

our children will know more than we know, a society which aims to establish fraternal relations among its members and which recognizes that hearty and continued co-operation is essential if we would succeed in securing those rich rewards of mind and body which past scientific discoveries lead us to expect to find in the unexplored regions.

G. A. MILLER

*THE FOUNDATION OF THE GEOLOGICAL SOCIETY OF AMERICA<sup>1</sup>*

THERE was an "American Geological Society" in 1832 at New Haven, Conn., but it faded out in the glare of the chemical and physical sciences which bloomed brilliantly at that time in New Haven. I have not been able to get any detailed information concerning it.

About the same time was organized the Geological Society of Pennsylvania, 1832. At a meeting of February 22, 1832, the officers were John R. Gibson, president, Nicholas Biddle, vice-president; Stephen S. Long, vice-president; Henry S. Tamer, treasurer; Peter A. Browne, corresponding secretary; George Fox, recording secretary.

This society sent out a circular signed by John Gibson and George Fox announcing the organization and asking assistance in getting information and specimens. The organ of publication was Featherstonhough's *Monthly American Journal of Geology*.

This society seems to have aimed to develop the geology of Pennsylvania specially, but its plan of operation covered other states. It came quickly into competition with the Philadelphia Academy of Science. Its transactions were published in Featherstonhough's *Journal*, at first, but as that *Journal* passed through only one volume, it is unknown to me whether the society survived long after the death of the *Journal*. It appears that there was close sympathy between them, and it may be presumed that Mr. Featherstonhough was the instigator and prime mover of both.

<sup>1</sup> Response by Professor N. H. Winchell at the banquet of the Geological Society of America, Princeton, N. J., January 1, 1914.

There may have been other local geological societies in the country since 1832 whose records have not been published, but I have not heard of any.

The period of discussion and gestation prior to the birth of the present Geological Society of America extended from August, 1881, to August, 1888, *seven years*.

A few weeks before the 1881 meeting of the American Association for the Advancement of Science, at Cincinnati, Professor Chamberlin called on the speaker at his home in Minneapolis. The Western Society of Naturalists had been organized several years earlier, and one of its annual meetings was announced to take place at some point in the Mississippi Valley. In the conversation which took place in my parlor the suggestion was made by the speaker that the geologists of the western part of the country ought to be organized into a Mississippi Valley Geological Society. Professor Chamberlin immediately fell in with the idea, and it was agreed by us that the project should be broached at the approaching meeting of the American Association for the Advancement of Science at Cincinnati. But this idea expanded, in conversation with geologists at that meeting, into greater dimensions, and it was resolved to organize the geologists of America in a general society.

The first informal meeting embraced those present at Cincinnati and was held in the room of Section B, at 5 P.M., August 18, 1881. A committee was chosen to draft a constitution, consisting of George C. Swallow, of Missouri; N. H. Winchell, of Minnesota; S. A. Miller, of Ohio; Wm. J. Davis, of Kentucky; John Collett, of Indiana, and H. S. Williams, of New York.

On meeting the committee elected Winchell chairman and Williams secretary, and Miller was designated to draft a constitution for the proposed society. This constitution was presented the next day at an adjourned meeting of the committee, but after considerable discussion it was finally decided that it was best to defer more definite action to the next meeting of the American Association, and that meantime the committee prepare and distribute

widely a circular asking for the opinions of geologists generally, the replies to be reported at the next meeting of the Association, which was to be held at Montreal. Before the issuing of this circular John R. Proctor, state geologist of Kentucky, was added to the committee. This circular was drawn up by the chairman of the committee and, on submission to the members of the committee, was approved unanimously by them. It was based almost entirely on a previous rough draft prepared by Williams and presented to the committee by him at one of the preliminary meetings at Cincinnati. Its main points are as follows:

The committees are desirous of eliciting opinions from all active and professional geologists, to the end that more judicious and effective action may be taken at the next meeting.

1. The science of geology, with its kindred branches of paleontology and lithology, has made rapid progress in America—perhaps more rapid than in any other country—in the last twenty years.

2. The literature of geology is largely distributed through numerous scientific journals, and in the proceedings of miscellaneous scientific societies, to procure which is difficult and expensive.

3. The present facilities afforded through the American Association for the Advancement of Science are insufficient, and unavailable by the working geologists of the country—because (a) The meetings are held in the summer, which is the geologist's working season. In order to be present he must interrupt his work and leave the field, often at considerable expense, especially if he has a party with him. (b) Its brief meetings partake largely of the nature of vacation pleasure-parties, and much of the time is engrossed by reception, gratulation and excursions. (c) There is no sufficient avenue of publication of the work of geologists. (d) The association has become so large, widespread and popular in its work, membership and organization that its spirit necessarily, and properly, is not favorable to the development of any special work through its own agency.

