

Palæontologists at Vienna.

THE Palæontologische Gesellschaft is an international society of palæontologists, with members belonging to several European nations, to Great Britain, and to the United States. An annual meeting was to have been held in London and Oxford during August 1914, but on account of the War and its effects it was impossible until the present year to hold a meeting outside Germany. Even now the difficulties were only overcome by the aid of the Austrian Government and the generosity of many notable Viennese, who made a meeting in their capital possible for their impoverished colleagues. Thus it was that on September 24-September 29 a most successful gathering of 53 members and 90 interested persons took place in the University of Vienna under the presidency of Prof. Othenio Abel.

The non-Austrian members included Prof. Wiman of Uppsala, Professors Van Bemmelen and Versluys from Holland, Baron Fejervár of Buda-Pest, Prof. Pompeckj of Berlin, with 36 German colleagues, Dr. F. A. Bather of the British Museum, and representatives of Czechoslovakia and Jugoslavia.

The congress was honoured in having its session opened in the Festival Hall of the University by the President of the Austrian Republic, Dr. Hainisch, supported by his Vice-chancellor, Dr. F. Frank, Dr. Maurus representing the Minister of Education, and the Rector of the University, Prof. C. Diener. The large gathering listened to an address by Prof. Pompeckj on "The Beginnings of Life," which, in his opinion, took place on the land and not in the sea. Here may be mentioned the dinner in the Rathaus, also attended by the President of the Republic, when speeches of welcome were made by the president of the society and the Deputy-Mayor. The honour of returning thanks on behalf of the foreigners was allotted to Dr. Bather, who dwelt on the power of scientific intercourse to unite the nations, and showed how the advance of science, and notably of palæontology, was retarded by the vexatious barriers still erected by politicians.

The purely scientific programme included the following papers. Baron Fejervár: The origin of the præ-hallux and the Cheiropterygium theory in the light of palæobiological research; C. Wiman: on some flying Saurians; F. A. Bather: Cothurnocystis, a study in habits and evolution, also Stephanocrinus, a study of convergence; R. Richter: Convergence among Trilobites; H. Schmidt: The development of the Ammonoidea in the Carboniferous; P. Kessler: Nautilids with incomplete septa, which led to a discussion on their mode of life; R. Kubarth: Researches on recent and fossil

conifer woods; O. Abel: The first find of a Tetrapod track in the Alpine Trias. The chief interest of the meeting, however, centred in the so-called Drachenhöhle at Mixnitz on the Mur in Steiermark. In this cavern, 1000 metres above the sea, there has been found a remarkable series of cave-bears in all stages of skeletal growth, as well as the remains of smaller mammals associated with them. These have been studied by Prof. Abel and his assistants K. Ehrenberg, O. Antonius, A. Bachofen-Echt, and others. These all described their particular researches, and Prof. Abel in a public lecture drew a vivid picture of the animal life of the "Dragon's Cave."

Opportunity was given to the members to visit Schönbrunn, where the menagerie still contains a fine representation of wild Bovidæ, and the Geological and Mineralogical galleries of the Natural History Museum. An afternoon was devoted to an excursion to the Pallerstein in the Wiener Wald, where the Eocene flysch preserves most curious markings, for the most part of annelid origin. At the close of the meeting 70 members visited the Mixnitz cave, and after spending four hours in the study of its mysteries, were refreshed by a delightful supper and entranced by Styrian folk-songs sung by a choir of local ladies. Fifteen managed on the following day to ascend the Sonnwendstein near Semmering under the guidance of Prof. Kober.

The following have been elected officers for the ensuing year. President: O. Abel (Vienna); Vice-Presidents: O. Jaekel (Greifswald) and E. Stromer (Munich); Secretaries: O. Antonius (Vienna), R. Richter (Frankfort); Treasurer: P. G. Krause (Berlin). New members of Council are F. A. Bather (London) and W. Janensch (Berlin).

The warmest thanks of all who enjoyed this inspiring gathering are due to Prof. Abel, who, with his colleagues Dr. K. Ehrenberg and Dr. O. Antonius, saw to all the arrangements. Nor should there be forgotten the fine reconstruction of the mammoth made under their direction by the artist Franz Roubal, or the members' badge based thereon by Prof. R. Marschall. The "enkel Bier-abend," where some found a more intimate hospitality in Dr. and Mrs. Abel's home, was a characteristic and delightful feature. But it is more fitting to end with mention of Prof. Abel's "Palæobiologischer Lehrapparat," where he has accumulated a most interesting series of fossils illustrating what one may term their natural history. Nowhere else have we seen this idea so consistently carried out. This room, like the meeting as a whole, was a constant reminder that neither fossils nor those who study them need be dull and lifeless creatures.

Deterioration of Structures in the Sea.¹

THE investigations on the deterioration of structures of metal, concrete, and timber exposed to the action of sea-water which are being carried out under the direction of a committee of the Institution of Civil Engineers have already formed the subject of two interim reports (see NATURE, October 21, 1920, p. 235, and December 30, 1922, p. 878). The third report, which has just been issued, records progress along several very different lines of research, although, since the phenomena with which they are concerned are slow in development,

conclusive results are not to be looked for in a short space of time.

That part of the work of the committee which deals with the corrosion of metals is the subject of several sections of the report. A full account is given of the arrangements devised for exposing test bars of various types of iron and steel to the action of the sea. The bars, prepared under the supervision of Sir Robert Hadfield and Dr. J. N. Friend, have been despatched to Plymouth, Halifax, Colombo, and Auckland, and reports are given from the engineers in charge at these places describing the methods used for fixing them in position. Groups of bars are to be exposed for five, ten, and fifteen

¹ "The Deterioration of Structures in Sea-Water." Third (Interim) Report of the Committee of the Institution of Civil Engineers. Edited by P. M. Crosthwaite and G. R. Redgrave. Pp. 79. Department of Scientific and Industrial Research (H.M. Stationery Office). Price 3s.