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ELEMENTARY SCIENCE IN SCHOOLS.



HIS we have, more than once, strongly advocated in the columns of this Magazine, and it has lately been the subject of an interesting debate in the House of Commons, on the motion of Sir J. Lubbock. The motion was an essentially simple one, being merely the addition of three words to the Code of Education, but Lord George Hamilton, by some strange misconception, regarded the matter as one of vast importance, and, opposing the motion, it was rejected by a vote of 68 against 37. Sir J. Lubbock thought it would be desirable to modify the Code by adding elementary natural science as one of the subjects paid for, and the question, whether such should or should not be added, scarcely admits of much argument.

At present, in England, the sum of 4 shillings (equal to about \$1) per scholar, is granted for passing creditably in grammar, history, elementary geography, and plain needle-work, and these are, no doubt, necessary subjects to take up in any scheme of education; but surely no one will say that an elementary acquaintance with a phenomena of every-day life is not as well worth \$1 as geography or grammar, or even history, and, in fact, in a country like Canada, is of more importance than in England, for the simple reason that, if not taught in schools, children in this country have not the same opportunities of acquiring instruction in natural sciences as in England: we have neither the advantage of libraries from which to obtain books of instruction, as pointed out in the last number of this Magazine, nor philosophical instruments to illustrate the subjects.

History, geography and grammar are, no doubt, necessary subjects to take up in any scheme of education, but it is strange to find a motion for including in the Code on Elementary Education acquaintance with the phenomena of every-day life rejected, as if it was not as well

worth 4 shillings as geography or grammar, or only history.

If less mathematics and classics were taught in our schools, and the better class of school-teachers who are competent to take up science, gave elementary lectures occasionally to their pupils, on astronomy, electricity, sound, light, heat, as well as on technical subjects, which admit of the performance of a few attractive experiments, it would be the means of making these studies delightful and instructive, and create a taste for study and a yearning after further knowledge; such lectures have always been found to promote discipline, and by bringing the school-teacher more in familiar contact with his pupils, a feeling of attachment grows up between them, of which the teacher knows full well the benefit. In cases where teachers have, of their own accord, taken up at irregular times lectures on these subjects, they have proved so attractive to the pupils, that it has been found exclusion from a science lecture has had a more deterrent effect on bad behaviour than even the cane.

Sir J. Lubbock told the House he could prove, by abundant testimony from many of the best school-teachers, and most able inspectors, that science, properly taught, was most instructive and delightful to children. It was not the intention to teach electricity, astronomy or any advanced science, but merely to bring to the notice of the children the received explanations of the phenomena of nature—why it rains, snows, hails; the cause of night and day; of summer and winter; how a plant grows; the cause of lightning and thunder; in short, as Germans call it, the *Naturkunde*, a knowledge of nature; and yet, it was most extraordinary the opposition Sir J. Lubbock's motion met with, so difficult it is to introduce new subjects into established rules and codes of Great Britain.

Nothing very profound can be expected from children, but it is surely as useful for a boy to know that an eclipse of the moon is caused by the earth passing between our satellite and the sun, and to know what a satellite means, as it is for him to be able to give off hand the latitude of a place or an historical date. We trust the day is not far distant when elementary science and technical instruction will be taught in all Canadian schools, and illustrated by such attractive experiments as will leave a lasting impression on the minds of children never