

are the most degraded in organization, and inhabit the bottoms of all depths. Foraminifera are so plenty at some points, that Mr. Schlumberger has counted

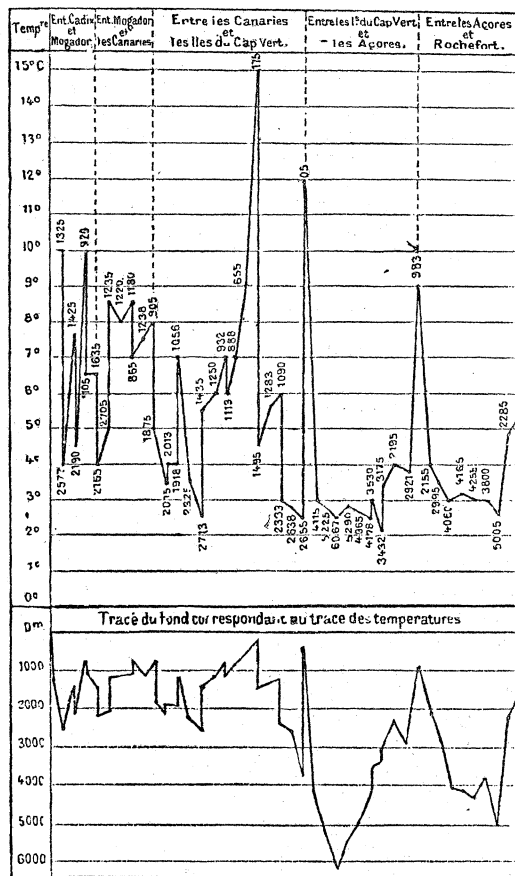


FIG. 3.—THERMOMETRIC CURVES, AND CORRESPONDING DEPTHS OF THE OCEAN-BED.

more than a hundred thousand of them in a cubic centimetre of mire. They live at the bottom of the ocean, and not, as formerly supposed, at the surface; and the accumulations from their tests (see fig. 2)

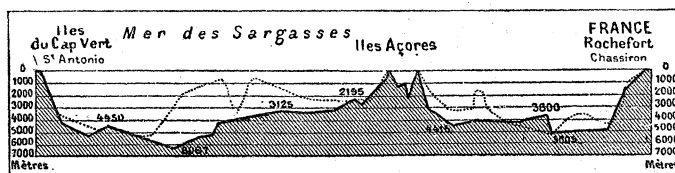


FIG. 4.—PROFILE OF THE OCEAN-BOTTOM TRAVERSED BY THE TALISMAN.

make what is termed the 'Globigerina ooze,' and will form, in the course of time, beds like those of certain geological horizons of the tertiary of Europe.

In 1868, during a cruise of the Porcupine, Mr. Carpenter and Sir Wyville Thomson discovered, among the particles of lime brought up by the dredge, a sort of jelly which made very slow movements. Within it were calcareous corpuscles of peculiar shape, which some naturalists thought to be the products of the protoplasm itself, while others thought it the *débris* of calcareous algae. Huxley called it *Bathypus Haeckeli*. This discovery caused a great sensation; and it was questioned whether this living slime did not at certain periods undergo evolution, and then give rise to new creatures. Wyville Thomson could not find *Bathypus*, and it was discovered that previous observers had been deceived by a chemical reaction. The supposed *Monera* was nothing more than a simple gelatinous precipitate of sulphate of lime, as it forms when concentrated alcohol is turned into sea-water. The mode of preservation of the lime had created *Bathypus*.

Here the general description of the results of the cruise of the *Talisman* is brought to a close. Yet I have thought it would be interesting to show the result of our researches on temperatures at great depths; and I have drawn two curves (fig. 3), the upper showing the thermometric records, the lower the corresponding depths. On examination it will be noticed that they do not always agree. Thus the lowest temperature we found was at 3,432 metres, while it was a little higher at 5,000 and 6,000 metres. From this the importance of deep currents, and the part they play in the distribution of life in the ocean, may be judged.

Another curve (fig. 4), drawn by Mr. Milne-Edwards, shows the profile of the bottom of the sea between the Cape Verde Islands and the Azores, on the one hand, and between these islands and France, on the other. Our relief differs considerably from that indicated on the German charts recently published (see dotted line).

KOREAN CURIOS.

POSSIBLY the most curious things in the possession of the Korean embassy, which recently visited the United States, were two thumb-rings (fig. 1), worn by the Prince Min Yong Ik one at a time, and usually on the thumb of the right hand, apparently rather more as an object to play with than as an ornament.

