

the master has used in teaching, not the upper class only, but all the children under his charge. Hitherto we have been living under a system of bounties and protection; now we propose to have a free trade. Our plan carries out the idea of the Report, though free, I trust, from many of its objections. The Report suggests the propriety of our being satisfied that the children possess the elementary accomplishments of reading and writing. I think that suggestion is a valuable one, and we have acted upon it. What we propose to do is built upon the present system of the Privy Council. No attempt has been made to introduce any change. The schools will continue to be denominational, and religious teaching must be the foundation of all. The inspectors will still conduct a religious examination; in short, there is no proposal to make any change in the religious character of the schools. It only remains that I should point out the evils of the system. As the system spreads we must increase the number of inspectors. I am afraid that is unavoidable. We have considered the recommendation of the Commissioners that we should employ schoolmasters instead of inspectors; but it appears to us that, considering the delicate and difficult duties which inspectors have to discharge, we ought to retain as inspectors persons of the same class as we have them now. We believe the work will be more efficiently done by them than it would be by any schoolmasters. They will, as I have said, increase with the extension of the system, but I hope not very rapidly. We must recollect that inspection and the increase of inspectors are evils inseparable from a central system. We grant money; it is necessary we should ascertain that it has been properly applied, and we know not how we can get that information except through persons appointed to examine and report. But let me say, that if the number of inspectors should become too large, Government and the House have the remedy in their own hands. The number of inspectors is far larger than it need be at this moment, because each denomination has its own inspectors, and it often happens that three or four gentlemen are sent to the same town to inspect the schools in it. That, of course, involves an enormous waste of time and money, and some good might be effected by making the same gentlemen inspect all classes of schools, with the exception, perhaps, of those belonging to the Roman Catholics. However, we propose nothing of that kind; I merely point out what might be done. Another evil is that we shall pay over the money to the manager of a school, instead of to the person who is to receive it; and therefore we are not quite so sure that the money will reach the hands for which it is designed. That, however, is more a theoretical than a practical objection, and I have no doubt that the charitable and religious persons who manage schools will be found in every respect qualified to discharge this trust. I have now laid before the House, I am afraid at too great length, the views and intentions of the Government with respect to the report of the Education Commission. I hope that, whatever hon. gentlemen may think of our proposition—upon which, of course, I cannot expect them to deliver a judgment until they have seen the details—they will, at least, believe that we have honestly endeavoured to do our best, under circumstances of great difficulty. We have endeavoured to meet the case as we could; and we hope, by the kind assistance of the House, to succeed in giving greater efficiency to the present system. The House must not expect from us impossibilities. We cannot combine in the same system the advantages of the voluntary principle with those of the system of public grants. We want to carry out the best system under present circumstances as far as we can. So far as we can elevate it—so far as we can make it more comprehensive, more efficient, and more economical, we are most anxious to do so.—*English Journal of Education.*

The Study of Natural History.

Shall the study of natural history be introduced into our Public Schools, together with that of chemistry, both organic and inorganic? The subjects of this inquiry are now exciting considerable interest among the friends of public school education. It is maintained by some, that botany and zoology should be introduced into all our District Schools, and studied by the children as are the arts of spelling, orthoëpy, and reading. Others claim that not only botany and zoology, but agricultural chemistry, geology, and mineralogy, should also be studied in our Common Schools. The latter reason, that because many of the children that attend the Public Schools never enjoy any other advantages for education, they should be taught in these schools what is essential to their future pursuits in life; and as many of them will be farmers, they should, therefore, be taught agricultural chemistry, botany, and zoology. This

sounds plausible enough; but have not those children in the Public Schools that are to be fishermen, merchants, mechanics, bankers, shoemakers, and so on to the end of the list of industrial employments, equal claims? If our pursuit is to be thus favored, then must all be alike favored, else our schools will cease to be Common Schools, in the sense they now bear that significant distinction.

It is not my purpose now, however, to consider the objections brought against the course of study suggested above, but rather to throw out some hints to teachers concerning a method of awakening and deepening an interest in children entrusted to them for instruction and training in natural history. Mr. Mann, the first Secretary of the Board of Education, was once interrogated as to what is the best book for a teacher to use in instructing the children of his charge in moral philosophy. "THE TEACHER," replied the great pioneer of educational reform and improvement, with deep earnestness. So would I say to one who should ask me what is the best book for a teacher to use in teaching natural history in a Common School, *The Teacher*.

Thus the inference is plain, that I would not have natural history introduced into our Public Schools as a formal study with the use of text-books; and I would have this remark apply to chemistry, organic or inorganic, and most of the other departments of the natural sciences. It should be required of all the teachers of our Public Schools, and I doubt not it soon will be, and especially of the graduates of all our Normal Schools, that they shall be acquainted with the elements of geology, mineralogy, botany, and zoology, both in a scientific and an economical point of view, sufficiently to enable them to give instruction to children. For illustration: Let the teachers of this Commonwealth become acquainted with its geology, mineralogy, botany, and zoology, so that the common rocks, minerals, plants, and animals, can be named, their uses, habits, etc., discourse upon intelligibly in the presence of the children assembled in all the school-houses of the Bay State, from the lowest grade of schools to the highest; then, instead of introducing text-books, which bristle with hard, unintelligible words, used as the names of rocks and plants and animals, I would have the teacher daily, and oftener if circumstances will allow, instruct the whole school, or at least all that occupy the same room, concerning some object, creature, or thing, with the sight of which they are all quite familiar, and of which they already know many facts, some of which may be of interest even to the teacher.

It is recorded of Jonathan Edwards, the greatest metaphysician of the American world, that when a boy, scarcely ten years of age, he was so delighted in watching a spider, that he wrote an essay, detailing therein the habits of the creature, which so pleased his father, that he sent it to a friend in Scotland, who wrote back to the father, informing him that his son had recorded many original observations concerning the spider, not contained in any work on natural history. Judging from the habits of Jonathan when a boy, as found in the biography of President Edwards, there is little room to doubt, that, had he turned his attention to physics instead of passing on to metaphysics, a higher department of knowledge, he would have been a Cuvier or a Linnaeus.

I would call such exercises as I have indicated, when introduced into schools, object lessons. The objects about any school-house in the rural districts are so numerous, that it would be hard to go amiss. A boy e. g. on the way to school picks up the fragment of a rock and hands it to his teacher about the time for opening school, and asks for its name. The teacher takes it and thanks the little inquirer, and says, I will tell you immediately after opening the school. When the time arrives, the teacher holds up the object before the school, and asks, How many of you, scholars, can tell me what I have in my hand? Perhaps nearly every child signifies his ability and readiness to answer. Permission is given to speak. One says "a stone," another "a rock," "a piece of a rock," "a mineral," etc., etc. After having exercised the children and given them an opportunity to tell all they know about it, then the teacher invites their attention while he shall tell them many things about it that he knows, which they do not know. His remarks lead him, in conclusion, to speak of its connection with the soil, which gave birth, as it were, to the vegetable kingdom, the link between the mineral kingdom and the animal kingdom.

The next morning a little girl picks a flower on her way to school, and presents it to her teacher on arriving there, asking him to name it. He replies to her as he did on the preceding day to the little boy who brought the fragment of a rock, and when the time comes, he holds it up before the school, as he did the piece of a rock on the former occasion. In discoursing of this specific flower, he is led to speak of the plant producing it, its habits, uses, etc. It may have had upon it insects, or indications of their