short passages of Scripture. Some of the younger members may

not understand all that is said; it is not to be expected. God Himself often said more than His disciples understood at the time. It is the nature of the Word that it falls into the heart like seed in the ground, to lie hidden for a time, and then bring forth the blossom.

A judicious and intelligent House Father has an excellent opportunity to refer to occurrences in the family life, — to build up what others have torn down. At this time, also, new members of the household are introduced, the birthdays are spoken of, and a word of caution or encouragement given. The birthdays of those who have left the school may be mentioned. The memory of the old companion is revived, and words of joy or sorrow spoken, according as he has fulfilled or disappointed the hopes entertained for him. The memory of the friends and benefactors of the institution should be renewed on their birthdays. In a simple and natural way, the life of the household is led back to the source of all life. All this combined forms a spiritual power. Every child knows he will never be forgotten by the school. Many a pupil has written how, on his birthday morning, he knew they would be praying for him at the Reform School, and the thought has a power for good.

The evening hour is to be occupied by reading, a prayer and a hymn. These times of worship should be kept entirely distinct in their character from the school and working hours. No school discipline should be exercised. The children must learn that, when assembled as a worshiping congregation, they must maintain order amongst themselves. If reprimands become necessary, they should be given privately, after the close of the service. The children will in this manner learn to distinguish prayer from working time. These hours sanctify the whole, and give glimpses of the coming Sabbath.

Besides the daily prayers, must be mentioned the blessing at meals. The middle of the day is the time for the chief meal, and is the symbol of "the daily bread." The other meals are but preliminary, either preparing for it or supplementary. So dinner is the time for the blessing. The Lord Himself invoked a blessing at the beginning of the meal only, and those who do this follow His example. The custom of the Reform School must in this particular conform itself to the custom of the country.

The most important day, as regards the religious education of the pupils, is, of course, Sunday. When a nation has become estranged from the true way of keeping Sunday, and the pupils on their entrance only know Sunday as a mere day of amusement, all the more is it the duty of the Reform School to accustom them again to its proper observance. Sunday is the day of the Resurrection; its celebration testifies of the victory of life over death. From the time that spring sets in, and all the summer through, the families take turns in going, early in the morning, "when the sun rises," to the beautiful "God's Acre," the last resting-place of many a former pupil of the Reform School, where each grave is only adorned with a simple stone cross and the heavenly words of comfort, *Christ is my life*. They clear and adorn, during the early Sabbath hours, the graves of the departed ones in silence, as the sacred ground demands, and with that love in their hearts which, at such a place and during such an occupation, is but natural. When, later in the day, the other families

go to church, their way leads them past these decorated graves, and the risen Saviour is preached to them each without words.

On Sundays, everyday labor is to cease entirely. The whole house has already, during Saturday, undergone a thorough cleansing; the children likewise, who are dressed in their Sunday's best. Everything in house and garden looks fresh and shining, and every one feels that it is Sunday. Then comes the public worship. In long and orderly procession all the inhabitants of the Reform School go to church. What the pupils have heard already at the family worship they now hear again, in common with God's congregation, as a testimony to them that church and family rest on the same foundation, and should always be inseparably connected. The Gospel of the forgiveness of sins, and the privilege of being called children of God, is not preached to them alone; all are sinners, and all live by the same grace.

From church, the children go directly to dinner, which is always better on Sunday. Then comes Sunday afternoon, the time to which the children have been looking forward all the week through. In many places, one Sunday afternoon during the month is set apart for the visits of parents and friends, and one may then often see parents, arm in arm and in familiar conversation with their children, walk through the shady avenues and between the flower beds of the garden.

But how are the many other Sunday afternoons to be spent? This is a much vexed question, and there is in this respect a vast difference between Germany on the one side and England and America on the other. For our part, we do not doubt for a moment that the manner in which the Sunday afternoon is spent at the German Reform Schools is more in accordance with the spirit of Christ's Gospel than the Anglo-American one. First among the Sunday recreations ranks the walk into God's free Nature. On Sunday He allows His sun to shine, His flowers to bloom, the brooks to ripple through the forest's shade, and the birds to warble their joyful songs; and should man not enjoy all this on that day? For the rest, the children may in most cases safely be left to follow the bent of their own inclination, and they will find the right way; they will, without being told to do so, quietly read or draw, or do some carving, or something of the kind. Sometimes they will play a quiet game, or some good book is read to them, or they engage in conversation.

