Third, to do that which will endure. He will have no part in oblivion, he is unwilling to be forgotten, he can not abide the thought that his work is to perish, that all that to which he has given his time and strength and thought and power comes to an end simply because his body dies. He wishes to project his temper and his purpose and his plans into the future, to find in this way and even here the beginnings of immortality, so to labor that at least a part of his finite product may be worthy to be woven in and in with the divine plan and thus become lasting and infinite.

Guido H. Marx

STANFORD UNIVERSITY

(To be continued)

THE ELEVENTH INTERNATIONAL CON-GRESS OF GEOLOGISTS, STOCKHOLM, 1910

RESPECTING the progress of the arrangements for this congress, which is to be held in Stockholm, August 18-25, the secretary-general of the congress has given the following information (February, 1910):

The deliberations of the congress will principally concern the discussion of the following questions:

- 1. The Geology of the Precambrian Systems.—The discussion is divided into the debate of the following special questions: (a) To what extent can it be proved that the characters of Archean rocks are due to a deep-seated metamorphosis? and (b) The principles of a classification of the Precambrian formations, especially as to what extent a classification after age, of local or universal importance, can be carried out. The following gentlemen have hitherto held out short introductory lectures for this discussion: F. D. Adams, Ch. Barrois, F. Becke, U. Grubenmann, J. F. Kemp, A. C. Lane, J. J. Sederholm and P. Termier.
- 2. The Abrupt Appearance of the Cambrian Fauna.—Messrs. Ch. Lapworth, G. F. Matthew, A. Rothpletz, C. D. Walcott and J. Walther have promised contributions on this subject.
- 3. The Changes of the Climate Since the Maximum of the Last Glaciation.—As an introduction to this discussion three Swedish

scientists (G. Andersson, G. De Geer and R. Sernander) published last spring comprehensive descriptions of matters of fact observed in Sweden, which are conclusive for the explanation of the postglacial climatic deviations in that country. These three essays were sent to a considerable number of foreign scientific men that have occupied themselves with the question of postglacial climate, and these gentlemen were at the same time requested to cooperate in an international discussion of this problem. The Swedish Committee desires the cooperation in this international debate in such a manner that from each country but one report on the postglacial climatic deviations observed there should be sent in. In consequence of this invitation already several treatises on the said subject have been sent in and scientists from the following countries have hitherto promised their cooperation: Austria, Belgium, Canada, the Cape Colony, Denmark, Egypt, England, Finland, France, Germany, Hungary, India, Italy, Norway, Russia, Sweden, Switzerland. ports on the arctic and antarctic regions have also been received.

All the treatises, sent in from the different countries, will be collected in an autonomous work: The changes of climate since the maximum of the last glaciation. This publication, which will probably be ready in the course of the month of April, will form the basis of the coming discussion. This work will be sent free of cost to the contributors. Besides, it will also be procurable, at a price not yet fixed, from the publisher, "Generalstabena Litografiska Anstalt," Stockholm 3.

4. The Iron Ore Resources of the World.—In the beginning of 1908 the committee of the congress sent to the national geological institutions and to the mining geologists in the different states invitations to take part in an exhaustive investigation of the above question. This request has everywhere met with so much attention that, at present, reports from nearly all the iron-ore producing countries of the world have been received which will be collected in one work: "The Iron-ore Resources of the World." This publication, consisting of

about 900 pages in quarto with numerous plates and illustrations in the text and accompanied by an atlas of 40 map-sheets, will shortly be ready. It will be sent free of cost to the governments of the cooperating states and to the collaborators, and it will also be procurable from the above-mentioned publisher at a price of £3. This work will form the basis for the discussion at the congress of the possibilities of the future iron and steel industry to procure the raw material.

- 5. The Geology of the Polar Regions.—This subject will be treated in a series of special lectures, of which the following have hitherto been advised:
- H. Jarner: "The Geological Results of the Danmark Expedition to Northeastern Greenland."
- A. G. Nathorst: "The Climatic Testimony of the Fossil Floras in the Polar Regions."
- J. F. Pompeckj: "The Jurassic Deposits of the Arctic Region."
- N. V. Ussing: "The Eruptive Area of Tlimausak—Western Greenland."

Besides, one of the geologists of the last British Antarctic Expedition will give a report on the geological results of this expedition.

In connection with the discussion of polar geology there will be an exhibition arranged of the geological collections brought home by Swedish expeditions from the arctic and antarctic regions.

The debates of the congress will principally relate to the discussion of the above questions. Isolated lectures, of which the committee has been informed, will be placed in one of the following sections:

- 1. General and regional geology. Tectonic matters.
 - 2. Petrography and mineralogy.
 - 3. Stratigraphy and paleontology.
 - 4. Quaternary formations. Recent glaciers.
 - 5. Applied geology.

