

THE BRITISH SCIENCE GUILD.

THE eleventh annual meeting of the British Science Guild was held at the Mansion House on Monday, April 30, when the Lord Mayor presided. After the meeting had been welcomed by the Lord Mayor, Sir William Mather, president of the Guild, opened the proceedings, alluding briefly to the part taken by the British Science Guild in the encouragement of applied science during his tenure of office. He explained also the proposal of the committee of the Ramsay Memorial Fund to raise 100,000*l.* with the view of founding a chemical laboratory and a series of fellowships in memory of Sir William Ramsay at University College, London. In conclusion, Sir William Mather announced his retirement and the nomination of Lord Sydenham to succeed him as president of the Guild.

The election of Lord Sydenham as president, of the Lord Mayor as a new vice-president, and of the executive committee was moved by Sir Boverton Redwood and seconded by Prof. R. A. Gregory. The motion, which was carried unanimously, also included the adoption of the annual report. Sir Boverton Redwood referred to the valued services of Sir William Mather during his four years of office, and both speakers directed attention to the exceptional progress in the organisation of science during the past year. Prof. Gregory referred to the great step forward represented by the establishment of the Department of Scientific and Industrial Research, and pointed out that this action had led to similar developments in Australia, Canada, and the United States. In fact, many of the aims for which the Guild had been working were now in course of realisation.

The annual report contained a summary of the chief scientific and technical committees which are working in connection with various Government Departments, and a note on the report recently issued by the Board of Scientific Societies on "National Instruction in Technical Optics." An account was also given of the proceedings of the Metric System Committee, which is engaged in preparing two draft Bills such as would pave the way for the introduction of a metric system of weights and measures. Two appendices dealing with the work of the Canadian and South Australian branches of the Guild contain interesting accounts of the steps being taken in these countries for the encouragement of applied science. Under the title "The Promotion of Scientific and Industrial Research" the report also contains a particularly useful analysis of the various movements in this direction in this country, in France, and in the United States.

Following the adoption of the annual report, the chairman called upon Lord Sydenham to deliver his address on "National Reconstruction," the main part of which appears elsewhere in this issue.

Lord Sydenham's address contained many illustrations of the results of neglect of scientific knowledge and method, not only as regards omis-

sion to utilise directly the scientific resources of the country, but also in respect of a failure in the grasp and foresight such as sound scientific training would confer. Attention was directed to some latent sources of power in the British Isles awaiting development, and to the great resources of the Empire, which can not only produce all the great food staples and raw materials of every kind, but has almost a monopoly of some of the rarer metals and earths utilised in industry. While emphasising the paramount importance of allotting to science a larger place in national education, Lord Sydenham also expressed the hope that one result of the war would be a wider and loftier outlook on national problems and a greater willingness to sink individual claims in concerted action for the good of the community.

Mr. H. A. L. Fisher, President of the Board of Education, then addressed the meeting. Referring to the present methods of teaching science in our schools, Mr. Fisher said that he believed that such teaching was often quite efficiently conducted; and yet experience showed that we had not been successful in conveying the instruction in such a way as to grip the imagination of the children, and lead them to follow up and utilise scientific knowledge and method in later life. This was an old country, with old-established businesses, following traditional lines of development and having palpable defects. In the future it would be necessary for industries to be organised on a far greater scale, and with a fuller degree of co-operation between those interested; and also for science to be applied to these businesses in a much more complete manner than hitherto.

He had noticed a tendency to assume that scientific and technical instruction was necessarily divorced from the "humanities," and even inferior in its results from the point of view of making good citizens. He did not believe that there need be any such antagonism between these different branches of national instruction. It should be possible to give young people a scientific or technical training which, if conceived on broad and imaginative lines, would produce a sense of discipline and a development of character quite equal to that ascribed to the older discipline of orators and poets. Forms of technical training which did not equip the whole man were bad forms.

In conclusion, Mr. Fisher remarked that outside criticism, while sometimes needful, should be applied with discrimination and knowledge. An instance he had in mind of uninformed criticism was the charge not infrequently levelled against workers of slackness. No one who had not first-hand knowledge of the conditions under which work was being done at the present time should make such criticisms. He believed a great deal of harm had been done by workers being urged to efforts which were excessive and productive of overstrain.

