

The Glasgow Meeting of the British Association.

THE meeting of the British Association which opens in Glasgow next week will be the fifth to be held in that city. The first Glasgow meeting in 1840, presided over by the Marquis of Breadalbane, was attended by 1353 members, and resulted in grants being distributed for scientific purposes to the amount of £1546 16s. 4d. The *general proceedings of that meeting* were very similar to those of British Association meetings of later years; perhaps the most conspicuous difference being the opening of the meeting with an address not by its president but by Murchison on behalf of himself and his co-secretary, Sabine, in which the activities of the Association during the preceding year were reviewed. In addition to giving an interesting summary of such activities, the secretaries in their address stressed particularly the importance of the Association as a channel for impressing upon Government the opinions and claims of science, and it is of equal interest to note in the address indications of cordial co-operation in this respect between the British Association and the Royal Society. In 1840 the Association met in seven sections, A-G; section E, now devoted to geography, represented in those days medical science; D represented biology as a whole, and the younger sections H to M, representing various specialised subdivisions of biological science, are in the 1840 report conspicuous by their absence. Amongst the sectional officers of this first Glasgow meeting were: J. D. Forbes, Airy, Whewell, Graham, Lyell, Buckland, De la Beche, Smith, W. J. Hooker, Edward Forbes—assuredly an impressive list!

In 1855 the Association again met in Glasgow under the presidency of the Duke of Argyll, who in his opening address urged forcibly the claims of science to an important place in the school curriculum. Again there was a distinguished list of sectional officers—Section C standing out in particular with Sir Roderick Murchison as president, and Lyell, Darwin, Sedgwick, Hugh Miller, and Ramsay as vice-presidents.

The 1876 meeting, presided over by Thomas Andrews, was again one of much interest: the presidents of sections included William Thomson, W. H. Perkin, and Russel Wallace, while amongst other office-bearers were Clerk Maxwell, Stokes, Tait, Crookes, Haeckel, and Hooker. One of the two evening discourses, by Wyville Thomson, was devoted to the *Challenger* expedition, which had just returned from its great voyage of exploration.

The Glasgow meeting of 1901, under the presidency of Sir Arthur Rücker, still lingers in the memory of the older members of the Association as one of special interest and success. The members numbered 1912, and £945 was distributed in the form of scientific grants. Of the distinguished men who then presided over sections, Major MacMahon, Prof. J. Cossar Ewart, and Dr. H. R. Mill are expected to be present at this year's meeting. In addition to Sir Arthur Keith, who

vacates the presidential chair in favour of Sir William Bragg, at least three other past presidents of the Association are expected to be present: Prof. Horace Lamb, Sir Oliver Lodge, and Sir Charles Parsons.

As will have been gathered from the summary in our last week's issue, the sectional programmes at Glasgow promise to be of great and varied interest. An outstanding feature of the meeting will be the numerous discussions upon problems of the day, some relating to pure science, others to its relations with industry, economics, or education: discussions in which many distinguished men of science will take part. Such discussions probably contribute more to the advancement of science than does the ordinary type of paper conveying to specialists the news of some original discovery in specialised research.

Important items of Association business which will come up for discussion by the General Committee at Glasgow will have to do with arrangements as to future meetings. Next year's is to be held in South Africa, and it is expected that a deputation will be present in Glasgow to discuss final arrangements. The place of the centenary meeting in 1930 will also have to be discussed, there being obvious practical difficulties in the way of holding that meeting in the city in which all would desire that it should be held, namely, York, where the Association held its first meeting in 1830.

In looking forward to a doubtless successful and interesting meeting at Glasgow, the thought suggests itself that the time approaches when the British Association may well prove itself to be an instrument of still greater national importance than in the past. Our civilisation has come to be entirely dependent upon science in many of its practical details: public health, food-supply, transport—of materials and ideas—industry, and the many other factors which make civilised existence what it is; but yet we find government and administration carried on practically entirely by men of literary training without any grounding in science. If our civilisation is to continue, there is need for such changes in our educational system as will ensure that not only our governors and administrators but also the mass of the people shall be given such a grounding. There are those who believe that the British Association is in an unequalled position for accelerating the advent of such educational reform, which has been long delayed but is becoming every year more urgent.

VISITORS FROM ABROAD.

An exceptionally large number of distinguished men of science from abroad will be present at the meeting. Notable among them will be the following:

Prof. M. J. Bonn, of the Commercial High School at Berlin, a well-known economist, especially on the economic history of Europe; Prof. Robert Broom,

of the American Museum of Natural History, New York. He was until lately professor of geology and zoology at Stellenbosch, South Africa, and keeper of fossil vertebrates in the South African Museum, Cape Town.

Prof. Dr. Viktor Christian, keeper of the Natural History Museum at Vienna: a distinguished authority on anthropology.