Numbers of anonymous letters have been received at the Rauhe Haus from England, in which all this was severely censured. As a special sin, it was mentioned that some of the children had, on Sunday, worked in their little gardens; and why, we ask, should the innocent pleasure be denied them of tending their few flowers on Sundays? We likewise strongly recommend for the girls sewing or mending; they herewith follow a custom which in most parts of Germany distinguishes the good and diligent servants from the idle ones. Especially in winter, the necessity for some such occupation becomes quite urgent. During the weeks preceding Christmas, the children are busily occupied with getting ready presents, by which they intend to gladden the heart of some friend or relative; frequently, also, for poor and sick children. And, truly, what more worthy occupation could be found for Sunday?

The great church festivals,—*Christmas, Easter and Whitsuntide*,—and their celebration, are merely a further development of Sunday. In connection with these festivals is the preparation for each of them. The time of Advent, before Christmas, the season of Lent, before Easter, and the time from Ascension-day till Pentecost, form the great Sabbath times of the new covenant. In this light the church and the family are to look at these seasons. No child, we venture to say, who has once celebrated Christmas at the *Rauhe Haus* will ever forget it again. We know of several who have celebrated Christmas again in this manner on the prairies of the far West and on the stormy ocean, and as long as they live will the simple songs sung on these occasions resound in their hearts. The season of Lent is the time of preparation for the confirmation; then comes the confirmation itself, and the grand celebration of the Lord's Supper before Good Friday, and the solemn Easter morning service at the graveyard.

There cannot be too much care bestowed on the instruction in biblical history and the catechism, for one is as important as the other. The aim of instruction in biblical history must be to make the pupils as much as possible acquainted with the various periods of this history, and to represent before the youthful mind, in their true dimensions, the grand personages of the Old and New Testament,—above everything else, the unique person of the Redeemer, as the Alpha and Omega of all that has happened,—the further development of God's kingdom, and the fact that, both here and in history, it is the same almighty will that rules the destinies of nations and those of each single individual. Many a one can date the turning-point in his life from this religious instruction received at the Reform School. "That's me!" said, once, a lively little boy, when a person from sacred history was depicted to him by his teacher. This "that's me!" may often be the beginning of a new period in the history of a child's life. In the catechism instruction, an opportunity is afforded to give the children a deeper insight into the divine truths, and to build their faith on firmer foundations, so that all the vicissitudes of life may not be able to shake it.

If we start from the principle that the most essential point in the family of the Reform School consists in that love which springs from Christ and leads to Christ, each child must as much as possible be made to feel of what great importance it is to the leaders of an institution, which is pervaded by the spirit of Christ's love, to save his individual soul for life eternal. The first and chief question is, who is to exercise this pastoral care. As in every truly Christian family this care will devolve on the father of the family, so in the family of the Reform School it will be the province of the House Father to attend to this. He is to be the spiritual adviser, exhorter and comforter of every child belonging to his family.

The starting-point for this relation between the child and the House Father, is the hour when the former is received into the institution. At that time the child is told, with the first welcome, that all his former sins shall be forgotten, and never again be mentioned; but, at the same time, with this significant beginning, the House Father speaks to the child of the only Saviour of men as He who has come to seek and save the lost

ones. The work begun in that hour is to be continued by the House Father, and the whole life of the child at the Reform School is to be a further interpretation of those first words. If the House Father understands how to explain the word of God to the child; if he knows how to make use of the birthday celebrations, and other joyful and sad events in a child's life,—to introduce some word of exhortation and comfort,—the relation between the child and the House Father will naturally become a more tender and intimate one. The conversation need by no means always be of a religious nature; but the child must be able to feel at every word which is said the fatherly love which the House Father cherishes for his children.

