sources, commercial, mining, manufacturing, and agricultural, for the purposes of prosperity and progress, for the comfort and happiness of its people, must have a large increasing force of strong, active, intelligent working men and women. This force of men and women must be educated and trained in the right way from early childhood. Their number has been diminishing of late. Manual training in the schools all over the land will turn the tide, and have a tendency to restore the country more nearly to a normal condition.

Now, is industrial or manual training good for any child or youth? We think so, and for all the children and youth in the land, — for those in the country as well as for those in the city, for the poor as well as the better-conditioned; in short, for all classes and all ages who are engaged in the duties of school. So I think we may be assured that some industry or manual art can be and should be introduced into every country school, whether the cottage by the road-side, or the more pretentious structure for the hamlet, or even the finely constructed institution for the village.

What industry can be profitably introduced? Why, any and every industry within the means of the school, and suited to the capacity, attainments, and age cf the pupils in attendance. There are many things that can be done with profit in any and all schools; and, as soon as the pupil enters upon school-life, one of them should be taken up, and each carried forward one after the other, just as the subjects of study are taken up and completed. SAMUEL G. LOVE.

THE RESPECTIVE FUNCTIONS IN EDUCA-TION OF PRIMARY, SECONDARY, AND UNIVERSITY SCHOOLS.¹ — I.

It is generally understood that at conferences such as this the papers read should be of a directly practical kind. I have not always fulfilled this expectation, nor do I mean to do so now. And this partly because it seems to me that a conference of teachers should be held to be also a conference of educationalists, and that questions may therefore be quite fittingly treated in those larger relations which, though not exactly philosophical, are at least suggested by philosophy. Another reason for not being directly practical is that I am tired of the practical, and have nothing more to say. In books, lectures, and printed addresses I have exhausted myself, so to speak, and I am not sure that debate on practical questions is now much needed. We have reached that point at

¹ Paper read at the Educational congress, Edinburgh, on the 31st of December, 1886.

which we wait for action to be taken; and the departmental committee recently appointed, and the universities bill now believed to be in proof, give promise of immediate and salutary activity in many directions.

In primary education the department is now moving on right lines : after many wanderings in the wilderness caused by its own innate perversity, it has now reached the confines, at least, of the promised land. Respectful advice, for the further wise development of the Code, will now be listened to at Dover House, if tendered by competent persons. It has not yet been resolved that 'designated' inspectors who have not been teachers shall go through a course of educational study and scholastic training before entering on duty; but this reform *must* come. As to the training of teachers, the key of the position, as I have again and again pointed out, is the preparatory qualification of the training-college entrant, and this resolves itself into the reform of the pupil-teacher's schedule. This reform the authorities are now considering.

