

Meteorological Office has received the special thanks of the Admiralty for its services in the Mediterranean. The world at large has been unaware of these manifold activities, imagining that the Meteorological Office practically ceased to exist when the daily forecasts in the newspapers came to an end. Yet during its silence the department has been worked far harder than ever before, and it was in recognition of the success of the service that the director received the honour of knighthood.

EDUCATION AT THE BRITISH ASSOCIATION.

AFTER the presidential address, the section took up the discussion of the reform of the primary school. Mr. J. C. Legge dealt with handwork, but unfortunately he spent the greater part of his half-hour upon historical and psychological preliminaries. Of the constructive suggestions outlined in the abstract the most interesting was the idea of finding in the soldiers returned from the war a great reservoir of admirable men who might be trained as teachers of handwork. He concluded with a plea for greater freedom to local authorities, a freedom such as would allow them to develop along their own lines, under the gentlest supervision from a very human central authority. Prof. T. P. Nunn pointed out the dangers of formality in handwork—a danger from which Mr. Legge's paper was not wholly free, in so far as it seemed to separate the activity of muscle and nerve from purposefulness. Manual activity must not be regarded as an end in itself, a danger which it shared with all other school subjects, as shown especially by mathematics and geography. Some body of central interest, life itself perhaps, is essential in order to give meaning to the several parts of the curriculum. In school, handwork should be an aid to the so-called intellectual subjects, and it should be the means of developing the feeling for craftsmanship and art. Prof. J. A. Green pleaded for a larger place and a new use for books. The bookiness of the primary school was not due to a superfluity of books, but to the unrealities for which books stood. Rightly understood, it is more books, not fewer, that are wanted there. A disappointing discussion followed, in which side-issues rather than fundamentals were raised—a result perhaps inevitable when the wide range of the subject is remembered.

A better result was achieved next day, when the place of science in secondary and higher education was considered. Mr. J. S. Talbot, referring to a committee of the Incorporated Association of Headmasters which had met recently at Wellington, said there was general agreement as to the necessity of finding a place for science amongst the subjects essential to a good school education. From two and a half to four hours a week should be provided for it in the school time-table of all boys up to sixteen. At the same time, they were not agreed that the school science of to-day was wholly satisfactory. A well-educated boy should surely know something of men like Newton, Darwin, and Pasteur, though he might now do much science at school without hearing of them. Dr. Gray's precise scheme of reform followed broadly the same line. The division between classical and modern sides should, he thought, be dropped for all boys in public schools before sixteen, though the division might take place at fourteen in municipal secondary schools, where it would follow technical and commercial lines of demarcation. After sixteen all boys should be taught the principles of biology. Dr. Hadow dealt with the subject from the point of view of the universities. The present first-year work might

be better done in the schools, and the three years' university course begin at the end of what is now the intermediate course. As to research, the pure science student might start immediately he had graduated, but applied science men should go to the works first and return to the university after a year or two there. Dr. E. F. Armstrong deprecated the booky man of science. Present methods produced few men of any use in business where scientific methods of attacking problems were the first essential. But the prizes in industry depended in the last resort upon capacity for organisation and command. In the discussion, all the speakers agreed in condemning early specialisation and demanding a fuller recognition of science in the schools, and some further emphasis was laid upon the doubt as to whether just the right kind of science was being provided for boys amongst whom a large proportion had literary or linguistic tastes. Similar problems in relation to girls' education were discussed in the afternoon, though the issues were narrowed down to the school science more suited to girls preparing for the medical profession on one hand, and for domestic life on the other.

The last meeting of the section was devoted to a consideration of the report of the Mental and Physical Factors Committee, which had conducted an inquiry into the development of facility in the first four rules of arithmetic as shown by elementary-school children between eight and fourteen years of age.

THE BRITISH ASSOCIATION AT NEWCASTLE.

SECTION K.

BOTANY.

OPENING ADDRESS (ABRIDGED) BY A. B. RENDLE, M.A., D.Sc., F.R.S., PRESIDENT OF THE SECTION.

SINCE our last meeting the Great War has continued to hold chief place in our lives and thoughts, and in various ways, and to a greater or less degree, has influenced our work. In the case of many botany has had for the time being to be set aside, while others have been able to devote only a part of their time to scientific work. On the other hand, it is gratifying to note that some have been able to render helpful service on lines more or less directly connected with their own science. The trained botanist has shown that he may be an eminently adaptable person, capable, after short preparation on special lines, of taking up positions involving scientific investigation of the highest importance from the points of view of medicine and hygiene.

Some months ago the various sectional committees received a request to consider what could be done in their respective sections to meet problems which would arise after the war. Your committee met and discussed the matter, with the result that a set of queries was sent round to representative botanists asking that suggestions might be presented for consideration by the committee. A number of suggestions were received of a very varied kind, indicating that, in the opinion of many botanists at any rate, much might be done to utilise our science and its trained workers in the interests of the State and Empire. Your committee decided to arrange for reports to be prepared on several of the more important aspects by members who were specially fitted to discuss these aspects, and these will be presented in the course of the meeting. These reports will, I am convinced, be of great value, and may lead to helpful discussion; they may also open up the way to useful work.