Often it may become necessary to take a child apart and engage in prayer with him. Many a one has, just through such a short and heartfelt prayer, by the blessing of God, been saved for life. Never should children, however, be forced to pray. As there is no prescribed method of instruction at the Reform School, there is not to be any prescribed method for the religious education of the pupils. Love which is not voluntary, but forced, carries the germ of death within it. Many people demand such a religious pressure as a sign of true Christianity. All such methodical Christianity is untrue, and should not be tolerated. It is especially wrong to try to bring about conversion by these forced means. Conversion is a thorough change of the innermost tendencies of the human heart, a change of all the thoughts, words and actions, and is brought about not by force, but by the silent working of God's holy spirit. To assist, so far as human power reaches, this labor of God's spirit, is the duty of the conscientious Christian House Father. It is an art of love and prayer, which only prospers by God's own blessing, but which is productive of a divine life, from which, as from a hidden root, those fruits of the spirit spring forth in rich abundance—which Paul describes in the fourth chapter of his Epistle to the Galatians; and these spiritual riches may become the greatest crown and ornament of every Reform School.

XII.—DISCHARGE AND AFTER-CARE OF PUPILS.*

Pupils can be dismissed only when their education has been brought to a satisfactory close. As a general rule, a three-years' sojourn is required to obtain this result, and no child should leave before confirmation. Pupils that wish to stay only a year or two, should not be admitted. Difficulties may frequently arise, occasioned by the foolishness of parents, who, because their children have, perhaps, been punished, as they think, too severely, wish to remove them from the Reform School, or threaten, as has, indeed, already been done, to invoke the law.

In order to meet such difficulties, the *Rauhe Haus* has adopted the following course. In the contract of admission a passage is inserted in which the parents solemnly declare that they have voluntarily committed their child to the care of the Reform School, and that if they remove their child from the school before the stipulated time, they engage to pay all

* This chapter includes the following subjects: Time and conditions of leaving the institution; further care bestowed on pupils that have left and the difficulty and partial impossibility of doing this; results of the Reform School education.

the expenses incurred during the child's stay. Of course, if the parents are utterly unable to pay, nothing remains but to dismiss the children without insisting on the payment of the expenses. The departure of pupils who have gone through the regular course; that is to say, have stayed till after their confirmation, ought to take place in a solemn and impressive manner; the best time will be the hour of daily worship. The House Father will then hand to those that are about to leave, a Bible, with some suitable words of scripture written on the fly-leaf. At the end of the service, a few words of love and exhortation ought to be addressed to them in public.

As regards the finding of places for pupils that have left, those who have paid for their full board and instruction will have to find places themselves; but the institution will gladly give advice and useful hints. For the pupils of the poorer classes, however, places will have to be found by the institution, as a completion of the education which they have received. The choice of a trade is always to be left to the child, and should have the sanction of the parents. The House Father should, long before the time of leaving, in confidential conversation, ascertain the wishes and ideas of the child on this subject, and, if possible, try to check foolish desires and aspirations.

A difficult problem is the superintendence of pupils after they have left, which should be continued up to a certain stipulated period. After leaving the Reform School, the pupils will in most cases see and hear just the contrary of what they have been wont to at the school; they will be surrounded by immorality and infidelity, which will do their best to draw them into the whirlpool of sin; the public press, with its but too frequent mocking of God and heavenly things, will exercise its baneful influence. On the other hand, there is the excessive demands which in some Christian houses will be made on children that have come from a Reform School, which, according to the ideas of some people, should only turn out perfect angels. It even happens, not unfrequently, that the parents themselves destroy the tender plants of morality and religion which with so much care have been raised at the Reform School, by entreating and encouraging their children to forget all that gloomy religion which they have learned there, and again to place themselves on a level with the cheerful world.

All these circumstances combine to make the continued superintendence a very difficult and delicate task. At any rate a regular contract ought to be signed by the principal of the Reform School and the tradesmaster with whom the pupil is to be placed. Among the conditions there ought to be: permission for the pupil to pay a visit to the Reform School on certain Sundays in the year; a regular weekly visit of one of the assistants from the Reform School to the house where the pupil lives, etc. If possible, the Reform School should, during the time the contract lasts, supply the pupil with clothes, in order to hold out some inducement to his master.

