

DISCUSSION AND CORRESPONDENCE.

THE FLORIDA SEA-MONSTER.

SINCE the publication of the brief note in SCIENCE, March 5th, I have made additional studies of the specimens received, which confirm the cetacean affinities more definitely. The extreme firmness and toughness of the thick elastic masses of integument show that the structure must have been intended for resistance to blows and to great pressure, and could not have pertained to any part of an animal where mobility is necessary. They are composed of a complex of strong *elastic* connective tissue fibers, like those of cetaceans. There are *no muscular fibers* present in any of the parts sent. This lack of muscular tissue and the resistant nature of the integument are sufficient to show that the creature could not have been a cephalopod, for in that group a highly contractile muscular tissue is essential.

The structure found is closer to that of the integument of the upper part of the head and nose of a sperm whale than to that of any other structure known to me. It is probable, therefore, that the great bag-shaped mass represents nearly the whole upper part of the head of such a creature, detached from the skull.*

A rough area, shown in the latest photographs of the under side of the upturned mass, may indicate the area that was attached to the skull. It may have belonged to a very large example of a common sperm whale, with an abnormally developed and perhaps diseased nose; if not, then it probably pertains to some entirely unknown creature of the same family. It seems hardly probable that any such large cetacean remains to be discovered. The shape of the mass, and especially of the large, round, closed end supposed to represent the nose, is quite unlike the head of the sperm whale, which is truncated high and narrow in front and projects but little beyond the upper jaw. Moreover, nothing corresponding to the blowhole of a sperm whale has been discovered. Some of the photographs show an indentation near the large end on the upper side, but Dr. Webb in-

* This view has been adopted by me in an article now in type for the next number of *The American Journal of Science*.

formed me that it was only a pit or 'sulcus' about two feet long and six inches deep, perhaps due to injury. The internal cavity, so far as made out, seems to be unlike that of the sperm whale. Therefore, the view that it may be from an abnormal or normal sperm whale must be regarded as a supposition or theory that still needs more evidence to support it, but is at present the most plausible.

A. E. VERRILL.

NEW HAVEN, March 12, 1897.

THE FLORIDA MONSTER.

PROFESSOR VERRILL would be justified in making a much more emphatic statement (see SCIENCE for March 5th) than that the structure of the masses of integument from the 'Florida monster' resembles blubber, and the creature was probably related to the whales. The substance looks like blubber, and smells like blubber and it *is* blubber, nothing more nor less. There would seem to be no better reason for supposing that it was in the form of a 'bag-like structure' than for supposing that stumps of arms were present. The imaginative eye of the average untrained observer can see much more than is visible to anyone else.

F. A. LUCAS.

WASHINGTON, D. C., March 8, 1897.

GIBBERS.

OBSERVERS the world over have reported, in wind-swept places, the occurrence of pebbles having carved and polished surfaces due to the action of the natural sand blast. German geologists first called these pebbles 'Kantegerölle,' from the edges ground on them by intersecting planes of wear. Walther next proposed to call them 'facettengerölle,' because the facets were the essential features, the edges resulting from the development of the planes. But not all sand-blasted pebbles are faceted. Planes and edges are not more common than concave surfaces and pits; or, as Gilbert found in the Wheeler Survey, a vermicular fret-work wear of the rock surface. For these reasons the name 'glyptolith' was proposed by the writer in an account of the pebbles seen in southern New England. (Am. Jour. Sci. XLVII., 1894, pp.

63-71.) At the time there was no English equivalent to German usage.

W. A. Horn, in *The New Illustrated Magazine* (London, March, 1897, pp. 597-605), gives a vivid description of the Eremian or Solitary Desert region of Australia. The surface of this deflated plain is described as strewn with "bare shining stones, having a polished surface, from the sand continually blowing over them. They are locally known as 'gibbers' (hard g.)." Those who have occasion to employ a name for such pebbles now have an extended choice of German and Greek compounds and English gibberish.

J. B. WOODWORTH.

HARVARD UNIVERSITY.

INTERNATIONAL CONGRESS OF MATHEMATICIANS AT ZURICH IN 1897.

"It is known that the idea of an international congress of mathematicians has been, above all in these latter days, the object of numerous deliberations on the part of scientists interested in its realization. It has appeared to them, by reason of the excellent results obtained in other scientific domains by an international 'entente,' that assuring the execution of this project would have very weighty advantages.

"As the outcome of a very active exchange of views, accord was reached on a prime point. Switzerland, by its central geographic situation, by its traditions and its experience of international congresses, appeared designated to invite a first attempt at a reunion of mathematicians. In consequence Zurich is chosen as the seat of the congress.

"The mathematicians of Zurich do not disguise from themselves the difficulties they will have to surmount. But in the interest of this enterprise they have thought it their duty not to decline the flattering overtures that have been made them from all sides. They have decided, therefore, to take all preparatory measures for the future congress and, to the extent of their powers, to contribute to its success. So, with the concurrence of mathematicians of other nations, was formed the undersigned committee of organization, charged to bring together, at Zurich in 1897, the mathematicians of the entire world.

"The congress, in which you are cordially in-

vited to take part, will take place at Zurich the 9th, 10th and 11th of August, 1897, in the halls of the Federal Polytechnic School. The committee will not fail to communicate to you, in time, the text of the program determined, begging you to inform them of your adherence. But even at present it may be said that the scientific contributions and questions of policy will pertain to subjects of general interest or recognized importance.

"Scientific congresses have also this great advantage, to favor and keep up personal relations. The local committee will not fail to give great care to this part of its task, and, with this aim, it will arrange a program of fêtes and social reunions.

"May the hopes reposed in this first congress be fully realized! May numerous participants contribute by their presence to create, among colleagues, not alone coherent scientific relations, but also cordial bonds based on personal acquaintance!

"Finally, may our congress serve the advancement and the progress of the mathematical sciences!"

The invitation of which the above is a translation is signed by eleven from Zurich and ten associates, as committee.

Readers of SCIENCE already know of the persistent efforts of Vasiliev, of Kazan, and Laisant, of Paris, to establish this congress. It is matter for rejoicing that their noble endeavors have been crowned with this definite success.

GEORGE BRUCE HALSTED.

A NEW GEOGRAPHICAL MAGAZINE.

THE appearance of a new geographical magazine* is a matter for both congratulation and regret. The magazine referred to is designed to furnish authentic and well-selected geographical data for the use of school teachers, and the opening number gives promise that much good may be expected from it in this direction. The articles presented seem well adapted to the audience addressed and are scarcely open to

* *The Journal of School Geography*. R. E. Dodge, responsible editor; W. M. Davis, C. W. Hayes, H. B. Kümmel, F. M. McMurry and R. DeC. Ward, associate editors. Published at Lancaster, Pa. Price, \$1.00 a year.