As to secondary education, the first question is the professional training of the secondary schoolmaster at our universities; and the second is the better organization of our high schools. I entirely dissent from those who would speak of the secondary system we have as contemptible. On the contrary, I say, without fear of contradiction from any one even slightly acquainted with the history of education, that secondary instruction and secondary schools were never in so vigorous a condition in Scotland as they are at this moment. I also continue to dissent from those who would draw a hard and fast line for the education to be given in primary schools, in the supposed interests of secondary schools. An exception, however, is to be made in those small towns where the secondary school is made easily accessible to the poor man's child, and where the cheap and necessarily inefficient competition of the primary schools tends to starve out the secondary. For secondary education, what we want in Scotland is a permanent commission, elected by the universities and larger school boards, acting as a consultative body under the Scotch department, and empowered to administer a treasury grant of, say, twenty thousand pounds a year in subsidy of local efforts, and on certain conditions as to school staff and organization. With this and a university entrance examination, the secondary schools of Scotland would be in a highly efficient state in less than ten years. The same commission, as regulating the examinations, would institute leaving-examinations qualifying for the university, and content itself, I am convinced, with a triennial visitation instead of an annual inspection of the schools; this visitation being for the sole purpose of reporting on the staff and curriculum. Inspection of such schools, in the ordinary sense of that term, is wholly unnecessary, if not indeed hurtful to the cause of education. The governing body of secondary schools should be an elected committee of the existing burgh boards, with the addition of county representatives; the county being taxed for the support of the school up to a maximum of, say, a farthing per pound. As to the secondary or high-school curriculum, it is long since I reluctantly came to the conclusion that this must, for the future, be mainly on the lines of the German real-gymnasium; Greek, however, being taught, but only as a specific subject to the few. In this way, we get rid of the anomaly of 'modern sides.' These 'practical' opinions I here summarize bluntly, having on many previous occasions reasoned them, and I now pass on to the special subject of my address. 'Education' is a big word as well as a great word. It comprehends every influence that goes to the formation of a mind. No man can give an account of it. A genuine autobiography is an attempt to do so. But in this even a Goethe or a Ruskin will fail. These men, like all others, probably owed as much to those subtle influences which pass unnoticed as to the more self-conscious experiences which it is easy to read, record, and estimate. We who have to do with education professionally are apt to forget this, and to exaggerate the influence of the school. We forget that the ancient Persian presented to the world a fine type of manhood, with no schooling at all, in our sense of the word; that the Greek leapt by one bound into the van of humanity, and knew little but his Homer, a few moral apothegms, and his simple lyre; that the Roman had unfolded all his greatest qualities, and had proclaimed himself the coming master of the world in arms and laws, with little or no literary acquirements. It is not by the Latin or arithmetic we teach the boy that we make him a true or capable man: it is by the life we present for his admiration and acceptance, and, above all, by the life which we live before his eyes. Our lives, and the very movements and gestures and exclamations which reveal our lives, are the most potent of all influences in the education of the

I may seem to you to have fallen suddenly in love with the trite and the obvious, and to have come to this, that I would substitute for the philosophy of education a few well-worn truisms and platitudes. And, indeed, you are right; for as one grows older, and has wandered far and wide over the meadow-lands and deserts of the educa-

young.

tional country, dwelt on the history of the education of the race, and pondered the philosophy of the school, one finds one's self back again at the starting-point, in happy company with the crystallized wisdom of the ages. The last function of science can only be to enable us to see truly what is already there before us to be seen, though covered with a veil: the last function of the philosophy of education is to see the ancient facts of our moral relations to each other, and the truth of the ancient truisms, — to see truly what is covered by the veil of words.

So, then, I am not ashamed to utter truisms, and to say that the formative power of the teacher is not in what he teaches, but in what he is — what he is, first, consciously or unconsciously, in himself, as a living and advancing mind, known of all men, and especially of all boys; and what he is consciously to his pupils in respect of aim, method, and manner.

These certainly are very general reflections, and yet of very close and particular application. For if the end of all our school-striving be not what our pupils ultimately *have*, but what they finally *are* — are as receptive beings in harmonious relation with the simplicity, strength, and truth of nature, and as active helpful beings endowed with sympathy, given to sacrifice, subject to duty, courteous in bearing — I say, if this be so, what a multitude of practical lessons for the teacher are implicit in such a conception !

Let me, in this connection, be strictly practical for a moment, and ask the head master of an English school, "Do you believe this that I have indicated to be the true outcome of school-work? Do you really believe? You are a Hellenic and Roman scholar, and you are probably a theologian, and know your Bible. Well, then, if you believe it, is there any reason in the nature of things why, for example, your boys should be kept away from a knowledge of other nations and their commercial and industrial relations with ourselves, and those far-reaching lessons of humanity which such knowledge suggests? Is there any reason why the insular pride, insolence, and self-centring of our British boys - sources these of much evil should not be modified by a knowledge of other nations of men and their claims to our regard? Can you truly promote what you accept as the true end, the life you admit to be the true life, if you do not by means of the facts of human relations lead the boys of wealthy parents to understand their dependence on the poor, and the true significance of the co-operation of capital and labor? Can any good reason, again, be given why you should not protect the boy's future life by giving him some knowledge of his own frame? Do you not call it on Sundays, when you preach, the temple of the spirit?" I am speaking, gentlemen, of geography, and economics, and hygiene, as school-subjects, and on which a fifth or sixth form boy would be held to waste his time. And so on I might go for pages, criticising existing practice, in the light of general principles, and suggesting the materials to be used for the making of a true man. So potent are general truths, so keenly practical is philosophy, so penetrating are truisms. It is life that truly educates us : it is the revelation to the young mind of moral and spiritual ideas in their prosaic but fruitful relations to the hard facts and stern duties of common day, that is the main purpose of the great English public school, as of all schools. Can any one who has looked at the records of our law courts for the past seven or eight years believe that this instruction is not needed? Can any one believe that it is continuously given?