Very difficult, in fact almost impossible, will this superintendence become when the pupils are placed far away from the Reform School, or go to sea, or emigrate to foreign countries. In some such cases the pastor

of the village or town where they were placed has been asked to have an eye to such, and if they should go astray to try and lead them to the right path again. Often, however, this will be entirely impracticable, and all that can be done is to exercise the greatest care in the selection of the persons with whom such pupils are placed.

RESULTS.

As regards the results of the Reform School education, mere numbers will never convey an adequate idea of the good that has been done by them; their silent influence will, nevertheless, make itself felt far and near. As there were no statistics extant concerning these Reform Schools, communications had to be opened with every one of them, and the result has been the following:

There are at present in Germany and the six German-speaking provinces of other countries, 80 Roman Catholic and 320 Protestant Reform Schools. Concerning the former, no information could be obtained, and of the latter, information was received from 79. Many of the other Reform Schools have either not responded at all to our inquiries, or have done so in an entirely unsatisfactory manner, or declared themselves unable to give any information.

Of the 79 institutions mentioned below, 28 are for boys and girls, 44 only for boys, and 7 only for girls.

GRAND DUCHY OF BADEN.—Hardt, near Carlsruhe (16 years).*

KINGDOM OF BAVARIA.—Marienthal, near Schweinfurt (15½); Inken-thalerhof, near Rockenhausen (13); Hassloch (17); Trautbergerhaus, near Castel (17); Puckenhof, near Erlangen (17); Jean Paul Reform School, at Baireuth (26).

DUCHY OF BRUNSWICK.—St. Leonhard, near Brunswick (15).

FREE CITIES.—Rauhes Haus, at Horn, near Hamburg (34); Ellenerhof, near Bremen (20½); Fischer-büden, near Lubeck (22½).

MECKLENBURG.—Bethanien, near Rattey (16).

PRUSSIA—1. *Province of Brandenburg*.—Neander Haus, at Gross-Camin (16); Marwitz, near Henningsdorf (10); Heilbrunn, near Wusterhausen (15); Gossner House, in Berlin (6½); Pfingsthaus, in Potsdam (16); Wilmersdorf (11½); Cöthen, near Falkenberg (11); Angermünde, (15½); Reitwein, near Podelzig (18); Roth's House, in Brüssow (20); Linde (14); Hermsdorf (15); Reppen (15½); Wulkow, near Alt-Ruppin (15).

2. *Province of Pomerania*.—Stralsund (20); Stolp (10¾); Garz (23); Triebsees (14); Elisabeth Stift, at Kieckow (17); Elisabeth Stift, at Görcke (17); Zülchow, near Stettin (36).

3. *Province of Prussia*.—Schönbruch (25); Tilsit (20).

4. *Province of Saxony*.—Lindenhof, near Neinstedt (17); Eckartshaus, near Eckartsberge (19); Genthin (12).

5. *Province of Silesia*.—Steinkunzendorf, near Peterswaldau (14); Breitenhain, near Schweidnitz (13¼); Neisky (7¾); Görnitz (17½); Rankau, near Mörschelwitz (16); Wiltschau, near Kollerwitz (16); Schreiberhau (34); Morija, near Gnadenfrei (10½); Neusalz (17); Michelsdorf, near Landshut (11); Bethesda, in Friedland (11).

6. *Province of Westphalia*.—Hellweg Institute, at Holzwickede (4½); Gotteshütte, at Klein Bremen (8½); Pollertshof, near Pr. Oldendorf (16); Vörde, near Hagen (6½); Schildesche, near Bielefeld (15).

7. *Province of the Rhine*.—Duisburg (23); Schmiedel (17).

*The figures in parentheses denote the number of years the institution had been in operation in 1868.

8. *Province of Hanover*.—Hamelu (14); Linderhaus, near Altenzelle (22); Schladen (16½); Ricklingen, near Hannover (17); Grossefehn (2½); Hülenberg, near Melle (14).

