This shows that more than two thirds of those present at the Washington meeting avoided the larger hotels. But what is most noticeable is that there were only about two fifths as many registered at headquarters as at another hotel. The meetings of the council were not held there, and not more that half a dozen members of the council made it their stopping place. More than one person who had gone to headquarters in the hope of meeting friends soon went elsewhere. The announcement in the preliminary circular that the Arlington would be headquarters proved to be unfortunate. At Pittsburgh last summer local conditions caused 165 out of the 431 persons present, or about 38 per cent., to meet the high charges imposed at headquarters.

This statement of facts must not be interpreted as an implied criticism upon the management of the local committee at Washington. The permanent secretary has been so systematic, energetic and courteous, that it would be hard to find any reasonable ground for criticism. All that is intended is to call attention to the fact that, under the conditions that appear now to exist, the custom of specifying any place as headquarters seems one 'more honored in the breach that the observance.'

W. LE CONTE STEVENS.

LEXINGTON, VA.,
January 14, 1903.

PROCEEDINGS OF THE AMERICAN ASSOCIATION.

TO THE EDITOR OF SCIENCE: In your issue of March 13 W. J. Beal makes a plea for the publication in full of all the papers read at the meetings of the American Association for the Advancement of Science in the *Proceedings* of the Association. I must enter a protest against this. I should be entirely unwilling to have my recent paper on 'Abelian Functions and their Relation to the Specific Gravity of Sirius' buried in the *Proceedings*, where it would never meet the gaze of most of my astro-mathematical friends. Nor do I care to wade through dozens of pages about the 'Stero-isomerism of Azonium Derivatives,' and the 'Ecology of the Dominican Thelophoraceæ' in order to find a few pages of interest to me on skew helicoids.

No, the *Proceedings* should contain merely the titles of the papers read, with a reference to where the original is to be published; a brief abstract of every paper should appear in SCIENCE; but the papers in full should be published only in the special journals where they belong and where they will meet the eyes of those, and those alone, who are particularly interested in them. Of course there are some papers read in the sections which are of more than technical interest. For such the columns of SCIENCE are the fitting place, for here they will reach the eye of every member of the association. X.

SHORTER ARTICLES.

ADDITIONAL SPECIMENS OF THE JAPANESE SHARK, MITSUKURINA.

IN a recent number of the *Japan Daily Advertiser* (Yokohama, March 4, 1903, page 5) there is a notice, and it deserves record in SCIENCE, of the capture of additional specimens of the deep water shark, *Mitsukurina.*

Students of fishes will recall that in 1898 Dean Mitsukuri, on the occasion of his visit to Washington as a delegate to the International Fur Seal Conference, brought with him a shark which caused considerable comment. This specimen had been taken in deep water off the Bay of Tokyo; then it came into the hands of Mr. Alan Owston, a resident naturalist of Yokohama, and by him it had been presented to the Imperial University of Tokyo. A detailed account of this new shark soon appeared in the *Proceedings of the California Academy of Sciences,* Ser. 3 Zoology, Vol I., pp. 199–204, 1898, and it was here described by President Jordan as *Mitsukurina owstoni,* and regarded as the type of a distinct family of lamoid sharks. The most prominent features of the new form were the elongated and spatulate snout, the great extent of the ventral lobe of the tail and a general looseness of make-up, notably in its protractile and expansible jaws. The form was evidently from deep water, and structurally it seemed to be a close ally of *Odontaspis,* so close, indeed, that we are still in doubt whether

Dr. Jordan was justified in regarding it as representing a distinct family. Of general interest the specimen certainly was, however, from its grotesque appearance. But the feature which gave it especial value to the student was its resemblance to a shark of the Cretaceous period, *Scaphanorhynchus,* generally assumed to be extinct. Was it possible, then, that this Cretaceous shark was still living in Japanese waters? And if this were true, might it not occur in other deep-sea regions, like its more ancient relative, *Chlamydoselachus?* Thus we find that Dr. Arthur Smith Woodward, of the British Museum, commenting (1899) upon *Mitsukurina,* is distinctly of the opinion that the new genus was but a synonym for the Cretaceous shark, and he gives the evidence in favor of this view in the *Annals and Magazine of Natural History* (7), Vol. III., pp. 487–489, and makes out a fairly convincing case of identity. Nevertheless, we have to admit that the characters of the fossil shark are as yet too imperfectly known to warrant a definite judgment, and the safer course, therefore, is to acknowledge for the present the validity of the name *Mitsukurina.*

The note in the Japanese paper announces that more specimens of this shark have been taken, and we have promise, accordingly, that better anatomical data may be looked for. For one thing it now appears that the specimen first studied was an immature one, no examination of the soft parts having been made. The latest specimen in the hands of Mr. Owston measures, *mirabile dictu,* about twelve feet in length and its weight is estimated as between four and five hundred pounds. This extreme size, it will at once be seen, ranks this shark as one of the largest members of deep-water ichthyic fauna, and it is possibly the most formidable member of its community.

The depth at which the specimen was taken is not stated, but from the conditions of fishing near Numazu, the fish was apparently taken in water deeper than three hundred fathoms. As a symptom of its living at a great depth one notes in the latest description of the fish, that its 'flesh and skeleton are extremely limp, folding like a wet rag.' The color of the fresh specimen is described as 'light reddish-brown, the fins darker brown; nuchal region a little darker, and belly paler.'

BASHFORD DEAN.

EARLY INSTANCE OF TANGIBLE LIP-READING.

AN interesting feature of the autobiography of Miss Helen Keller is the account by her teacher, Miss Sullivan, of her patient efforts to train her young pupil to receive and communicate ideas by tangible lip-reading. Most persons regard the education of blind deaf-mutes as a development of modern philanthropy, and it will surprise many to learn that the method of tangible lip-reading was invented nearly two hundred and thirty years ago.

Bishop Burnet, the famous English historian and theologian, in a letter dated Rome, December 8, 1685, and addressed to the eminent scientist Hon. Robert Boyle, wrote as follows:

> There is a minister of St. Gervais—Mr. Godey — who hath a daughter that is now sixteen years old. At a year old the child spoke all those little words that children begin usually to learn at that age, but she made no progress; yet this was not observed till it was too late, and as she grew to be two years old they perceived then that she had lost her hearing, and was so deaf that ever since though she hears great noises yet she hears nothing that one can speak to her. But the child hath by observing the motions of the mouths and lips of others acquired so many words that out of these she has formed a sort of jargon in which she can hold conversations whole days with those that can speak her own language. I could understand some of her words but I could not comprehend a period [sentence]; for it seemed to me a confused noise. She knows nothing that is said to her unless she seeth the motion of the mouths that speak to her, so that in the night when it is necessary to speak to her they must light a candle.
>
> Only one thing appeared the strangest part of the whole narrative. She hath a sister with whom she has practiced her language more than with any other; and in the night, by laying her hand on her sister's mouth she can perceive by that what she says and so can discourse with her in the night. It is true her mother told me this