

THE CENTENARY OF THE GEOLOGICAL SOCIETY OF LONDON.

UNDER the presidency of Sir Archibald Geikie, K.C.B., the celebration of the centenary of the Geological Society of London has been carried out with conspicuous success. While the proceedings throughout were characterised by an air of dignified gravity, a feeling of quiet enthusiasm pervaded the meetings. On no previous occasion have so many illustrious geologists been gathered together from all quarters of the globe, and a noteworthy feature in the assembly was the presence of many women who have achieved distinction in the pursuit of geology.

Although the actual date of the foundation of the society was November 13, 1807, it was necessary to hold the centenary meetings a little in advance of the actual birthday, in order to suit the convenience of the foreign members and correspondents, as well as the visitors from abroad and from all parts of the British Isles, who have university duties that commence in October.

The apartments of the Geological Society at Burlington House had undergone a great transformation. Easy-chairs and lounges, curtains and floral decorations served to make attractive the otherwise sombre-looking chambers. The council room, with its historic geological portraits, was set apart for the ladies. The museum, usually so desolate, was the principal reception-room, and it became a busy and animated scene where conversation and writing were seasoned with the fragrant odour of tobacco. Exhibits of certificates of membership of some of the great geological masters, early MSS. and published maps, and other documents of interest were displayed in cases or suspended from the walls. For all these arrangements so happily carried out, the society was indebted to the indefatigable labours of Prof. Watts and Prof. Garwood, the secretaries, to Mr. Belinfante, assistant secretary, and the other permanent officials, and to Mr. F. W. Rudler.

Thursday, September 26, was fixed for the main centenary proceedings, and the fine meeting-room of the Institution of Civil Engineers was courteously placed at the service of the society for the reception and the president's address. At 11 a.m. the delegates were received in the alphabetical order of their countries, and it was arranged that one representative only of each country should speak. Space will neither permit of the insertion of a full list of the delegates who came, nor of any record of the eloquent and warm-hearted remarks with which they accompanied their presentations of the addresses of congratulation to the president. It was to be regretted that no time or opportunity could be given for the display of these elaborate and beautiful documents, but no doubt a special exhibition of them will be made at some future meeting of the society.

Austria-Hungary was represented by Dr. Tietze, director of the Imperial Geological Survey; the Argentine Confederation by Prof. Aguirre, of the University of Buenos Aires; Belgium by M. Mourlon, director of the Geological Survey; Denmark by Dr. Steenstrup; Egypt by Capt. Lyons, director of the Geological Survey; France by Prof. Gosselet, Prof. Barrois, and Prof. de Lapparent; Germany by Prof. Zirkel, Prof. Credner, and Prof. Rothpletz; Greece by Prof. Skouphos; Holland by Prof. Wichmann and Dr. Molengraaf; Italy by Prof. Hughes (who spoke in the absence of Prof. de Lorenzo); Japan by Prof. Omori; Mexico by Dr. Aguilera, director of the Geological Survey; Norway by Prof. Brögger, and Dr. Reusch, director of the Geological Survey; Portugal by Prof. de Lima; Russia by Dr. Tchernyshew, director of the Geological Survey, Prof. Pavlov, Prof. Lœwinson-

Lessing, and Dr. Sederholm, director of the Geological Survey of Finland; Sweden by Prof. Nathorst and Dr. Gunnar Andersson, director of the Geological Survey; Switzerland by Prof. Heim and Prof. Baltzer; United States by Dr. Hague, Prof. Iddings, and Prof. Morris Davis; Canada by Prof. Adams; India by Mr. La Touche; South Africa by Mr. Rogers and Dr. Hatch; Australia by Prof. Hill and Mr. Johnston; New Zealand by Mr. Denham.

Numerous delegates represented the universities, the scientific societies, institutions, and field-clubs of Great Britain and Ireland, and on their behalf Prof. Sollas and Prof. Hughes made brief remarks, the latter speaking in Latin the address of congratulation from the University of Cambridge. Mr. A. B. Kempe represented the Royal Society, and Lord Avebury the Society of Antiquaries.

An interesting incident was the award to Sir A. Geikie of the gold medal of the Institution of Mining and Metallurgy, which was handed to him by Mr. C. J. Alford, in recognition of the services rendered by the Geological Society to the mining industry.

