slavish following of the growing mind. It is probable that in no two minds do the faculties develop in precisely the same order. That curriculum is best which is adapted to the greatest number of minds, but no curriculum could be adapted to all minds. Just in proportion as the course of study laid down in school is rigid and unalterable, so far will it fail to reach a large number of those for whom it is intended. Just as, in elementary education, payment by results is opposed to the whole spirit of Pestalozzi's and Froebel's teaching, so in our higher education we cannot obtain the highest level of instruction unless we assign a lower place to examinations.

There is no fear that in the present day realistic education — the learning of things instead of words — will be neglected. There may, indeed, be a danger lest we should teach things which are not the best worth learning, lest we should waste on mechanical arts or on the lower branches of science powers which ought to be applied to the highest products of the human mind. Goethe tells us that Wilhelm Meister, a dreamy enthusiast, took his son Felix to be taught in the Paedagogic Province. On returning a year afterwards to see how he was getting on, he could not at first find him; but, as he was in an open field, he saw in the distance a cloud of dust. The dust developed into a troop of horses; and out of this troop galloped the young Felix, riding a white bare-backed steed, from which he threw himself and fell at his father's feet. The rulers of the Province explained, that, having tried Felix at every thing else, they found that he was most fit for breaking horses, and therefore set him that task. We now see Goethe's dream realized, not only in technical education, but in the schools which are growing up over England for the training of young colonists. A boy is taken at fourteen, and taught how to build a house, to make his furniture, to manage a farm, to navigate a boat. This is realistic education with a vengeance; and the same might be said of mere technical training, where it does not rest upon the basis of general culture. Yet the extravagances to which this side of education may run are slight, compared with those which have for so many years formed the bane of humanism. Some exaggeration is required to redress the balance. It is difficult to secure improvements in education, and it is almost impossible to revolutionize an educational system. Educational theorists write as if a single child, willing to be taught every thing, were dealt with by a teacher able to impart every thing. The reality is very different. Children are taught, not singly, but in masses; and in a crowd the standard of conduct is generally that of the worst rather than that of the best. To secure all the attention of a large number of children needs considerable gifts, and to force a large class into active co-operation with the instructor is what few teachers can do. Again: a small proportion only of teachers have any special gifts of insight, liveliness, or imagination. They can only carry out the methods in which they have been trained. Once more every traditional system is protected by a large number of means and appliances for study which have grown up under its reign. The very perfection of the school-books makes it easier to study classical literatures and Greek and Roman history than any similar department of more modern date. The passive resistance of pupils, the absence of useful aids, the want of enterprise in teachers, — all militate against the substitution of a rational education, such as Comenius would have given, for the complete and elaborate drill in the arts of expression which we owe to Sturm and the Jesuits. America has been less spoiled than Europe by the influence of petty traditions; and it is there, perhaps, that we may look for the rise of a training which will begin with the kindergarten, will be inspired in its higher branches by the enthusiasm of Milton, will always pierce through the veil of words to the substance which the words are intended to convey, and, while training to the full the senses of the individual and his mechanical powers, will not fail to set the highest value on the best products of the human mind, and will never, in the pursuit of material science, undervalue the far dearer treasures of poetry and philosophy.

OSCAR BROWNING.

TRAINING OF TEACHERS.

THE history of our normal schools is the inside history of the progress of education in the United States. Established by prolonged struggles, maintained by continual contests, they have been the central point of onward movement. Circumstances have made them, at the best, but half-measures for the training of teachers. State normal schools are excellent high schools, and a little more. The general standard of admission is that of graduation from grammar schools, eight or nine years' course. Two years are spent in regular high-school studies; the third year a partial course in pedagogics and methods is begun; and the fourth year, psychology, pedagogics, methods, and practice form the principal work. Compare this with preparation for other professions, — four years high school, four years college, and then the law, medicine, or theological school. Rarely can a pupil study psychology with any profit until the

high-school course is finished. Very few pupils can grasp the laws of mind until they are more than twenty years of age. Without psychology, any comprehension of the science of education is impossible. Without this science, imitation of methods is the only resort. One in ten or twenty by inherited and acquired power may have the strength to understand principles: such graduates go on with their studies, and make efficient teachers.

The need of the hour is the establishment of purely professional training-schools, — schools that would take rank with the best law and medical schools. The normal schools themselves suffer greatly for lack of strong, broadly educated, professionally trained heads. A principal of a New England academy, without a spark of professional training, goes into a great western territory to take charge of a normal school, and help lay the foundations of the educational system in a new state. In another profession he would be called a quack: in ours it is almost a necessity, because trained efficient teachers, capable of taking the lead in education, are exceedingly scarce. Few superintendents and principals have had any training for their work. A graduate of Harvard or Yale is just as well fitted to enter the pulpit, the law, or to heal the body, as he is to take the head of a school. In some large cities — Boston, for instance, which has one of the best training-schools in the country — many women teachers know far more of the science of education than their principals.

There is a crying need of safe leaders in education. There never was in our history comparatively a tithe of the earnestness, enthusiasm, and general awakening in the cause of education, as there is at present. This vast energy is spending, and will continue to spend itself in the superficial study of methods, devices, and general details of management and organization, unless there are means offered for a far deeper and broader study of the laws of human growth and the principles of teaching which spring from them.

