

to arouse an interest in the suppression of alcohol traffic in Africa, ought to know, that, even if its aims were reached, the negroes would be little better off. There is only one way to improve their state: it is to develop their arts and industries; to improve the methods of agriculture where such is practised, to further stock raising and trading where the negroes are stock raisers and traders. After this has been done, the missionary may be able to Christianize his pupils. The intelligent missionaries, who understand that an improvement of the material welfare of the natives must precede any teaching of religion, are not many. The author, whose aims are very praiseworthy, has not grasped the question of education of the natives. He overestimates one cause of their ruin, and underestimates their faculties. The spread of Mohammedanism shows that the native is well able to protect himself from alcohol, if his other energies are not destroyed by foreign influence. This shows that the principal problem is not the prohibition of alcohol, which of course is the chief aim of the Woman's Temperance Association, but the stimulation of the energies, and development of the faculties, of the natives.

THE GERMAN SYSTEM OF NORMAL SCHOOLS.¹

IN Germany schools have a social as well as an educational rank. They may in general be divided into lower, middle, and higher schools. The tuition, which is common to all, is graded, so that the poorer and lower social classes are driven into the lowest grade of schools. These are called *Volks*, or people's schools. In Prussia ninety-one per cent of all children attend them; in Bavaria, ninety-six per cent. Their course of study is rounded up and complete in itself. This school leads into no higher school. The length of its course of study is eight years,—from the age of six to that of fourteen. It is for this grade of schools that the German normal schools prepare, and have always prepared, teachers. The higher schools are taught by classically trained university men, even in the elementary grades.

German normal schools arose in the middle of the eighteenth century, and were established and maintained almost wholly from philanthropic motives. They educated pious young people for a business to which was attached neither competence nor worldly honor. Externally their growth was greatly stimulated by the rise of that great democratic wave which has swept through the world during the present century; furthermore, by that fear of an uneducated proletariat which arose with the French revolution; and, finally, by that high patriotism which saw in the education of the German people the hope of freeing Germany from the domination of Napoleon. Internally the normal schools received a new birth through the educational revival which arose with Rousseau and Pestalozzi.

But at the close of the Napoleonic wars, Germany relapsed into the old police state, and soon suffered the internal contradiction of a free intellectual development of the people in its schools, and the cast-iron rigidity of a bureaucratic and despotic system of government. This contradiction culminated in the revolution of 1848. A re-action followed, and the normal schools, which had grown numerous, were accused of being the main disseminators of revolutionary ideas. In 1854 there followed the three famous Prussian Regulations, which eliminated from the normal schools the spirit of Pestalozzi and modern development, and reduced them to medieval handmaids of the Church and a bureaucratic State. Other German powers followed the example of Prussia. Authority took the place of self-activity in the schoolroom, and German education sank from its high estate. This was the condition of education in Germany until the great day of German unity, which came at the close of the Franco-Prussian war. The oppressive Regulations were repealed, the spirit of progress and free development of mind returned, and Germany resumed her former place as the leader of educational advancement. The number of normal schools increased, until there were enough to supply all teachers needed for the people's schools. The number in 1882 in Prussia was one hundred and eleven, nine of which were for women, the rest for men, there being no co-education in German normal schools. Each

school has a director, a head teacher, four ordinary teachers, and one assistant. It is attended by about a hundred students, about two-thirds of whom board in the school. The board is very cheap, not exceeding a dollar a week. The State pays the deficit, if one occurs. I apprehend that the main reason for this close connection with the school is to be found in the tendency of the normal students to imitate the excessive beer-drinking and carousing so common among the students of the university. The employment of women as teachers in Germany is yet regarded as an experiment in many parts of the country, and occurs usually only in graded girls' schools. Director Leutz of Karlsruhe said to me, "So far, they give good satisfaction, for they are still young and fresh, but who knows what they will become when they get old and cross?"