9. *Province of Hesse and Franconia*.—Beiserhaus, at Rengshausen (23); Scheuern (16); Wiesbaden (10).

10. *Province of Schleswig-Holstein*.—Martin-stift, near Flensburg.

RUSSIA.—Narwa (29½); Reval (24); Altona, near Mitau (8½).

SAXONY (*Kingdom*).—Weinberg, near Riesa (15¾); Prince Albert-stift, in Schwarzenberg (15).

SAXON DUCHIES.—Heinrich-stift, in Great Paschleben, near Cöthen (14½); Friedericken-stift, in Ballenstedt (10); Georg and Marien Haus, at Meuselwitz, near Altenburg (13½); Fischhaus, near Meiningen (7½).

SWITZERLAND.—Bächtelen, near Berne (28); Friedheim, near Bubikon (20½).

WURTEMBERG.—Herbrechtengen (26); Tuttlingen (42).

In these 79 institutions there have, up to November 1867, been received 10,527 pupils.

Of this number—

1. There died at the Reform School,	247, or 3 per cent.
2. Returned to the parents from various reasons, or run away,	630, “ 7.7 “
3. Left the institution in the regular course, after having been confirmed,	7,223, “ 89.3 “
	8,100

Those who have turned out badly,	644
Of these, punished by law,	339
Unpunished,	305
	644 644

Those of whom indifferent accounts are given,	1,251
Those of whom perfectly satisfactory accounts are given,	4,529
Those never heard from,	799

Therefore, left in the regular course,	7,223
Counting all that have left,	8,100 pupils.

Present in the seventy-nine institutions in 1868, 2,427 pupils.

Of these seventy-nine institutions, there rise above the percentage—

With good (62.6 per cent),	36 institutions.
With indifferent (17.3 per cent.)	37 institutions.

And there are below the percentage—

With bad, not punished (4.2 per cent.),	48 institutions.
With bad, punished (4.7 per cent.),	46 institutions.
With bad generally (8.9 per cent.),	40 institutions.

Fuller details can, of course, be given only when returns shall have been received from all the Reform Schools of Germany.

XIII.—RELATION OF THE REFORM SCHOOLS TO THE STATE.

It is self-evident that the state and communal authorities will take a lively interest in the Reform Schools, because the number of vagrants and candidates for the houses of correction is thereby greatly diminished. That this is really done, is conclusively shown by the numbers given in the preceding chapters. The governments of most Christian countries have, therefore, shown a desire to assist the Reform Schools. The greatest possible caution should, however, be exercised, and the *timeo Danaos* always be remembered, because not unfrequently the union of the

state authorities and those of the Reform School endangers the character of the latter and tends to make them mere houses of correction. This induces the parents, either by stratagem or by force, to entice their children away from the Reform School, and encourages the children to run away from the so-called prison. The spirit of Christian charity which should always pervade the Reform School is thereby greatly diminished, and the confidence of the better class of parents entirely shaken. It is, therefore, necessary to keep the two carefully separated, not as if they were enemies, but because it will be to their mutual advantage. The question is chiefly whether pupils are to be received, who, from some reason, have been placed in the Reform School by the communal or state authorities. The temptation lies in the fact that by receiving such pupils the Reform School gets a certain fixed subsidy, which is paid regularly by the authorities. Agreements of this kind exist in several countries. Thus the Prussian penal law code (§ 42) of 1851 decrees, "that criminals who have not yet completed their 16th year are to be set free, if it has been ascertained that they do not yet possess the faculty of discriminating, and that the court has to decide whether they are to be sent back to their family or placed in a House of Correction."

As there were then only very few such institutions, some substitute for them had to be found, and the Reform Schools were at once thought of. Many people highly lauded the new movement, extolling the "Christian spirit" of the State; while, in reality, the State only wished to get rid of these young criminals. Thus we find, in 1857, 313, and, in 1859, 276 children, who properly ought to be in a House of Correction, distributed over sixty-nine Protestant and seven Catholic Reform Schools. Similar agreements between the State and the Reform Schools exist, to some extent, in Wurtemberg and in Bavaria. In the last-mentioned country it has gone so far that some of the Reform Schools have entirely lost their original character, and are at present nothing but Houses of Correction, maintained by government subsidies, but originally founded by private individuals, legacies, etc.