Mr. H. G. Wells, who followed Mr. Fisher, said that he had long been an enthusiast for education, on which any attempt at reconstruction

must ultimately be based. If the education was right everything else would follow. He had followed the course of education in England for thirty years, and he was satisfied that all was *not* well with education in England. To defective education was due the general neglect of science and the habit of "muddling through." The radical defect, both in the schools and in the universities, was the undue predominance of classical studies. In the school the classical side had received almost all the encouragement, obtained the best masters, and was allotted the best boys. There was no room for science, modern languages, or knowledge of potential industrial value when so many hours were allotted to Latin and Greek. The effect was constantly perpetuated by the encouragement given to classical studies in the form of scholarships, and the greater opportunities given in the public service to men trained in classics. As a result those responsible for the country's destinies were mainly without knowledge or appreciation of science. When one considered that during an average youth's period of education he could not get in more than 5000 hours of real solid educational work, the importance of utilising these hours judiciously was evident.

Mr. Wells did not underrate what was wise and beautiful in Latin and Greek and ancient philosophy, and he regarded it as unfortunate that such knowledge was needlessly barred from the ordinary man by the insistence of pedants that it could be obtained only through the vehicle of the Latin and Greek languages. It was this insistence upon the rigid study of ancient languages which had raised a barrier between scientific and literary studies so that men of science and scholars tended to be separated into two camps, neither able to sympathise with or appreciate the aims of the other.

A vote of thanks to the Lord Mayor and the speakers closed the proceedings.

THE PUBLIC SERVICES OF INDIA.

IT is just thirty years since a Commission last reported on the Public Services of India. They have been years of remarkable social and intellectual progress, years in which the self-consciousness and political aspirations of educated Indians have developed surprisingly. It was time, doubtless, that a fresh stock-taking should be made.

The present report (Cd. 8382, price 4s. 2d. net) deals with all public posts carrying a salary of 200*l.* or thereabouts and upwards. These posts are roughly 10,000 in number, and since they all require a knowledge of English, they have to be shared between the Englishmen needed to maintain British control or required because Indians have not yet sufficient technical aptitude, and the 1½ millions of Indians who have had an English education. Some 285 millions must, as matters at present stand, go without any share of the official loaves and fishes as represented by the

200*l.* limit, because they are illiterate in English. On the other hand, there is keen competition among them for the minor posts in which a knowledge of English is still not always required. After all, 200*l.* a year, in spite of a 30 per cent. rise in prices in ten years, is a comfortable competence in rural India.

The problem to which the Commission has addressed itself is that of giving a larger proportion than at present of the 10,000 better-paid posts to natives of India, including domiciled descendants of Europeans. It is a little surprising that, in dealing with the grievance that a large share of the official prizes falls to foreigners, the Commission has not noted the point, which any anthropologist would grasp at a glance, that the classes who, by their knowledge of English, share the 10,000 higher posts with Britons are, in fact, Indian cosmopolitans. They call themselves "Indians," not Parsis, Bengalis, Gujaratis, etc. They use English in their communications with one another. English, for instance, is the language of the National Congress. But in their intercourse with the 285 millions they must needs, like English officials, use the local languages. These, it must be remembered, are many more in number than the languages of Europe, and, unlike these, belong to five wholly separate families of tongues. It follows that an Indian serving out of his native province is every whit as much a foreigner, and, with regard to local observances and customs, may have as much to learn, as an Englishman. In the case of the semi-barbarous tribes of the hills and the N.E. frontier, educated Indians have been admittedly less successful than Englishmen in dealing with the people. To put it in another way, it were surprising, surely, if Europe were governed by benevolent Martians, that Englishmen should assert a claim to administrative posts, say, in Serbia or Bulgaria on the ground of their proficiency in Martian literature!

It must be admitted, on the other hand, that of the 10,000-odd better-paid posts only 42 per cent. are held by Indians. As the salary (and the responsibility) rises the proportion of Indians diminishes. At 500*l.* a year it dwindles to 19 per cent.; above 800*l.* it is only 10 per cent. This, put thus statistically, may seem a somewhat serious grievance. But the Commissioners themselves assert, as the result of two years of inquiry, that in the case of the Indian Civil Service (1411 posts) and the Police (926 posts) it is necessary to maintain a high proportion of Europeans in order to ensure the maintenance of British policy and prestige. They might have added, without excessive indiscretion, that a large part of the work of the Civil Service and the Police is precisely the protection of the mute millions from the classes from which the English-speaking Indians are drawn. Others of the twenty-four services into which the administration is divided, such as survey, railways (in the engineering branch), assay and mint, etc., are still chiefly recruited from the West because Indians with adequate technical training are not available.

It must be remembered, too, that the 10,000