

In 1847 the British Association met in Oxford. Shortly afterwards a memorial was drafted for presenting to the University urging greater facilities for the study of natural history and science. It was, however, strangled in the birth, even so great an advocate of science as Buckland refusing to sign it. "Some years ago," he wrote, "I was sanguine, as you are now, as to the possibility of natural history making some progress in Oxford, but I have long come to the conclusion that it is utterly hopeless." We shall agree that it required some courage on the part of Dr. Tait to start the teaching of science at Rugby in the face of the almost universal condemnation of the study as frivolous and dangerous.

Between the years 1859 and 1864 Canon Wilson and others did some good voluntary work in geology. About this time a Royal Commission recommended that every boy should receive instruction in one or other of the sciences, and Dr. Temple engaged a science master from Birmingham with the view of carrying out the recommendation at Rugby. But Hutchinson could not enter on his duties till 1865, so Canon Wilson and Kitchener, who two years later became the first president of the Natural History Society, undertook to teach botany. Sir J. D. Hooker planned a course of study, and as the masters were not experts in the subject, they devoted their holiday to a six weeks' course at Barmouth, with Henslow as their coach. Such enthusiasm merited the reward it received.

The way was thus prepared for the inauguration of a society which should undertake the voluntary study of Nature, independently of the school curriculum, and on March 23, 1867, the Natural History Society was founded by a little group of eight boys and one master. The portrait of the master, Kitchener, is given as frontispiece to the current report. Some idea of the good work which the society has since accomplished may be obtained by reference to the pages dealing with natural history which give such value to the "County History of Warwickshire," in which the annual reports of the school are laid under frequent contribution.

Most young people probably have an inherent love of Nature, but it depends largely on early environment whether it will die or develop. More than one old Rugbeian has, in the course of the last half-century, made his mark in one department or other of natural history. Thus Longstaff, whose delightful book on "Butterfly Hunting in Many Lands" carries us round the world, writes: "As long as life lasts I shall be grateful to Mr. F. E. Kitchener and Canon Wilson for the substantial addition to my happiness that their instruction provided." Dr. Lucas, F.R.S., whose death last October was so greatly deplored, was another Rugby boy, and acted as curator and secretary in 1898, while the report for 1896 contains a paper by him on photomicrography. Worthington, whose interesting papers on "The Splash of a Drop" won for him election to the Royal Society, first developed his love for this subject while at Rugby.

And what shall we say of that famous Nimrod of modern times, Capt. Selous, whose "African Nature Notes" and other books reveal the perfect naturalist? His obituary, with an excellent photograph, finds a place in this report, but we owe to Canon Wilson a most romantic story of his successful attempt to obtain eggs from a heronry at Coombe Abbey, and the price he had to pay for his daring. We regret that we cannot find space to repeat the anecdote, with others of a similar kind.

That the work of the society is well maintained, and that the interest does not flag, is shown by the original papers as well as by the sectional reports. Without being invidious, we should like to direct special attention to the work of Greg and Bevington

in ornithology. Such studies are of inestimable value to young people. They develop the powers of observation, teach patience, sympathy, endurance, and kindness, divert the mind from base pursuits, and open out a fairy realm of beauty and delight, which cannot fail to ennoble, as well as entertain, those who pursue them. Any public school not already in the possession of such an institution may be heartily recommended to follow the example of Rugby.

HILDERIC FRIEND.

AN INSTITUTE OF APPLIED OPTICS FOR FRANCE.

A SCHEME is on foot in Paris to establish an Institute of Applied Optics, with the object of securing closer co-operation between theory and practice in the optical trade. It has been suggested, according to an article in *La Nature*, that the scope of the institute should fall into three sections, viz. (i) a college of optics, providing a thorough theoretical and practical training for opticians, and promoting among its students a taste for optical research; (ii) a central optical laboratory, where tests of glasses and optical instruments would be made for men of science, public bodies, and manufacturers, and research work of general interest carried out; and (iii) a special trade school in which the students could obtain a thorough training in the practical branches of the trade.

It is proposed that the institute should publish transactions in a form following, say, the *Zeitschrift für Instrumentenkunde*.

The students of the college of optics would be recruited from the educated classes—Army and Navy officers, students or ex-students of the universities and technical colleges, astronomers, illuminating engineers, manufacturers of optical instruments, and doctors interested in physiological optics. There would be two distinct branches of instruction, viz. general optics and instrumental optics. The courses would be supplemented by lectures on all modern optical questions. The period of study is suggested as one year.

The central laboratory would serve as a test laboratory for manufacturers of optical instruments and for glass manufacturers, as a practice laboratory for the students, and as a research laboratory for the college staff.

The professional, or trade, school would take young people for three years and give them a thorough training in (i) glass-working, and (ii) construction and fitting up of optical instruments.

The scheme has received the favourable consideration of various Government departments and of certain scientific and learned societies in Paris; indeed, the publication of the transactions of the institute is already assured.

While it would be difficult to install the machinery and plant necessary for the trade section of the institute, it is suggested that the programme of the courses should be considered and the principal courses commenced in the school year 1917-18.

E. S. HODGSON.

THE MAN OF SCIENCE IN THE COMMUNITY OF TO-DAY.¹

IT is not too much to say that for the first time in the history of the British Empire Science is coming into her own. It is no doubt humiliating to have to confess that it was the misapplied science of our enemies which demonstrated to us how inferior was the place we had given science in our own national

¹ From an address delivered to the Nova Scotian Institute of Science on November 13, 1916, by Prof. D. Fraser Harris.