XIV. RELATION OF THE REFORM SCHOOLS TO THE CHURCH.

During the first three decades of the Reform School's existence in Germany, this relation never gave rise to any difficulties. There was a change, however, after the year 1848-49. The question is only interesting in so far as there are not a few ministers who ignore, and even despise, Reform Schools, because they are not "church institutions." We cannot but deplore their taking this view of the matter, because the Protestant Reform Schools in Germany, whoever may have founded them, are, in fact, religious institutions, though not founded, ruled and maintained by the church. The Reform Schools are religious institutions, because, resting on the same foundation as the church, they build up the kingdom of God here on earth, — His invisible church, — by seeking the lost ones, and by leading them again to the right path. They are also religious institutions, inasmuch as members of the church, in voluntary love, have founded and maintained them by their contributions and prayers; they are a com-

fort for those who seek in the church a saving hand for their children; they are a living testimony that faith is not yet dead. So they are entirely different from merely philanthropic and humanistic institutions, which, without leading to Christ, attempt to reform the youth entrusted to their care. The religious character of the Reform School demands that children of churches which, in principle, are opposed to each other, such as Catholics and Protestants, should not be received in one and the same institution. That the Protestant Reform School, with its inmates, takes part in the public services is understood, because it forms one of the families of the Christian congregation.

XV. ADMINISTRATION, FINANCIAL AFFAIRS AND PUBLICITY.

Great or small as the Reform Schools may be, they are nowhere merely private institutions, but aim at obtaining the privileges of corporations, that they may acquire real estate and legacies. The difficulties which are to be overcome in this respect are very great, especially when it is to be proven that the institution is in possession of a definite amount of property. The possession of real estate is, generally speaking, a vital condition for the continuation of a Reform School after the death of its founder. This property belonging to the Reform School, the regulation of other external affairs, the raising of the required funds, and the way in which they are to be employed, the installation or dismissal of a House Father,—all this, and many other things, demand an administrative body (*verwaltungskörper*.)

We will not in this place criticise the way in which things have been managed hitherto, but much remains to be desired in this respect. Thus it has happened that well-meaning persons,—noblemen or owners of large real estates,—have founded a Reform School on their property, but did not regulate its ownership, and, after the death of the founders, the existence of such a Reform School has been seriously threatened by the heirs. The position of such an institution is very awkward, especially if no one has the will or courage to investigate the matter thoroughly. The House Father will find himself in the worst predicament, particularly if he have a large family of his own, as he is exposed to the entirely arbitrary treatment of persons who either take no interest in his school or hate it.

Next to the real estate, the finances are a fruitful source of cares and difficulties. This certainly ought not to be one of the duties of the House Father, as it has been in some places, where he has actually been forced to wander round from house to house, and collect contributions. As regards the raising of the necessary funds, the most natural way is to have the Reform School chiefly maintained by a number of wealthy benefactors. These generally agree to do this before the undertaking is commenced; but their number is gradually diminished by death, removal and other circumstances, and ought, therefore, to be continually recruited.

Another important source of income is the money paid for board. However, there should never be a certain fixed sum which is made the *conditio sine qua non* of a pupil's being admitted to the Reform School, as has been in some places. Where this sum is very high, as a natural con-

sequence, the number of pupils has been small, and, because the institution did not flourish, the contributions have gradually ceased to flow in. Then, suddenly, the very opposite course was pursued, by receiving pupils altogether gratuitously. This was not the right way either, and had not the desired success. Every Reform School should fix the number of children to be received at twelve, twenty, or twenty-four, etc., and make the rule, that children who are absolutely unable to pay anything should be received gratuitously, but that, on the other hand, parents should be reminded that their duty and honor as parents demands that they should not receive anything gratuitously for which they are able to pay. Then it must be ascertained what parents really can pay, be it ten, twenty, thirty, fifty, or eighty (Prussian) dollars per annum. In case the parents cannot pay, it will be well to gather a circle of friends who will undertake to make up an annual sum; and what is then still wanting must be paid by the voluntary donations, which will never fail if the institution is conducted in the right manner. If the Reform School has friends, it should always endeavor to increase their number, because love is inventive and rich in little helps, which, together, are an important aid. Such assistance by no means ought to be despised, as contributions in kind and gifts of clothes.

