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THE RESULTS of the explorations of the Hemenway South-western Archæological Expedition in 1887-88, under the direction of Frank Hamilton Cushing, promise to be of the greatest importance to our knowledge of ancient America. The plan of the researches is so comprehensive that we may expect they will clear up the history of the natives of the South-west States and Territories and of northern Mexico,—their somatological character as well as the origin and development of their peculiar culture. Mr. S. Baxter, secretary of the expedition, has recently reviewed the most important results hitherto reached. It has been ascertained that the culture of this region was identical with that of Zuñi. The inhabitants of these ancient cities practised an elaborate and thorough system of co-operative river and rain irrigation, and seem to have had a system of canal navigation. They had domesticated animals, notably the turkey, and probably also the rabbit and a variety of the *Auchenia*, or llama. Mr. Cushing has also found facts which lead him to conclude that an entirely indigenous metallurgic art existed; that the natives knew how to reduce ores by smelting, and how to fuse and braze with terra-cotta and cane blowpipes. These researches are of the greatest value, as they are founded on studies of a surviving branch of the peoples once living in these regions, the customs of which serve as a clew to the finds made in the ruined cities. The final results of the expedition will undoubtedly form the starting-point for investigations into the ancient civilization of America.

## AN AMERICAN GEOLOGIC SOCIETY.

WITH the activity in geologic investigation during the last decade there has grown up among American geologists the feeling that their work should be more fully co-ordinated and unified, and that more frequent opportunities for personal intercourse should be secured. This feeling took definite shape in 1881, when, at the Cincinnati meeting of the American Association, definite movement was made toward the co-ordination of the Federal and State geologic surveys, and toward the organization of an American geologic society.

The efforts of the geologists in attendance at Cincinnati were not, however, seconded by their absent brethren so warmly as to warrant the founding of the proposed society. The plan has since been kept in mind by its promoters, and during the past summer a call was issued for a meeting of geologists interested in the proposal to form such a society, in Cleveland, on Aug. 14 last. This call was met by a hearty response, and the twoscore of geologists present effected a preliminary organization, adopted a provisional constitution, and appointed a committee to call a subsequent meeting and complete the organization. This committee consisted of Professor Alexander Winchell of the University of Michigan; Professor John J. Stevenson of the University of the City of New York; Professor Charles H. Hitchcock of Dartmouth; Professor John R. Proctor, State geologist of Kentucky; and Professor Edward Orton, State geologist of Ohio.

The meeting for final organization took place in Sage Hall of Cornell University, at Ithaca, on Dec. 27. The attendance was small, but included representatives of a considerable part of the country. Chairman Winchell of the committee on organization presided; a list of 102 geologists, engaged in either original investigation or teaching, who had subscribed to the constitution and paid the entrance-fee, was read; and the provisional constitution prepared at Cleveland was adopted, and the organization thereby rendered complete. The following officers were then elected: president, Professor James Hall, State geologist of New York; first vice-president, Professor James D. Dana, Yale College; second vice-president, Professor Alexander Winchell, University of Michigan; secretary, Professor John J. Stevenson, University of the City of New York; treasurer, Professor Henry S. Williams, Cornell University; executive council, the above-named officers, and the following fellows at large,—Hon. J. W. Powell (director United States Geological Survey), Professor J. S. Newberry (Columbia College), and Professor C. H. Hitchcock (Dartmouth College). Two committees were appointed as follows: committee on revision of provisional constitution, Professor Alexander Winchell, Professor Henry S. Williams, Professor C. H. Hitchcock, Professor J. J. Stevenson, and H. L. Fairchild of the University of Rochester; advisory committee on publications, Professor Joseph LeConte (University of California), Mr. W. J. McGee (United States Geological Survey), Professor N. H. Winchell (State geologist of Minnesota), Professor I. C. White (University of West Virginia), Professor William M. Davis (Harvard University).

According to the terms of the provisional constitution, original fellows of the society comprise working and teaching geologists, who, being members or fellows of the American Association, subscribe to the constitution and pay the entrance-fee before Jan. 1, 1889. In addition to the 102 original fellows thus constituted, sixteen candidates for fellowship were elected at the Cleveland meeting. The society thus starts out with a membership of 118, including nearly every eminent geologist of the United States, and little if any undesirable material, and with a fund (derived wholly from membership-fees) of nearly twelve hundred dollars in the treasury.

It was the prevailing belief at the meeting that the Geologic Society of America is destined to take rank with the leading organizations of related aim in Great Britain, France, Germany, Austria, and other countries; and that, to maintain the high character with which it starts out, it will be necessary to limit the fellowship, and that the legend indicating fellowship in the society ("F.G.S.A.") should be regarded as an honorary title. But one dissenting voice was raised against the last proposition.

The meeting of organization was concluded by an eloquent ad-