The present normal schools, struggle as they may and do, cannot well grow into the needed purely professional schools. The rural districts look upon them as convenient, cheap, and good high schools; and rural legislators will continue to hold them to that line of work: the normal element must necessarily be secondary.

Let New York or Pennsylvania, for instance, found one professional training-school. Find a head first, — a very difficult task. Give the principal two or three excellent assistants. Take a whole village or small city for a practice department. Admit upon a rigorous examination only graduates of colleges, normal schools, and high schools, of full four years' courses; admit, too, teachers who have made themselves efficient by three years of successful teaching. Make the school the central point and place of meeting of the county superintendents. Allow them to spend all the time they can command in study at the school. The course is indicated by the term 'professional training-school.' History of education, psychology, pedagogics, and methods should make up the curriculum.

Any teacher or superintendent, of whatever age or standing, could go to such a school with no sense of degradation, just as De Garmo and Seeley went to Stoy's famous Lehr Seminar at Halle. If Stanford could be induced to found, with his proposed university in California, a school like the one outlined above, he would confer upon his fellow-men a priceless boon. Rich men are constantly giving immense sums to sectarian schools, technical schools, academies, and colleges. Oh that some rich man would die for a professional training-school for teachers!

FRANCIS W. PARKER.

I. There are many who see no necessity for such training. A knowledge of the subjects to be taught is thought all-sufficient. But the time when the ignorance and vice of the teachers made them an article of public vendue,[1] or when they followed teaching because they were fit for nothing else, is a thing of the past. A great school system has been built up; the masses of the people are more enlightened, and they demand qualified workmen, though they may not, and in many instances do not, understand the need of professional schools in which to train these workmen. Nor is this demand for competent teachers unreasonable. Better qualifications for any business or profession are required now than were required fifty years ago. We have training-schools for nurses, for cooks, for clerks, for the trades, for farmers, as well as those for the learned professions. The medical student, even after his graduation, feels that his preparation for the practice of medicine has not been completed, and that the people are not yet willing to trust him. Nobody doubts that he has learned the facts necessary to be known; but he has yet to learn to use these facts, to do which he places himself under the special training of a competent teacher, — enters into partnership with a successful practitioner. The lawyer and the clergyman often pursue the same course. People do not question the wisdom of such policy. They commend it, be-

[1] See Report of commissioner of education for 1875, p. xx.

cause they realize that to know a thing is altogether different from being able to do it. Why should the teacher be an exception to a course so commendatory to the good sense of the people? Certainly it is not because the mind of the child is esteemed of less worth than his body or his estate. He, also, must have this training.

II. But of what shall it consist? Not simply of a knowledge of the facts to be taught, nor even, in addition to this, a knowledge of how to teach. Many a one who cannot teach, knows how. School officers ought to know how teaching should be done, but it is not at all necessary that they should be able to do it. Of far greater value than professional knowledge is professional ability. Mere theoretical teaching does not give the power to act. This power comes only from acting. It is true that the young teacher may acquire it in the school-room, and the practice, though often very painful to him, is exceedingly valuable; but the multiplicity of failures to every successful experiment makes it very hard upon the school. Instruction in the matter to be taught, and in the methods of teaching it, should be accompanied by practice in teaching. Nor should this practice at first be in a model or practice school, but in classes whose pupils have already developed their modes of thinking, and formed their habits of study and recitation under the instruction of superior teachers. Little harm beyond the waste of time can come to them from the misdirected efforts of the young teacher; but such would not be the result of his efforts in the ordinary model school composed of little children. During his senior year in the training-school, the young teacher should spend one hour a day in the practice-school, teaching under the direction of his professor, applying the theories he has learned. Not only this: as soon as he enters the training-school, he should be required to examine every question from the stand-point of the teacher as well as from that of the pupil. In every recitation he should play, in some important respects, the *rôle* of teacher. The object of professional training is to enable the teacher to use his knowledge. This it can hope to do successfully only as it gives him exercise in using knowledge, under the direction of an experienced teacher. NELSON B. HENRY.

THE professional training of teachers has become a necessity in all of our large cities; and the time is not far distant when the same will be true in every city, town, village, and district. There is no longer any doubt but that teaching is a service, hence there is no longer any reason why the teacher should any longer be subjected to little petty 'quiz' examinations every few weeks in order to retain his position. Fix the standard of scholarship high; and when one has credentials from any well-known authority, accept it. On the other hand, however, see to it that those who are to train the immortal souls of our children know the difference between the instinct of a dog and the human mind. Too many teachers teach a human being the rules of arithmetic by exactly the same method they would teach a dog to 'speak' for a piece of bread and butter, or a parrot to ask for a cracker. As well might a lawyer endeavor to practise law with no knowledge of the statute laws of his state, or a doctor to practise medicine with no knowledge of physiology, as a teacher to practise the profession of teaching with no knowledge of the mind he is trying to shape.