In addition to all this, there ought to be the produce of the garden and fields belonging to the institution. When new buildings are to be erected, love gladly lends a helping hand. On such occasions, an appeal in one of the papers will not be out of place. The longer a Reform School exists, the more it gains the confidence of the public, and the richer will be the contributions. Thus the more than 400 Reform Schools of Germany and Switzerland would, if built together, make quite a town, with a large amount of real estate. But, although scattered all over the German land, they form a grand monument of love and faith, raised under the blessing of God. Some of the stones of this building may crumble to dust, but the foundation of the whole will not be shaken, and newer and better ones will take their places.

In most Reform Schools an annual report of the financial status has been handed to the benefactors, and has also been published. If these reports were made out upon some uniform plan, it would be possible to show what the expenses are for one child in the various institutions; but the material for making such a computation is so imperfect, that no satisfactory conclusion can be drawn. To give an idea of the expenses of the Reform Schools in Wurtemberg alone, we will mention that the nineteen Reform Schools existing in 1844 expended the following sums:

For the first foundation of these nineteen institutions,	210,569 florins.
For maintaining them up to the year 1844,	724,680 florins.
Total,	935,249 florins.

The annual expenses for one child seem to be eighty to ninety florins in the South of Germany, and from seventy to one hundred and twenty (Prussian) dollars in the North.

It will be evident, from what has been said hitherto, that the Reform School cannot have the character of a family living in seclusion. It is like a house with windows on every side, inviting all passers-by to look in.

From this circumstance springs the new, and by no means easy, task of guarding the children from all dangers which may result from this publicity. Especially if the Reform School be located in the neighborhood of some large city, there will scarcely be a day on which there are no visitors, frequently from all parts of the world. Visits of this kind cannot be in any way regulated; on the contrary, nothing that might interest strangers should be kept from their observation,—only, the proper regard must be had for the welfare of the pupils, which may easily be endangered if, for example, every casual visitor is allowed to engage in conversation with any one of the pupils on his past life, or if strangers wished to attend all the recitation hours.

To this must be added the monthly visits of parents and friends, which should always be kept up, but be under strict supervision. Nevertheless, it will be impossible to prevent the parents or friends from communicating to the pupils items of news and gossip, which the latter had better not know, particularly with regard to the Reform School, which is the frequent object of bitter attacks and misrepresentations in the local press. The children then become conscious of the fact that their persons attract the public attention. All this imposes upon the authorities of the Reform School a new moral and educational task, to accomplish which will be the duty of the House Father, and it will require a great deal of tact and knowledge of human nature to do this in a satisfactory manner, as, on account of the innumerable individual cases, no general rules can be laid down.

On the other hand, the authorities of the Reform School should encourage publicity on certain occasions, such as the annual festivals, when all benefactors and friends should be invited to take a share in the festive joys. On such a day the children should not be annoyed by examinations and catechising, but enjoy themselves in the full sense of the term, by singing and playing to their hearts' content.

In connection with the anniversary of the founding of the Reform School, a report on the past year should be publicly read. The tenor of it should be such as may be read before the children without giving offence; portions which touch on delicate subjects, but which, nevertheless, cannot be omitted in the report, may be left out in reading, but should certainly appear in print. Such a report ought to contain a full statement of income and expenditure, the names of the members of the administrative board, full statistics of the past year, and all occurrences, both sad and joyful, which may be of public interest. Sermons delivered on such festal occasions ought not to be inserted in it. The principal of the school should draw up the report, from material collected by the House Father, in the shape of a diary. If all the reports were made out on this principle, they would form quite a treasure of pedagogical experience. Amongst the best and most interesting reports, we mention those of the Reform School at Stammheim, near Calw (Wurtemberg), formerly edited by the late Dr. Barth; as, also, those published by the Swiss Society in Zurich.