In the afternoon the president delivered his address on "The State of Geology at the Time of the Foundation of the Geological Society." He dwelt especially on the important aid towards the foundation of the science of geology given by Guettard and Desmarest in France, by Werner in Germany, by Hutton and Jameson in Scotland, and by William Smith in England. The results of their labours gradually attracted more and more attention, as did also the controversies that arose between the followers of Werner and Hutton, the one school (the Neptunists) attributing too much to the influence of water, the other (the Plutonists) attributing too much to the agency of heat. Thus it came about that a number of earnest students well versed in mineralogy determined to meet together and gather facts in illustration of the new science of geology. In due course they established the Geological Society of London, to the origin and history of which reference has already been made in the pages of NATURE (September 26, p. 537). G. B. Greenough, one of the founders, was the first president, and his geological hammer with a whalebone handle was exhibited by a relative, Mrs. Bowen-Colthurst, of Dripsey Castle, co. Cork. To this interesting relic Sir Archibald Geikie directed brief attention.

In the course of his address he pointed with pride to the publications of the society, and concluded by expressing the opinion that they might with confidence look forward to a career in the future not less successful and useful than that which they were now met to celebrate.

A hearty vote of thanks to the president, proposed by Prof. de Lapparent, was seconded by Prof. Rothpletz.

In the evening a brilliant assembly gathered in the Whitehall Rooms of the Hotel Metropole for the official banquet. The company numbered 291. The president was supported by two veteran geologists, on his right Prof. Gosselet, and on his left Prof. Zirkel. It is noteworthy that not a single peer, baronet, or bishop was present among the fellows of the society or its guests. A brief grace was said by Prof. Bonney, hon. canon of Manchester; and the company then proceeded to the consideration of the menu. The card was illustrated by portraits of Greenough, the first president, and of Sir Archibald Geikie, but, curiously enough, the date of the meeting was printed 1908 instead of 1907. The toasts were taken without interruption at the conclusion of the dinner. Those of the King and of the heads of foreign States were proposed by the president. Then followed the Geological Society of London, proposed by Prof. de Lapparent, with response by the president;

the Universities and other Educational Institutions by Prof. Bonney, and reply by Prof. Credner; the Academies and Learned Societies by Prof. Miers, and reply by Prof. Barrois; the Geological Surveys by Prof. Lapworth, and reply by Prof. Heim; Engineering and Mining Institutions by Prof. Hughes, and reply by Prof. Beck; the Delegates and other Guests by Dr. Marr, and reply by Prof. Stevenson; and the Ladies by Prof. Watts, and reply by Prof. Walther.

On Friday, September 27, visits were paid to the British Museum at Bloomsbury and to the Natural History Museum at South Kensington, to the Geological Survey and Museum of Practical Geology at Jermyn Street, and to the Victoria and Albert Museum at South Kensington. Demonstrations on objects of interest were given by the officers at these institutions, and especial interest was manifested in the new model of Assynt in the north-west Highlands (recently added to the Museum of Practical Geology), which was explained by Dr. B. N. Peach. A number of the foreign and colonial visitors were also invited to St. Paul's Cathedral, and were conducted through the edifice by Canon Scott Holland and Dr. Grabham (delegate appointed by the Royal College of Physicians). The party was afterwards entertained at tea by Dr. Grabham in the Chapter House.

In the evening the foreign and colonial delegates were entertained at dinner at the Criterion Restaurant by the Geological Society Club. This club was founded in 1824 by Buckland, Fitton, Greenough, Lyell, Warburton, and others, with the object of affording to a limited number of the leading members of the society an opportunity of dining together on the evenings of the society's meetings. The proceedings on the present occasion lacked some of the exuberance and animation that we read of in early records of the club, when Buckland and Sedgwick and other geological giants of old made merry. On the present occasion, however, the proceedings had to be curtailed.

The party, as in the case of the official dinner, was photographed, and a congratulatory telegram was sent to the distinguished veteran and past president, Dr. H. Clifton Sorby, now in his eighty-second year, and still engaged in scientific research. It may be mentioned that other veteran fellows of the society, Prof. T. Rupert Jones, now eighty-eight, and the Rev. Osmond Fisher, in his ninetieth year, bear testimony to the healthy character of geological labour. Nor should we forget the father of the society, the Rev. W. H. Egerton, a brother of the late Sir Philip Egerton, who was elected a fellow in 1832, and at the age of ninety-six is still rector of Whitchurch, in Shropshire. A letter received from him during the present year, in which he mentioned that he had been a pupil of Buckland, was exhibited in the society's museum.