The teacher who has no knowledge of child-nature should make this his first study; for the man or woman who has forgotten how he or she felt as a child, is hardly calculated to teach. Certainly no such person is fit to be the disciplinarian of children.

A person trying to be a teacher, with no knowledge of the principles of psychology, is like a little tug-boat pulling and tugging and puffing with might and main to get the 'pupil' in the right place; while those who go at their work understandingly take the place of the rudder, and guide the pupils in the right direction to help themselves through.

Let not those who are engaged in the professional training of teachers think their work all done when they have filled their pupils with theories. As well might they lecture on the art and science of swimming, and at the end of six months cast their pupils off the Brooklyn bridge to swim ashore, and expect them to do it, as to expect such pupils to do good work in the school-room.

The practice must go hand in hand with the theory. No student in a medical college can receive his diploma until he has passed a certain number of weeks in the dissecting-room. Neither should a student of psychology receive his diploma until he has had a number of weeks' experience in the class-room. We sometimes think it a pity that the mistakes of the pupil-teachers in the class-room do not, like those of the student of medicine in the dissecting-room, fall back upon themselves, and not upon their innocent little subjects. Were this the case, thousands of mistakes that have been made would have been avoided.

We often hear it said that teaching school belittles a man and sours a woman. To this we take exception, and say that it is the 'narrow

school-keeper' that belittles the school. The true, high-minded, hard-working, untiring, conscientious, progressive, enthusiastic, God-fearing teacher never belittles the school, society, or himself, but raises the standard of each.

Perhaps before closing we should explain one of those adjectives, viz., 'enthusiastic.'

We certainly think the professional teacher should be enthusiastic; because those who accomplish the most good are those who have energy and enthusiasm, and show by their work that they are in earnest, and believe what they do to be worth doing well. There is a difference, however, between a demonstrative and an enthusiastic manner. To be *noisy, flighty,* or *fussy* is not to be animated. Animation or enthusiasm is earnestness without undue excitement.

WILLIAM M. GIFFIN.

INDUSTRIAL TRAINING IN THE PUBLIC SCHOOLS OF GERMANY.

MY observations on the industrial training of the public schools of Germany are chiefly confined to the city of Darmstadt, the capital of the grand-duchy of Hesse-Darmstadt.

For many years the court of this grand-duchy of Hesse has drawn to the capital the representatives of the best education and culture; and its school system is undoubtedly the fairest model in central Germany.

Besides its common public schools, the city contains a polytechnic school, a gymnasium, a realschule, a school for the higher education of girls, several private schools, and a number of kindergartens.

To the noble efforts of the much-lamented Princess Alice may be largely attributed the interest that, since her death, has been taken throughout Germany in industrial training for girls. As soon as Princess Alice came to Darmstadt, she made her influence felt. The Alicen-Verein was organized with the princess as president, and Fräulein Louise Büchner as vice-president. This Verein is an association of women, whose object is to impart instruction in the various duties of housekeeping to mothers and their daughters, and to encourage them to better morals and habits of life, and inspire them with a higher ideal of w. Tomanhoodhis association started an entirely new and popular interest in girls' hand-work, — that kind of industrial training for girls which is now one of the regular branches taught in all the public schools of Germany.

In a country like Germany, with a dense population and with a sharp competition in all the departments of labor, with enfeebled natural resources, the only temporal salvation for the masses is work, — patient, continuous, and remunerative manual labor. Now, when this work is performed by an educated and skilful hand, it is plain that its effectiveness is enormously increased. The boy who has received industrial training is more apt to learn a trade; he is better prepared, as the masses must be in all countries, to make a living with his hands; he will be a happier man, more contented, and less willing to leave his fatherland and emigrate to foreign lands. These are undoubtedly some of the strongest reasons why the German government shows such a solicitude for the industrial training of its youth. At Darmstadt, a few years ago, several private citizens made an experiment in giving industrial instruction to boys after school-hours. The results of the experiment were such convincing proofs of the needs of such instruction in every city, that the institution was incorporated, and became a branch of the public-school system, although no special provision had been made in the school law, such as had been made for the industrial training of girls.

The manual-training schools are intended for that class of boys — and a very large class it is in every city — that idle away their time before and after school on the street, where they learn more readily the vices of the depraved than the virtues of the good, and so counteract whatever of honesty, patience, perseverance, kindness, and obedience the teacher at school may attempt to inculcate. This is the reason why the boys in our country, as well as in Germany, who have to work before and after school, make the best progress in their studies, and are the most obedient, and give least trouble to the teacher at school.

In Germany the schools close the daily session at about 2.30. After this time, the boys who, either through poverty or the indifference of parents, are not properly and healthfully employed, must attend the industrial school for the rest of the day. In the industrial school at Darmstadt, in the summer-time, the boys are put to work in the different gardens belonging to the institution. They are divided into classes or companies, each under the supervision of a teacher. One day I saw a company of boys, about twenty in number, between the ages of nine and ten, engaged at transplanting cabbage-plants, and for the first time in my life did I discover that there is an intelligent way of doing work even as trifling as this seems to be. In another part of the garden a company of older boys was preparing the ground for a new crop: the work was likewise systematically and even scientifically performed. In other