4. The geologists, as a body, have no way of expressing their views on important state, national or international measures, except through the medium of the American Association, at the meetings of which there is a perceptible and increasing lack of attendance and interest on the part of geologists, in consequence of which the actual views of the geologists of the country on such questions can not be obtained and expressed correctly.

5. There is no strictly geological magazine or journal in America.

6. There is no strictly geological society in America.

7. There are numerous such societies and journals in Europe as well as journals and societies devoted exclusively to the branches of paleontology and mineralogy.

The committee desire also to disclaim any intention to trespass on the field and plans of the American Association for the Advancement of Science, or to criticize it in any way as to the discharge of its functions. Its tendency is to popularize science and to advance its acceptance by the world by diffusing scientific knowledge, and by announcing important discoveries, and as such, its sphere of activity is one that no special scientific body can occupy, but which still will be aided by the existence of tributary organizations, such as that contemplated by this circular.

At Montreal responses were read from the following geologists: S. A. Miller, James Macfarlane, Franklin Platt, W. P. Blake, J. D. Dana, P. A. Chadbourne, J. E. Todd, E. W. Claypole, Wm. M. Davis, M. C. Read, Chas. E. Billin, W. H. Pettee, Geo. H. Stone, John Collett, R. E. Call, Warren Upham, W. G. Platt, C. A. Ashburner, R. T. Cross, G. K. Warren, A. Winchell, Robert Bell, P. W. Schaeffer, S. E. Tillman, E. O. Ulrich, C. H. Hitchcock, Edward Orton, W. J. Davis, J. W. Dawson.

The official report of the proceedings at Montreal states that A. Winchell was chosen chairman and C. H. Hitchcock secretary. Several sessions were held. Ninety answers to the circular which had been issued were reported by the chairman of the committee,

all but two of which spoke favorably of the project. The secretary (Williams) reported answers from thirty persons, and S. A. Miller reported answers from six persons, all favorable, making a total of one hundred and twenty-six opinions in favor of and only two dissenting from the formation of the proposed society.

A committee consisting of Jed Hotchkiss, R. Whitfield and C. H. Hitchcock, appointed to consider the situation, recommended that the first step to be taken should be the establishment of a geological magazine. This report was accepted and adopted; the Cincinnati committee also reported a proposed constitution, which was discussed and laid upon the table pending further labors by the committee and a report at the Minneapolis meeting in 1883.

At the Minneapolis meeting of the American Association for the Advancement of Science (1883) those who had been active for the proposed geological society met August 21, and listened to further discussions and some objections. Some dilatory motions were brought forward, viz., that a committee be appointed to confer with the Mineralogical and Geological Section of the Philadelphia Academy of Sciences with reference to the formation of an American Society and the establishment of a geological magazine. Prior to this a committee had been appointed with instructions to confer with Major J. W. Powell to ascertain what encouragement could be afforded by him in the support of a geological magazine. These special committees, however, accomplished nothing, except to delay the project, and to discourage those who were in favor of the proposed society; and the friends of the new movement became very much discouraged by the expression of unfavorable views at Minneapolis. These adverse opinions were stated by several of the oldest and most prominent geologists; and they served to dampen the ambition of those who, though younger, had been zealously promoting the proposition.

Four years later various causes led some of these opponents to change their minds and to solicit a continuation of the plan that had

been proposed. And in particular the speaker recalls such correspondence with Dr. J. S. Newberry.

The chairman and the secretary of the moribund organization, Winchell and Hitchcock, convinced that nothing would be done by other parties, under implied instructions and responsibility from the meeting at Minneapolis, by virtue of their office sent out a call to meet at Cleveland, Ohio, in connection with the American Association for the Advancement of Science, 1888. The call as issued provided that the new society should be composed only of members of Section E of the American Association. This was in consequence of fear, expressed by some of the older geologists, that such an organization would clash seriously with the Association; and their love for the Association, with which they had been connected actively for many years, was greater than for any new geological organization, which appeared to them like a phantom which would be likely to have only an ephemeral existence.

Meanwhile several geologists, depending largely on the action of the Montreal meeting, and on the frequently stated advice of individual geologists, unwilling to delay longer the issuance of a geological magazine, boldly took the initiative and established the *American Geologist*, the first number appearing January, 1888. The call for the Cleveland meeting appeared in the *Geologist* for June, 1888.

It is enough to say, further, that this call met a cordial reception and that at Cleveland very much renewed interest was evident. Committees were appointed to prepare a constitution, and this constitution was adopted at a meeting held at Ithaca, New York, in December, 1888, the present meeting being the twenty-fifth anniversary of its adoption.

#### ALEXANDER FRANCIS CHAMBERLAIN

DR. ALEXANDER FRANCIS CHAMBERLAIN, professor of anthropology in Clark University, died April 8, 1914. He was born in Kenninghall, England, in January, 1865. In early life he came to Canada and took the degree of A.B. at the University of Toronto in 1886, and A.M.