XVI. THE FUTURE OF THE PROTESTANT REFORM SCHOOLS.

On the supposition that the Reform Schools will remain essentially Christian institutions, we would, in conclusion, mention a few *pia desideria*,

whose fulfilment ought sooner or later to be attained, if the whole cause is not to be endangered :

1. The future House Fathers, assistants and teachers should, both theoretically and practically, be prepared for their solemn calling, which is only possible if they are for a number of years co-workers in an institution specially established for this purpose.

2. The number of such institutions which are already in operation (the *Brüderanstalten*) should be constantly increased, and, by an interchange of the varied experiences, the system be constantly improved.

3. There ought to be a supervision of the Reform Schools, authorized both by the Church and the State, which supervision, however, ought not to have a bureaucratic character, but should, by the authority vested in it, be able to protect the liberty and private character of the institution, and make improvements where they are needed.

4. Only in this manner will it be possible to have a guarantee that those free boards of administration, which stand in need of such a supervision, at least fulfil their duties according to the statutes, for the benefit of the institution and its local administration, through and in reference to the House Father.

5. It becomes more and more necessary to grant the House Fathers some pecuniary assistance, particularly for the education of their own children, who cannot, without danger to themselves, remain at the Reform School. When House Fathers become superannuated, after many years of faithful service, they ought to receive a pension. This question has already been mooted at several conferences.

All these considerations combined, urgently demand that the hitherto existing isolation of the various Reform Schools should cease, and a lively and regulated intercourse of the various institutions and House Fathers should be inaugurated, so that one may learn from the other, and, from this interchange of ideas, derive new strength to pursue the work. This approach of the various institutions to each other may be brought about in a two-fold manner, — either by literary communications or by personal meetings. With regard to the first, we can here mention that already, for a number of years, the Central Committee for Home Missions, in the German Evangelical Church, (Berlin and Hamburg), has caused more than one hundred Reform Schools to communicate their reports to each other. A supplement to these communications is found in the *Fliegende Blätter*, ("Fugitive Leaves"), published by the Rauhe Haus. In the various German countries there are journals which give information concerning the institutions located in their district: *e. g.*, in Wurtemberg, the *Armenblätter*, ("Journal for the Poor"), by Dr. Hehn, and the *Christenbotde*, (the "Christian Messenger"), by Pastor Burk; in Bavaria, the *Puckenhofer Blätter*; in Baden, the *Reich Gottes*, (the "Kingdom of God"), by Rev. Mr. Mann; in East Prussia, the *Evangelische Gemeindeblatt*, etc. But, as yet, there is no general organ for the whole of Germany; neither are there any societies, as in England.

The great obstacle is the peculiar tendency of the German national character to take an interest only in their native town or village. Besides this, there are the many special ecclesiastical and political party-interests,

which throw almost insuperable difficulties in the way of such united efforts. Still, there has of late been some improvement in this direction, especially through the instrumentality of the societies for Home Missions, which have instituted annual meetings of House Fathers and representatives of the Reform Schools in the various districts. Thus the Brandenburg Society for Home Missions, the Pomeranian Society, the Silesian Society (meets in Liegnitz), the Conference for Home Missions at Baiersdorf, in Bavaria, and the annual meetings of House Fathers at Züllchow, near Stettin.

A subject often broached at these meetings is the idea of a uniform organization of all the Reform Schools, which, however, is more visionary, and will scarcely ever be realized. If the various groups of Reform Schools could, through a special journal, be more intimately connected, then there would at least be a sound preliminary base, on which the work of uniting the efforts already made might safely be built up. The foundation on which these institutions rest is such a good and lasting one, and the blessing which, so far, has attended the work is so evident, that, in casting a farewell glance at the Reform Schools of Germany, we cannot doubt that the work so successfully inaugurated, under the blessing of God, will continue to flourish in future times like a tree "planted by the rivers of water," constantly putting forth new leaves, flowers and fruits, and, till the end of days, continue to be a blessing to the German nation and its children.

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