But let me pass on to consider the bearing of this by no means, I hope, inapt or inept introduction, to the special question which heads this address.

By the common consent of all nations, as well as of physiologists, the life of the body and the mind of man falls into three periods, — the period up to 7, that of the infant school; the period to 14, that of the primary school; and the period from 14 to 21, that of the secondary school and the university. These, I think, may again be subdivided thus: to the age of 5, the age of 5 to 7, from 7 to 11, from 11 to 14, from 14 to 18, from 18 to 21. But I do not propose to deal here with these various subdivisions, but to confine myself to the larger divisions which we have agreed to call primary, secondary, and university.

Now, let us get hold of some leading idea which shall give us at once guidance and a criterion of judgment at all these stages. That idea I believe to be contained chiefly in the word 'nutrition,' in the primary stage nutrition of feeling, inner and outer, that is to say, of the emotions within and the realities of sense without, and through these, training, with a minimum of discipline; in the secondary stage again, nutrition through the hard facts of life and the presentation of concrete ideals, and through these a maximum of discipline; in the university stage still nutrition, but now through ideas, with self-discipline as the necessary pathway to the apprehension of ideas.

And here I must try to distinguish between training and discipline, terms often confounded. If I carry a child through the explanation of any object of knowledge, step by step, in the true logical order of that explanation, and, repeating this again and again, finally cause him to repro-

duce the process. I am calling into activity his intellectual powers in the order in which they alone can truly comprehend. I am thus training him. If, on the other hand, I call upon him to apply past knowledge to the explanation of some new thing, I discipline him. For example: the geologist may explain to me a section of the earth's surface by exhibiting in logical sequence the causes whose operations have made it what it is. As often as I follow him through this explanation my faculties are at work in their natural order, and I am thereby trained. But if the same geologist, knowing that he has conveyed to me through his past instructions, principles and causal forces, takes me to a new section of country and calls on me to map it and explain it, he disciplines me. Again : in the moral sphere which concerns doing under the pressure of motives, when I lead a child by the hand and guide him to the feeling of the right motive, and to action in accordance with it, I train him. When I throw him on his own resources, and, withdrawing my fostering hand, call on him to do his duty, which means to sacrifice inclination to the moral 'ought,'--- to offer up self to virtue, - I discipline him. Training is the peculiar virtue of the primary school. In intellectual and moral training there is the following of a stronger on whom the weaker leans : in discipline there is the self-exertion of will in the face of difficulties, this will being the root of our distinctive humanity. Training may make a welldisposed youth, but it is discipline alone that makes him strong, virile, - a will, a man. Discipline is the peculiar virtue of the secondary school.

When the primary and secondary schools have attained their end, we have a great result truly; but, after all, our pupil is as yet only a man among men, a capable, upright citizen, it may be. That is all, though much. He is fit for more than this, however. He can rise above mere worldcitizenship, and become a citizen of a city not made with hands. The divine in him - his spirithood as distinguished from his mere man-hood --claims fellowship and kindred with God. He can rise to the contemplation of ideas, and regard. them face to face. The true is an idea: it is the motive inspiration of scientific inquiry. The beautiful is an idea: it is the subtle perception of the music of creation. The good is an idea: it is the comprehension of the harmony of the universal movement. When man attains his full stature and to communion with ideas, he raises his head above the vaporous clouds of earth and breathes an 'ampler ether, a diviner air.' He now begins to see the cosmic order as truly a spiritual order, and, returning to the ordinary life