The fact that Germany can supply all its *Volks* schools with graduate teachers from the normal schools, finds its explanation in these facts: 1. All students take a continuous course, and all graduate, as indeed they must before they can become teachers; 2. Nearly all graduates remain teachers, for a German rarely becomes that for which he was not specially educated; 3. Teaching is a profession in Germany, since none but trained persons are allowed permanently to teach in that country. The teacher is a civil officer, and holds his position with a life-tenure. I find by computation that the average length of service of Prussian teachers for the last fifty years is sixteen and nine-tenths years; so that, aside from the increase in the number of schools, but five and nine-tenths per cent of the whole number of teachers must be renewed yearly. Director Rein of Eisenach, in Sachsen-Weimar, and Director Leutz of Karlsruhe, in Baden, both assured me that not more than five per cent of the number of teachers in those states is renewed yearly. This makes it possible, with a reasonable number of normal schools, perhaps one for each hundred thousand inhabitants, to supply trained teachers for all schools. Every year, however, in Illinois, over twenty per cent of all teachers are beginners. At this rate, to supply our Illinois schools with trained teachers, it would take one hundred and forty-two normal schools, each having one hundred students, a three-years' course, and graduating thirty-three students annually. We have, in reality, two normal schools, which graduate from twenty-five to forty students each year.

German normal schools are administered by the state educational minister or commissioner, a provincial school commission, and by the director.

The same difficulties which have beset us, concerning the proper preparation of candidates for the normal schools, exist in Germany. Most of their candidates come naturally from the *Volks* or people's schools; but, as we have seen, their course of study is strictly elementary, and closes when the student is at the age of fourteen. The common rule is to require three years of preparation before entering the normal school. This preparation is obtained in any one of three ways: 1. Privately (this happens in villages where only the *Volks* school is found); 2. In the advanced grades of middle and higher schools; 3. In special preparatory schools. Of this kind, Prussia has thirty, whereas each normal school of Saxony has its own preparatory school. The pupils are here taken at fourteen direct from the *Volks* school, and graduated six years later. The course of study in the preparatory schools is purely academic, and consists of (1) religion, (2) German (reading, grammar, etc.), (3) mathematics (arithmetic, algebra, geometry), (4) history, (5) geography, (6) natural science, (7) writing, (8) drawing, (9) singing, (10) violin, (11) piano, (12) harmony, (13) gymnastics.

That every normal school must have a model and training school has long since been established by law in Germany, and is no longer a question of debate. As the late Director Kehr, of the Halberstadt Normal School, said, "a normal school without a training-school would be like a swimming-school without water." The only feature to which I wish to call your attention is the fact that in Prussia each training-school has a country or district school department, i.e., a model of a school taught by one teacher, so that the students have a complete picture of a village ungraded school. I do not dwell upon the subject of the training-school, for I believe that this country has now become pretty thoroughly converted to the idea that the training-school is a necessary part of any thoroughly equipped normal school. Some of you will remember, how-

¹ Read at the National Teachers' Association, in Chicago, July, 1887.

ever, in the discussion of my paper on model schools, at Saratoga, in 1883, that one of your members indulged in a prophecy concerning a gentleman who was advocating the need of training-schools in New England normal schools, to the effect, that, if the gentleman lived five years longer, he would not know so much about the subject as he did then. Only four of the years set by the prophecy are past; but, if that gentleman has even begun to know less on this topic than he did then, he can tell us to-day, for, by a coincidence, he is to discuss this paper also. I may remark in passing, that the training work takes place during the second and third years of the course, and consists of, observation, 60 hours; model lessons by the faculty, 120 hours; trial lessons by the pupils, 80 hours; special preparation for teaching in the training-school, 40 hours; teaching in the training-school, about 200 hours; critical discussion of class exercises conducted by the pupils, 40 hours.