One of them, supposed by the prince to be jade, was found, on examination, to be serpentine; hardness 4.5, and specific gravity 2.62. It was white in color, with an oily lustre, and had on it a number of small brown stainings resembling an oxidation of iron. In the centre of each spot, apparently forming a nucleus, was a small, dendritic, moss-like marking. This ring measured 84 millimetres across the opening, the width of the opening being 22 millimetres. Its length was 28.5 millimetres. One

edge was ground off quite sharp, and the other rounded. One of the rings was noticed to be slightly flattened on one side.

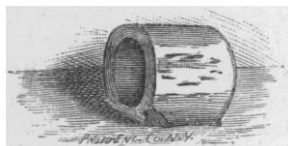


FIG. 1.

The spectacles worn by the embassy (fig. 2) were rather curious as regards form and size. They were made of transparent, colorless, and smoky quartz, and are worn more to rest the eyes than as aids to sight.

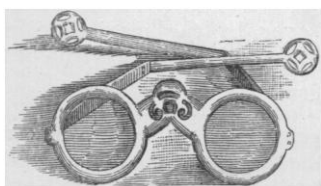


FIG. 2.

One pair, with glasses of smoky quartz, was very curiously marked, or rather streaked, showing the twinning of the crystal; and this feature was commented upon by them as a desirable one. The material of the glasses is obtained from Kyeung Ju, in the south-western part of the province, and is manufactured by thirteen spectacle-makers of note; there being also, in addition to these, a number of inferior workmen. The frames are made of horn, measuring five inches and a half in length, and two inches in width across the glasses.

The amber beads which they wear (fig. 3) are all imported from Europe, and a peculiar, long, rounded one was used as a button.

A curious button (fig. 4) is also used by them. It is worn on each side of the head, behind the ears, sewed to a velvet band; and a string attached to the hat passes under the button to hold the hat on the head. When made of gold, they denote the highest rank, and are worn only by the prince.

Every Korean woman wears two rings, always exactly similar in every respect, and as a rule perfectly plain. These are half oval in form, and are made either of gold, silver, amber, or coral. The coral, until recently, has been brought from China, and must have been cut from very large branches of this material.

They themselves say that their ladies are the best, or rather the most elaborately, dressed women in the world. In confirmation of this, the prince gave as his reason for leaving his wife at home, that her clothes would not have stood the wear of the journey.



FIG. 3.

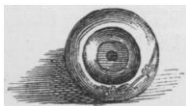


FIG. 4.

The prince described some crystals which must be the most remarkable yet known for quartz, if there is no error in his statements. They were described as hexagonal in form, and in length six times the height of a man, while over one foot across. After being shown a sketch of stalactites, the prince made a drawing of the crystals which showed the distinct terminal planes of quartz; and he insisted that they were not the same as the stalactites. They were described as red and white in color. It is barely possible from their form, that they are crystals of trap; but from their color and terminations it would seem otherwise. They are found rising from the water at Ohoong Sokh Chung, Kong Won Do, Tsing Chun county, a province on the east coast of Korea.

GEORGE F. KUNZ.

THE HISTORY OF AMERICAN INSTITUTIONS.

Johns Hopkins university studies in historical and political science. HERBERT B. ADAMS, editor. Vol. i. Local institutions. Baltimore, University, 1883. [470] p. 8°.

THE first volume of the Johns Hopkins university 'Studies in historical and political science' for the year 1883 is devoted to the subject of American institutions of local self-government,—a subject which has heretofore been greatly neglected, or, at any rate, treated in only a fragmentary and irregular manner. The present is the first attempt made to investigate it comprehensively and systematically; not exhaustively, by any means, or with any pretence to completeness, even of outline. Certainly, no person would look, in a year of independent studies, for any thing more than a commencement of so large a work. As the second year's issue does not propose to continue the same line of investigation, it seems fitting to examine the results of last year's labors, and determine what they have accomplished, and what they leave to be accomplished.

The studies before us embrace a wide range and variety of subject, including no fewer states than Massachusetts, Connecticut, Pennsylvania, Maryland, South Carolina, Michigan, and Illinois,—states far enough apart, one would think, in origin and character, to include every phase of American municipal life. Notwithstanding the admirable judgment, however, with which the subjects have been selected, it will be seen at a glance that there are vital omissions. New York, which has afforded the model for municipal government for almost the entire north-west, and which has some traces of the Dutch system still left; Virginia, the ruling state of the south, and