After the club dinner the party proceeded to the conversazione, which was held at the Natural History Museum. There a numerous company was received by the president in the Central Hall, and the proceedings were enlivened by a good programme of music, performed by the string band of the Royal Engineers.

During the week prior to the centenary reception a number of excursions were made with the view of exhibiting to the foreign members, correspondents and others who came from abroad, the main features of British geology. The longer excursions were arranged to occupy a week.

The Palæozoic formations were seen in the English Lake District, famed for the early researches of Sedgwick; in South Wales, where Murchison established some of his Silurian divisions; and at Bristol, Weston-super-Mare, and Cheddar, amid geologic scenes described by Buckland and Conybeare. The

Jurassic and Cretaceous rocks were viewed along the Dorset coast at Lyme Regis, Bridport, and Weymouth, a region full of associations with the work of De la Beche and Buckland; and in the Isle of Purbeck at Lulworth and Swanage, where Thomas Webster in early days so admirably depicted the geological structure. The excursion to the Isle of Wight was abandoned, while that proposed for the Edinburgh district was replaced by one to the north west Highlands, to Assynt, Inchnadamph, and Loch Glen Coul for the purpose of studying the displaced rock-masses brought forward by the Glen Coul and Moine thrusts. This last excursion was the more appropriate considering that the long-looked-for Geological Survey memoir on the North-west Highlands, embodying the researches of Dr. Horne, Dr. Peach, Dr. Teall, Mr. Clough, and other colleagues, has just been published under the editorship of Sir Archibald Geikie.

Some shorter excursions for two days were made to May Hill, Westbury-on-Severn and the Forest of Dean, to Derbyshire, and to the Crag District of Suffolk.

On Saturday, September 28, there was a series of day excursions, all well attended, to the Northampton iron-ore district, to Aylesbury, to Dover, to Box Hill, Leatherhead and Dorking, to Reading, to Erith and Crayford, and to Sudbury. Thus opportunity was given of seeing many important and interesting geological sections.

On Monday, September 30, and following days, the foreign and colonial visitors were entertained at the Universities of Oxford and Cambridge. At Oxford the degree of D.Sc. *honoris causa* was conferred upon Prof. Charles Barrois, of Lille, Prof. Albert Heim, of Zurich, Prof. Alfred Lacroix, of Paris, Dr. Albrecht Penck, of Berlin, Dr. Hans Reusch, of Christiania, and Prof. (Geheimrath) Ferdinand Zirkel, of Leipzig. At Cambridge the degree of Sc.D. *honoris causa* was conferred upon Prof. Waldemar Christofer Brögger, of Christiania, Prof. (Geheimrath) Hermann Credner, of Leipzig, Prof. Louis Dollo, of Brussels, Prof. Albert de Laparent, of Paris, and Prof. Alfred Gabriel Nathorst, of Stockholm. Prof. (Geheimrath) Heinrich Rosenbusch was unfortunately prevented from attending.

All the recipients of the degrees are foreign members of the Geological Society. Thus was honour done to the society and to many of its distinguished representatives abroad.

H. B. W.

THE FOURTEENTH INTERNATIONAL CONGRESS OF HYGIENE AND DEMOGRAPHY.

THE fourteenth International Congress of Hygiene and Demography, which meets every four years, was held this year in Berlin from September 23 to September 29, under the presidency of Prince Heinrich zu Schönauich-Carath, the vice-presidents being Profs. Ripner and von Mayr. It was organised in nine sections, comprising every branch of hygiene and demography; bacteriology; parasitology and preventive medicine; general industrial and school hygiene; port-sanitary and military and naval hygiene; dietetics, life-saving and statistics. Some 4000 members of all nationalities attended the sittings, and were received everywhere with the utmost courtesy and kindness. The meetings were held in the Reichstag buildings, which are central and admirably adapted for the purpose. The question naturally suggests itself, would the British Government pursue the enlightened policy of placing the Houses of Parliament or similar buildings at the disposal of such a congress meeting in England?

The weather throughout was delightful, and many social functions, including excursions, receptions