We come now to what has long been a serious problem in American normal schools; viz., the arrangement of the curriculum, and the relation of academic to professional work. There has been a growing feeling in some parts of this country that the normal school has no business with academic training, but should confine itself strictly to professional work. I judge from last year's report to this body, that some, wishing to conform to modern sentiment but not seeing how to do so in reality, have apparently rechristened some of their departments; so that that which used to be known as academic work, has now become professional work of the strictest kind. This may look well on paper, but it only retards a true solution of the difficulty.

It may in general be remarked that the curriculum of the Prussian normal school consists of the same subjects pursued in the preparatory course, together with the theoretical and practical professional work proper. From this we may infer, what is the fact, that it is the concurrent testimony of schoolmen in Germany that no amount of theory about teaching the various branches can equal a thorough review and study of them in their relation to the teacher and the children to be taught. Academic instruction is, then, in their view, a necessary branch of normal-school instruction, and not something which, under changed conditions of preparation, might be dismissed with profit. This does not mean, however, that academic instruction in a normal school should not differ essentially from academic instruction in a high school. As I apprehend the matter, it is in this particular that we have the most room for improvement. I will explain, later, the way in which I think this improvement can be made.

No subject is pursued for less than one year, while many subjects, such as history, geography, drawing, gymnastics, and certain branches of music, are studied throughout the entire three years. Many other subjects are studied continuously for two years. This arrangement is made possible by the fact that attendance by the students is continuous throughout the entire course, whereas our broken attendance compels us to make the school term the unit of time for a study. It is curious that the number of hours per week assigned to any given subject does not exceed two, except for arithmetic and algebra, biblical history, and teaching in the training-school.

Such, in brief, is the German normal school system. But what of it? What does it mean for us? Can we attain to any such results? What are the conditions by which its development must be determined?

The average American normal school may, perhaps, be fitly defined as a high school with a training attachment, having the limitations of a low-grade high school, and the ambition of a high-grade college.

In order that the changes which I have to suggest may be seen to have some basis in reason, I wish to make certain propositions, which, since I shall not have time to demonstrate them, may be considered as self-evident truths until they are shown to be erroneous:—

1. That, since the great majority of students who enter a normal school leave at or before the end of the first year, the curriculum for this year ought to be a fair, though elementary, representation of a complete professional education. In the Illinois Normal School at Normal, seventy-two per cent of the students do not enter upon the second year's work. If the principle stated is a sound one, no

great educational department ought to be entirely neglected in the first year's course; yet in our curriculum, psychology follows theory and art of education, and is found first in the second year. Again, natural science is a great and growing department of education, yet we meet its first manifestation in our course of study in the second term of the second year. I propose to put physiology, at least, into the first year's course. A little further on, I shall propose changes in the theoretical professional work.

2. That the education given in the great mass of normal schools must, in the nature of things, remain elementary in character. College and university trained teachers do not compete for positions in the district and village schools, even in old countries, where the struggle for existence is sharpest; much less are they likely to do so in this country. Schools paying from three hundred dollars to five hundred dollars only, must be filled by persons having only secondary education. Since, then, the normal school cannot compete with the college in higher education, it is idle to load up the curriculum with so many college studies, but is wiser to spend more time on fewer subjects. For example: we at Normal teach six sciences, one of which gets fifteen weeks, while each of the others is studied for a bare twelve weeks. Further, we devote six weeks to the history of education, and another six weeks to Rosenkranz's 'Philosophy of Education,'—the best yet the most difficult of works on education in the English language. It needs no argument to show the folly of making so many beginnings which lead to so little, or of making so large a contribution to the mushroom education of the times. I make the very modest proposal in regard to natural science, that astronomy be dropped, and that the two great representative sciences, physics and zoölogy, receive at least two terms each.

3. That any serious attempt greatly to raise the standard of admission will end in driving most of the male students out of the normal school. Witness the advanced State normal school at Milwaukee, which enrolls but one man. Any other normal school which demands the completion of a high-school course of study as a condition of entrance, will, I imagine, contain few male students. From this it follows, that, if the normal school is made purely professional, it is likely to become purely female.