In connection with the congress the following excursions will be arranged:

- A. Excursions before the Congress.
 - Spitzbergen, July 25 to August 17. Leader: G. De Geer.
 - Norrland (over-thrusts, eruptives, iron ore fields), July 27 to August 17. Leaders:

- A. G. Högbom, Hj. Lundbohm and P. J. Holmquist.
- Iron-ore fields of Gellivare and Kirunavaara,
 August 6-17. Leader: Hj. Lundbohm.
- Quaternary geology of the Torneträsk, August 6-17. Leader: O. Sjögren.
- The Alps of Sarek, July 27 to August 17. Leader: A. Hamberg.
- Quaternary geology of Angermanland and Jämtland, August 9-17. Leader: A. G. Högbom.
- Peat-moors of Närke, August 10-16. Leader: L. v. Post.
- B. Excursions during the Congress.
 Several excursions of one day, principally in the environs of Stockholm.
- C. Excursions immediately after the Congress.
 - The Archean rocks of middle Sweden, August 26 to September 4. Leaders: A. G. Högbom, P. J. Holmquist, A. Gavelin and H. Hedström.
 - Silurian deposits of Gotland, Dalarne and Västergötland, August 25 to September 6. Leaders: H. Munthe, H. Hedström, C. Wiman and E. Warburg.
 - Quaternary geology of southern Sweden, August 26 to September 8. Leaders: G. De Geer, H. Munthe and A. G. Nathorst.
 - Ore fields of middle Sweden, August 26 to September 6. Leaders: Hj. Sjögren, W. Petersson and H. Johansson.
 - Morphology of middle Sweden, August 26 to September 4. Leaders: O. Nordenskjöld and S. De Geer.
 - Plant-containing mesozoic deposits in Skåne, August 26-29. Leader: A. G. Nathorst.
 - Cretaceous system in Skåne, August 25–29.
 Leader: A. Hennig.
- D. Excursion in Skåne after the conclusion of group C.
 - Silurian deposits, September 7-13. Leader: J. C. Moberg.

In the beginning of March the second circular of the congress will be sent out, containing full particulars about the excursions and a statement of costs, etc.

All correspondence relating to the congress to be addressed to the secretary-general, Professor J. G. Anderson, Stockholm 3.

Synchronous with the Congress of Geologists and in intimate connection with it "The Second International Agrogeological Conference" will be held in Stockholm. The secre-

tary of the same is Dr. H. Hesselman, Valhallavägen 25, Stockholm.

THE BROOKLYN BOTANIC GARDEN

A Brooklyn Botanic Garden is now being established by the City of Greater New York in cooperation with the Brooklyn Institute of Arts and Sciences. Between twenty-five and thirty acres of land, south of the museum building of the institute in Brooklyn, and separated from Prospect Park by Flatbush Avenue, have been set apart for the purposes of the garden, and are now being surveyed and graded. A laboratory building for purposes of investigation and instruction, together with a range of experimental and public greenhouses, will be constructed during the coming summer and autumn. For this purpose the City of New York has appropriated \$100,000. In addition to this, friends of the garden in Brooklyn have subscribed \$50,000 as an endowment, the income of which is to be used for the purchase of equipment. It is intended to make the new garden not only a center of research, but also to give instruction to both elementary and advanced classes in botany, and cooperate in every feasible manner with the botanical work of the public and private schools of the Borough of Brooklyn. Dr. C. Stuart Gager, professor of botany in the University of Missouri, has been appointed director of the garden and will enter on his duties the first part of July. A scientific staff will be gradually assembled as soon as the buildings are ready for occupancy.

SCIENTIFIC NOTES AND NEWS

Dr. George W. Hill, of Nyack, N. Y. and Professor E. B. Wilson, of Columbia University, have been elected foreign members of the Brussels Academy of Sciences.

The Rumford Committee of the American Academy has recently made the following grants in aid of research: To Professor Joel Stebbins, \$350, in aid of his research with the selenium photometer. To Professor W. W. Campbell, \$125, in furtherance of the research on the polariscopic study of the solar corona by means of a Hartmann photometer. To Mr.

Frank W. Very, \$50, for the purchase of photographic glass plates of the spectrum by Higgs. To Professors C. E. Mendenhall and Augustus Trowbridge, \$250, in aid of their research on the effect of ether drift on the intensity of radiation. To Professor C. E. Mendenhall, \$250, in furtherance of a research on the free expansion of gases. The committee has also made a grant of \$250 to Professor Gilbert N. Lewis in aid of preparation of abstracts for publication in light and heat for the forthcoming International Physico-chemical tables.

Professor E. G. Conklin, of Princeton University, has been appointed to represent the National Academy of Sciences at the Zoological Congress at Gratz, Austria, and at the meeting of the International Association of Academies at Rome, Italy.

The American Philosophical Society has appointed Professor E. G. Conklin, of Princeton University, a delegate to the eighth International Zoological Congress at Gratz, Austria, August, 1910; Professor George L. Goodale, of Harvard University, a delegate to the International Congress of Botanists at Brussels, May, 1910, and Professor Frederick W. Putnam, of Harvard University, a delegate to the Congress of Americanists in the City of Mexico in September, 1910.

Professor Sir J. J. Thomson has been nominated to represent Cambridge University at the celebration in October, 1910, of the centenary of the University of Berlin.

The Biological Society of the Massachusetts Institute of Technology gave a dinner in honor of Professor Wm. T. Sedgwick, on March 17, prior to his departure for Europe. Speeches were made by President Maclaurin, Professor Talbot and Professor Porter, and Professor Sedgwick replied.

Dr. Henry Fairfield Osborn, president of the American Museum of Natural History, and Dr. Charles W. Dabney, of the University of Cincinnati, are among those who have been chosen as electors for the Hall of Fame of New York University.