Dr. C. J. Davison, of the Bell Telephone Laboratories, New York. He is notable for his work on thermionics and electron physics; Dr. George A. Dorsey, of New York, an authority on physical anthropology and ethnology, and curator of anthropology in the Field Museum of Natural History in New York.

Prof. A. von Eiselsberg, professor of physiology at the University of Vienna. He attends the meeting as representing Gesellschaft Deutscher Naturforscher und Aerzte, which is the German counterpart of the British Association.

Prof. Dr. W. J. de Haas, Natuurkundig Laboratorium, Rijks-Universiteit, Leyden, Holland, well known for his work on electric conductivity; Dr. Jul. Hartman, of Copenhagen, one of the leading younger Danish physicists; Prof. Olaf Holtedahl, Geolog.-Palæontol. Inst., at the University of Oslo, Norway, one of the leading authorities in Scandinavia on the palæontological side of geology.

Dr. John af Klercker, of Skanor, Sweden, a generous and public-spirited Swede of high scientific attainments, the foremost authority on the ethnology of Sweden; Prof. Douglas W. Johnson, of Columbia University, New York, a distinguished geographer, working mainly on the physiographical side, surface movements, relief, coastal changes, etc.; Dr. H. Spencer Jones, H.M. Astronomer, Royal Observatory, Cape Town.

Prof. A. E. Kennelly, professor of electrical engineering in Harvard University. He is attending the meeting as representing the American Association for the Advancement of Science.

Dr. A. Loir, conservator of the Museum of Natural History at Le Havre. He is attending the meeting

as representing l'Association Française pour l'Avancement des Sciences; Prof. V. I. Lubimenko, of Leningrad.

Prof. C. E. McClung, professor of zoology at the University of Pennsylvania, Philadelphia, who is widely known for his work on chromosomes, and as the organiser of the service of *Biological Abstracts* designed to assist biologists in keeping abreast of new work; Dean S. Lailer Mathews, of the Divinity School, Chicago, one of the most eminent ecclesiastics in America with a European reputation; Prof. N. Maximow, of Leningrad, whose work on fungi and applied botany ranks high in scientific circles; Prof. Th. Mortensen, of the Zoological Museum, Copenhagen.

Prof. Y. Ogura, of Tokyo, distinguished by his work on fossil plants.

Prof. J. Reinke, emeritus professor of botany in the University of Kiel.

Prof. Johannes Schmidt, of the Carlsberg Museum, Copenhagen, whose researches on the life history of the eel are known to all biologists; Prof. O. Stern, of the Institut für physikalische Chemie, Hamburg, who has done important work in various branches of physical chemistry; Dr. F. L. Stevens, of the Department of Botany, University of Illinois, a distinguished economic botanist and an authority in plant pathology, diseases of food-plants, with special application to agriculture. He attends the meeting as representing the American Association for the Advancement of Science; Prof. F. E. Suess, of the Geological Institute, University of Vienna, famous for his work on tectonics, carrying on that of his father, the late Prof. Edouard Suess, whose work on "The Face of the Earth" is a standard classic.

Prof. Vuylsteke, of Brussels, who was formerly a professor at the University of Louvain. He became an honorary corresponding member of the British Association in 1886, having attended the meeting at Aberdeen in 1885.

Prof. P. Zeeman, of Amsterdam, whose work on magneto optics and related subjects is familiar to all students of physical science.

Obituary.

DR. CHARLES CHREE, F.R.S.

CHARLES CHREE was the second son of the Rev. Charles Chree, D.D., minister of Lintrathen in Forfarshire, a country parish a few miles from Kirriemuir—Barrie's 'Thrums.' He was educated at the Grammar School, Old Aberdeen, and at the University of Aberdeen, where he was awarded the gold medal as the most distinguished graduate in arts of his year. Like many other Aberdeen students, he decided to complete his studies at Cambridge, but his scholarship was so wide that he had difficulty in making up his mind whether to pursue the study of mathematics and physics or to become a classical scholar, as he had taken a high place in classics at Aberdeen. He once told the present writer that what finally decided him was the fact that his mathematical rivals seemed less formidable than the classical ones.

Chree gained a mathematical scholarship at King's College, Cambridge, and rapidly came to the front as a leading mathematical physicist. His

degree of sixth wrangler in 1883, distinguished though it was, scarcely represented his ability. A serious illness originating in disease of the bone and necessitating amputation of a thumb prevented him from working for many months, and delayed his taking the Tripos as he had originally intended in the preceding year. He also took a first class in Part 2 of the Natural Sciences Tripos, taking geology as a subsidiary subject. His election to a fellowship at King's College followed in 1885, and in 1890 he was re-elected to a research fellowship.

During his stay at King's, Chree wrote many important papers, most of them on the somewhat abstruse subject of mathematical elasticity. The excellent work he did can be seen by looking up the many references to his name in Love's standard treatise on elasticity. He did good work at the Cavendish Laboratory, but at that time there were not many openings for research physicists, and the theory of elastic solids was not a subject which appealed to those who appointed university professors.