4. That every normal school in America should teach gymnastics two hours a week throughout its entire course. It is exceedingly rare to see a stoop-shouldered or consumptive-looking man in Germany. Sitting one day in the Garden of the Luxembourg, in Paris, I began to count the number of round-shouldered people who passed. All classes were represented. Of those I counted, thirty-six were straight, and sixty-three were more or less round-shouldered, many of them seriously so. Gymnastics is thoroughly universal in all German schools, but is, or at least has not been, in France.

5. That our normal schools should make a much more serious business of music. There is not time to discuss this point.

6. That since the normal school is elementary in its scope, and since the American teacher, unlike the German, has no limits set to what he may become, the thing of most lasting benefit which the normal school can do for him and the State is to quicken him to the widest professional growth. I have little doubt that some of the early normal schools, with their one-year courses, did far more towards implanting a growing inspiration in their pupils than we do with our three years of grind. To this end I would have a more rational and far-reaching professional course of study. I propose, therefore, the following: *First year*, first term, observation; second term, elementary psychology; third term, elementary theory and practice of teaching. *Second year*, first term, logic and advanced psychology; second term, history of education; third term, philosophy of education (Rosenkranz). *Third year*, entire year, two to three hours per week, illustrative teaching, united with the principles of methodology,—a subject which, so far as I am aware, has received little or no attention in American normal schools.

7. That it is time for the normal school in America to pass that stage of its development in which it is a high school with a training attachment, and that therefore, aside from the strictly professional work, a more pedagogical treatment of the academic branches is needful. To this end I propose the following: (a) that the teacher in charge of any given branch should give instruction in that subject throughout its entire scope as an organic whole, and not merely

in its high-school phases; (*b*) that he should consider his subject in its rise and development as a factor in education; (*c*) that he should present an historical view of his subject in regard to methods as the best safeguard against a mechanical and slavish copying of educational devices; (*d*) that he should consider the educational function and value of his subject; (*e*) that he should treat his subject in its co-ordinate relation to the other subjects of the curriculum.

8. That, finally, since a large part of normal-school work is to fit teachers for the district and country school, it is advisable to have a type of this kind of school in the training department.

CHAS. DEGARMO.

THE CONTENTS OF CHILDREN'S MINDS.

IT will be remembered that several sets of interesting investigations have been carried on in Germany and France with a view to determine what the actual content and capacity of the child's mind are. In 1882 Prof. G. Stanley Hall tried experiments with Boston school-children, similar to those made abroad, and published his results in the *Princeton Review*. The December issue of the London *Journal of Education* contains the record of a similar investigation undertaken by an English teacher. The following abridged report of it is not only of interest in itself, but especially for the purpose of comparison with the results of the attempts elsewhere made for the same purpose. The answers were given by six children. Unfortunately, the results obtained under the heads of 'Observation' and 'Information'—the most valuable of all—are very briefly given in the original. The following are some of them:—

What is bread made of? What is the use of sleep? How would you get a garden full of flowers? What is the color of railway-signals? How do chickens come into the world? In respect to all these questions, the children failed to differentiate to any great extent. To the question 'How many legs has a spider?' A answered, "Six;" and E, "I almost think six. I killed all the spiders in aunt's garden yesterday."—"Why?"—"Oh, just for sport." To the question 'Mark the length of a foot on this bit of paper,' A marked 1 foot 3 inches; B had never heard of a foot; C, 8 inches, remarking, "Some people's feet are as long as this, aren't they?" D drew a correct foot, having toes and heel; E marked 2 inches; F, a foot and a half. To the question 'Who rules over England?' A and E answered, "Queen Victoria;" B, "The King, I don't know who the King is;" C and F did not know; and D made a rigmorole statement about railway-lamps, because he could not answer the question, but wished to show that he knew something else.

