

hand, and, on the other, the addition he is conscious of making to the happiness of his fellows.

The question—of what good is science—is answered by many in a very different way from that in which I have as yet answered it to-day. Viewed in connection with education, they say it is of much good, perhaps of more good than any other subject of study. Side by side with the Exhibitions which changed the face of the world, were held discussions on sundry topics naturally started on the meeting of many active intellects ripened under diverse conditions to the comprehension of those gatherings of the riches of the earth, and the signs of man's delegated power to use and improve them. The relation of Science to Education could hardly fail to form one of those topics and so partly no doubt has arisen the strongly expressed opinion that the teaching of natural science is an essential in education. Nothing can well be clearer than that this subject demands the instant and most careful attention of those who have the direction of education, and that all Councils of Public Instruction, Governors of Colleges, and Trustees of Private Schools, and those who have young people to be brought up as intelligent members of society should be familiar with its details and bearings. It is impossible to do more on this occasion than touch very lightly on its most salient features, for it extends over ground so very wide that a long lecture or two might well fail to exhaust it when treated as it should be for the consideration of those whose duty it is to understand the vastly changed aspect of the educational world. There is an opinion already wide-spread and fast gaining in force that the whole system of education is wrong; not only that the subjects usually held to be necessary and preferable are not so, and that of these classics especially should give more place to natural science, but that neither languages nor sciences are taught in the right way. A great deal has been said, of course, on the various points raised, and some most influential bodies have felt compelled to make very urgent representation of their views. A petition was sent, for example, from the Chemical Society of London urging the claims of physical sciences, especially chemistry, to be introduced as a compulsory study in all schools under the control of Government. It has also been repeatedly insisted on that Natural Science should stand on precisely the same level as Classics and Mathematics, receiving the same attention and recognition, and an equal share of all honors, prizes, and emoluments, in all general educational establishments. The question of scientific education must be viewed in two distinct aspects, that of general and that of technical education. The ordinary school, college, and university, dealing with the former, have to do with pure science without reference to any uses it may admit of, just as with Greek and Latin; it has never been pretended that these languages are of any use in the daily life of most who learn them, but the very acquiring of them is thought beneficial to the mind; so it is with pure physical science, and it is further claimed that faculties are educated by its study which are not affected by the study of languages. Technical education requires the special direction of scientific studies for particular purposes, as in chemistry for the medical man, for the apothecary, for the metallurgist, for the mineralogist, for the geologist, for the farmer, and for the scientific, practical, and analytical chemist.

To speak a few words only on the results of the agitation of the questions