of the citizen, he descends from his Sinai, not to despise the mean things of the daily life, but now rather to see the God of the mountaintop in them, and to illumine all with the light that comes from within. He no longer sees with the eye of sense. For him nature is now bathed in the light that never was on sea or shore. The glory of setting suns, with all its splendor, is now to him only a dwelling-place for the universal spirit; the infinite variety of nature, only the garment we see Him by. The palpitating thought which is all, and in all, now finds in the spirit of man a responsive pulse. Blessed is the coming of that day. It is to sow the germs of this life of the spirit, to foster this into adolescence, if not maturity, that the university exists ; to give food, nutrition of this kind, — to supply the spiritual manna which will never fail us in the wildernesswandering of earthly existence, as each morning we rise to a new day. The discipline of this period is self-discipline. Such I conceive to be the three stages of education. These be brave words, some of you, perhaps, will say, but what guidance do they afford? By what cunning application can they be made to bear on the business of the teacher's life? The application will be apparent enough to others. Depend on it, principles are the most practical, the most potent, of all things. They are inexhaustible fountains of every-day detail. S. S. LAURIE.

THE PRUSSIAN MINISTER OF INSTRUC-TION ON FEMALE EDUCATION.

MINISTER VON GOSSLER presided over the tenth annual congress of teachers in high schools for girls at Berlin, at which about five hundred teachers were present. In his opening address, Herr von Gossler discussed female education in general, and stated that the chief difficulties connected with the instruction in girls' schools are two: "first, there are still a great many men and women who hold that a girl's character, and the emotional part of her nature, are the only things that require developing, but that the intellectual side may be left to chance; second, society is at present in such a state, that the question, 'What will become of our daughters?' is uppermost in the minds of the parents and of all true friends of the people. The serious nature of these problems has often led to attempts at introducing things into girls' schools which do not belong to them, and at putting girls in every respect upon an equality with boys. As Teutons and as Christians, we must ever hold that woman has equal rights with man, but on physiological grounds she is not the same in nature as man. Hence the aim of education should be to

recognize this diversity of characteristics, and to build accordingly. It must also be remembered that the school has no claim on girls for as long a period as on boys, - a difference which is based in part on the natural difference of sex, and in part on time-honored custom. The principles on which woman in Germany has been developed, and which are rooted in our nature, must be preserved and handed to our descendants as intact as we found them. Woman here, the centre of all Christian, humane, and ideal thoughts, is rightly considered with us as the centre of the home and the family. The best men and women of all times have always held that the well-being of a nation is based on family-life, on the home, and on woman. I say woman, for I do not mean specially the wife. Therefore our endeavors must be to hand down the nature of woman, with all the perfections inherent in it, unaltered to future generations. Woman belongs to the home, and must live for it: her share in art and science must always be looked upon as a secondary consideration. At a later period of the session, Herr Wübchen-Oldenburg, director of a high school for girls, offered a resolution stating that the object of education for girls should be to train woman to be the helpmeet of man, intellectually as well as otherwise. He claimed that "this aim is not attained - often it is made impossible - through the increase in the number of subjects taught, which leads to superficial knowledge. Hence the subject-matter of the studies is to be restricted rather than extended. It might well lose in breadth in order to gain in depth. The school-course ought to remain as it was fixed at the meeting of 1873. from the end of the sixth to the end of the sixteenth year. The new plan of studies ought to be tried provisionally in Berlin, before applying it to the country at large. The results of the discussions seem to be that the number of school-hours. at least for the four lowest classes, should be diminished, the subjects now taught should be rearranged, and more time should be allowed for bodily exercise.

POLITICAL EDUCATION.

MR. FREDERIC HARRISON, the well-known English essayist and follower of August Comte, is president of the Social and political education league of England. He took for the subject of his recent presidential address 'Political education,' and spoke at some length. He referred to the great political excitement of the time, and pointed out that public opinion needs to be continually reminded, that, if politics is to be fruitful, it must be based on history, law, and philosophy. He