The questions were put to each child alone, and they had no opportunity for talking about them with their companions. The questions were introduced after a friendly talk with the child, and after shyness had somewhat worn off. The attempts to draw out a child's moral notions almost invariably failed, as the children grew shy. The children are indicated by letters. A, B, and C were girls, aged respectively 8, 7, and 6. A was F's sister, and came from a cultivated home, as did all but C. D, E, and F were boys, aged respectively 7, 7, and 6. A had been running wild for weeks, F for months. D had attended school for a short time. C and F had had home teaching. The children enjoyed the questioning greatly, and it was more difficult to keep them to the point than to extract answers from them.

Below are given a selection of the questions and answers, under the heading of the faculty which they were designed to test:—

Reasoning Power.

1. Why do children have to go to bed so much earlier than grown-up people?
 - A. Because it is better for them; I don't know why. Is it to make them strong?
 - B. Because they are not so old. I don't know any thing else.
 - C. Because they are little. To make them get up early.
 - D. Because they get so tired. I think it is a good plan.
 - E. Because they get so tired, and because they are smaller.

- F. Because children are younger, and they must get more sleep, and that they don't get so tired as grown-up people.
2. If your porridge is hot, why do you eat the outside edge first?

A [had never heard of porridge, so took soup]. Because it would be cooler. I don't know why.

B [pea-soup taken]. Because it is colder; because the edge of the plate goes round it.

C [porridge]. The edge, because it is cooler, because the plate is cold.

D. I should eat the edge first because it is cooler; because it touches the mug, and the mug is cold.

E. Round the edge because it is coolest, because it is against a cold basin.

F [had heard of, but never seen, porridge; soup taken]. Because it is cooler. I don't know why it is cooler.

3. Do crossing-sweepers like fine or wet weather better? Why?

A. Wet, because they have more crossings to sweep, and will get more money.

B. Fine, because it does not rain.

C. Wet weather, because they get more money.

D. Fine, because he can be outter more, and can sweep the roads more. Do they get money for it? I should not do it unless I had money given to me.

E. Fine weather. Well, perhaps they do like wet weather for more sweeping. They like it wet, and then to leave off raining while they sweep.

F. Wet, because they get more money, because people don't want to walk in the mud.

4. What is the good of going to school?

A. To learn your lessons; to learn every thing. ["Will you have learnt every thing when you leave school?"] No. ["Then why don't grown-up people go to school?" A looked puzzled, then said] Because they know what little people don't, but they don't know every thing.

B. To learn to write and to play.

C. To get you clever. I think every one gets clever who goes to school.

D. Because it teaches you to know things when you grow up. ["What things?"] Oh! about trains and how the lines are made and laid down, and all that—and—Oh! [he looked quite awe-struck] is it not a wonderful thing how an engine is made?

E. To learn things; reading and writing, sums, and the multiplication-table.

F. To learn something. I don't know any thing else.

5. I gave the child several sticks of the same length, and asked it to make a cage for a bear with four sticks, so that it could not get out; then with three sticks, then two.

A. I don't know how. ["Try."] How big is the bear? [Gave a piece of paper to represent bear.] First took five sticks, then right with four, then right with three. ["Now try with two."] Promptly, "I can't, unless the bear can get in here," putting the sticks side by side, and she slipped the bit of paper between, but said at once, "It would slip out at the end."

B. Did all right; tried a little with two sticks, then said emphatically, "No."

C. Four and three right at once; when asked to try two, said roguishly, "I'll have to make a cage with one next, I can't do it with two."

D. Four, right; three, first wrong, then right; with two, tried again and again, and needed help to see that it could not be done.

E. Four and three, right; then said, "I don't know how we are going to manage with two." He tried, but at once gave up.

F. Four, right; three, "I can't;" then, very quickly, "Yes, I can"—right. Tried two, but said at once, "No, I can't."

Imagination.

1. What is the moon?

A. A light.

B. A man. I don't know why I think so.