

The results of Dr. Britton and Mr. Cowell's expedition bid fair to prove of high economic importance aside from their scientific value. The expedition owed much to the kind assistance of the planters, who detailed their negroes and horses for the service of the explorers. Without such aid, it would have been difficult to penetrate the forest belt, through which trails had first to be cut.

Further remarks were added by Dr. Underwood regarding a dodder in tops of trees in Porto Rico; by Mr. J. H. Barnhart, on an epiphytic *Utricularia* among the specimens from St. Kitts exhibited; by Mr. F. S. Earle, on the few fungi collected; and by Mrs. Britton, on the other cryptogams, which numbered 81, and included a *Vittaria* prothallium.

EDWARD S. BURGESS,
Secretary.

ANTHROPOLOGICAL SOCIETY OF WASHINGTON.

THE 321st meeting of the Society was held on November 5. Professor W. H. Holmes read a paper on the 'Discovery of Human Relics and the Bones of Extinct Mammals in a Sulphur Spring, Indian Territory,' an abstract of which will be published in *SCIENCE*. This paper was discussed by Dr. W. J. McGee, Jos. D. McGuire, F. W. Hodge, Francis La Flesche and others.

Miss Alice C. Fletcher gave an account of 'The Inauguration of the New Department of Anthropology, University of California,' through the munificence of Mrs. Phoebe A. Hearst. For ten years Mrs. Hearst has been gathering museum material, spending fifty thousand dollars a year on its acquisition and looking forward to a time when the collections might be housed in a museum building. Last summer the project took form, resulting in the establishment of the Museum at the University of California with a handsome endowment, the details of which appeared in *SCIENCE*, October 18, 1901.

WALTER HOUGH.

DISCUSSION AND CORRESPONDENCE.

THE GEOGRAPHICAL DISTRIBUTION OF FISHES.

IN *SCIENCE* for November 1, Professor A. E. Ortmann offers some very interesting notes on

my paper (in *SCIENCE*, October 11) on the geographical distribution of fishes. On the points raised I may add a word.

1. There is little or nothing in the present relations of the fish fauna of Japan to that of the Mediterranean to suggest a former connection through a warmer climate to the northward. The forms common to the two regions are chiefly of Indian and rather deep water distribution. One curious anomaly occurs, the existence of a second species of the large trout, *Hucho*, in Japan, the other known species being in the Danube.

2. The views of Dr. Ortmann as to the faunas separated by the Isthmus of Suez and the Isthmus of Panama seem to agree with those expressed by me. Of course, from the standpoint of ichthyology, no one could say when either oceanic connection actually existed. That is a matter for geologists.

3. The fish fauna of the Cape of Good Hope is imperfectly known, that of the southeastern coast of Africa still less. It is certain, however, that some tropical or semitropical genera do pass this barrier at present. In other ages the Cape might conceivably have been less of a barrier through less extension or through warmer climate at its extremity. This again rests with the geologists.

4. I am willing to accept the theory of the former extension of the continent Antarctica on geological grounds, and the known distribution of *Galaxias* would be explained by it. But the case of *Galaxias* would not of itself prove such extension, and the value of zoological evidence in such cases is easily overestimated.

DAVID STARR JORDAN.

PREGLACIAL DRAINAGE IN SOUTHWESTERN OHIO.

TO THE EDITOR OF *SCIENCE*: In his reply (November 15) to Mr. Miller's criticism of my papers on preglacial drainage conditions in the vicinity of Cincinnati, Professor Tight should have added that every one of the smaller streams mentioned by Mr. Miller, in proof of his theory, is of *postglacial* origin and consequently has no bearing on the question.

A view up and down the Ohio from the hill-top at either Madison or Leavenworth, Indiana,