

material remaining partly in the position in which the ice left it, and partly lifted by the bergs which became detached from the ice. Such part of it as was lifted was dropped over the sea-bottom at no great distance from its point of extrusion, and in that way the marine shells occurring in a seam of sand in the midst of this clay at Dimlington and Bridlington on the Yorkshire coast became imbedded, the mollusca which had established themselves on the surface of this moraine material having been thus smothered under a lifted mass of the same, which was dropped from a berg. The authors point out that precisely in the same way in which the Middle Glacial is found stretching out southwards and eastwards beyond the Upper Glacial Clay in Suffolk and in Herts, and is succeeded by such clay both vertically and horizontally, so does the earlier formed part of the Upper Glacial Clay, or that with chalk débris, stretch southwards beyond the later formed part, or that destitute of such débris, and is succeeded by it, both vertically and horizontally. This, they consider, shows that the Middle and Upper Glacial deposits, which constitute an unbroken succession, were due to the gradually receding position of the land-ice during their accumulation, the sequence being terminated with the Moel Tryfaen and Macclesfield gravels, which were accumulated during the disconnexion and gradual disappearance of the ice, and while the land still continued deeply submerged.

CORRESPONDENCE.

INTERNATIONAL GEOLOGICAL CONGRESS.

SIR,—The activity which has prevailed in the study of geology within the past generation has given to it a great importance both in a scientific and an economic point of view, and has resulted in a large accumulation of facts and materials. Workers in different countries have however pursued their labours to a great extent independently of each other, and have given their results in such ways that it is often difficult to co-ordinate them. Those geologists from Europe and America who have been at the International Exhibition at Philadelphia in 1876, have found there important collections of geological maps and sections, with rocks and organic remains from various regions of North and South America, as well as from many countries of Europe, and they have become deeply impressed with the great advantages to be gained by their comparative study. It was moreover evident that the bringing together of a still larger number of such collections in accordance with a previously arranged plan, could not fail to lead to important results for geological science. The International Exhibition to be held at Paris in 1878 will furnish such an occasion, and it is proposed to invite to that end governmental geological surveys, learned societies and private individuals throughout the world, to send to Paris such collections as will make the geological department of that exhibition as complete as possible.

In order to take advantage of the collections which may thus be brought together, it is moreover proposed to convoke an International Geological Congress, to be held at Paris at some time during the Exhibition of 1878, and to make that Congress an occasion for considering many disputed problems in Geology.

In accordance with this plan it is proposed that the Geological Department of the International Exhibition of 1878 shall embrace:

I. Collections of crystalline rocks, both crystalline schists and massive or eruptive rocks, including the so-called contact-formations and the results of the local alteration of uncrystalline sediments by eruptive masses. In this connexion are to be desired all examples of organic remains found in crystalline rocks, including Eozoon and related forms. These collections should moreover comprehend

all rare and unusual rocks of special lithological, mineralogical and chemical interest, examples of ore-deposits and of veinstones of all kinds, with their encasing rocks. As far as possible these collections should be limited to specimens of a size convenient for examination, and be accompanied with sections prepared for microscopic study. In the arrangement of all these materials regard should be had to their natural associations rather than to theoretical notions or artificial classifications, so that they may be studied not only petrographically but geognostically.

II. Collections illustrating the fauna and the flora of the Palæozoic and more recent periods, particularly of such horizons as present a more critical interest to palæontologists from the first appearance or the disappearance of important groups of organic forms. It has appeared to the Committee named below that the organic remains of the Cambrian, Taconic or so-called Primordial strata merit especial attention in this connexion.

These various collections should be explained as fully as possible by labels, catalogues, monographs and maps.

III. Collections of geological maps, and also of sections and models, especially such as serve to illustrate the laws of mountain structure. In the geological maps regard should be had to various questions which deserve the special consideration of the Congress, such as the scales best adapted for different purposes, the colours and symbols to be used, and the proper mode of representing superficial deposits conjointly with the underlying formations. A discussion of these will prepare the way for improved general geological maps of the continents.

In pursuance of the above plan, the American Association for the Advancement of Science during its annual meeting at Buffalo, under the presidency of Prof. William B. Rogers, unanimously adopted the following resolution on the 25th of August, 1876:—

“Resolved, That a Committee of the Association be appointed by the Chair to consider the propriety of holding an International Congress of Geologists at Paris, during the International Exhibition in 1878, for the purpose of getting together comparative collections, maps and sections, and for the settling of many obscure points relating to geological classification and nomenclature. And that to this Committee be added our guests, Prof. T. H. Huxley of England, Dr. Otto Torell of Sweden, and Dr. E. H. von Baumhauer of the Netherlands, who shall be requested to open negotiations in Europe, looking to a full representation of European geologists at the proposed Congress. The said Committee to consist of Prof. William B. Rogers, Messrs. James Hall, J. W. Dawson, J. S. Newberry, T. Sterry Hunt, C. H. Hitchcock, and R. Pumpelly in behalf of the Association, with the addition of Prof. T. H. Huxley, Dr. Otto Torell, and Dr. E. H. von Baumhauer.”

On the same day, at a meeting of the Committee, Prof. James Hall was elected Chairman, and Dr. T. Sterry Hunt, Secretary. It was then resolved to prepare the present circular, to be printed in English, French, and German, and distributed to geologists throughout the world, asking their co-operation in this great work of an International Geological Exhibition and an International Geological Congress to be held at Paris in 1878; the precise date of the Congress to be subsequently fixed.

All those interested in this project are invited to communicate with any one of the following members of the Committee:—

PROF. T. H. HUXLEY, London, England.

DR. OTTO TORELL, Stockholm, Sweden.

DR. E. H. VON BAUMHAUER, Harlem, Holland.

DR. T. STERRY HUNT, Boston, Mass., U.S.A.

PHILADELPHIA, U.S.A.,

T. STERRY HUNT, *Secretary*.

Oct. 27th, 1876.

NEW BRITISH BRACHIOPODA.

SIR,—During a recent visit to Abbotsbury, Dorsetshire, I obtained from the Upper Corallian red ferruginous rock some specimens of *Terebratula subsella*, Leymerie. I think this species has not been discovered in England before. The other Brachiopoda which occur in this rock are:—*Waldheimia lampas*, Sow., *Waldheimia Dorsetensis*, n.sp., *Rhynchonella pinguis*, Roemer, = *Rhyn. corallina*, Leym. These species will be figured in Mr. Davidson's Jurassic Supplement.

J. F. WALKER.