lapsus calami? Probably not. How, then, can the change to the correct form be authorized?

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TROCHOSPONGILLA HORRIDA IN ARKANSAS

WE report the presence of *Trochospongilla horrida* Weltner in the East Fork of the White River near Elkins, Arkansas. The colonies collected were on the under side of stones in a shallow portion of the river where the water is scarcely flowing. The flat, branching colonies were a dirty white in color. Gemmules were present in specimens collected on July 23, 1936. The strongly spined skeletal spicules and the birotulate gemmule spicules with smooth entire margins make the identification certain.

Although reported in recent years from such far apart localities as Germany, Russia, Turkestan and China, *T. horrida* appears to have been found in the United States only four times: twice in Illinois,[1] once in Delaware[2] and the present collection in Arkansas. It appears to be the first fresh-water sponge to be reported from the state of Arkansas.

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WANTED: A NEW WORD

THE word should be from the Greek because a companion word is from that language, although the late Professor Burt G. Wilder said that a mule word might be as useful as a mule animal. He quoted appendicitis in this connection.

There is a large literature relating to planktonic food for many kinds of organic life. An equally large literature should belong to benthotic food, but the awkwardness of the expression is doubtless responsible for its hiding out of literature. According to the dictionary "benthos" relates to the bottom of the sea. This is not descriptive in application for the food of many forms of aquatic life living in shallow waters—for example, that of mollusks, fishes and even young ducks which feed upon the layer of living organic matter resting upon the top layer of mud in shallow water. Among the fishes we know that hypoglossidae, catostomidae and siluridae may thrive upon this top layer of mud without depending upon larger organic prey. We all know the roundish marks on the top layer of mud made by the fishes commonly known as suckers. I could not account for long scoops made on the top layer of mud until one cloudy afternoon standing upon the railroad track near Union Springs, New York, I watched a number of bullheads feeding. They would stick the tip of the lower jaw a little way into the mud and then with a few quick movements of the caudal fin they would force themselves ahead, making the mysterious scoop markings on the mud.

At the foot of our lawn in Stamford young wild ducks know enough to feed upon the top layer of mud without being taught by parents until they are large enough to eat Nuttall's pondweed and the cracked corn which we give them.

Flounder fishermen of the Great South Bay say that mud is the only food in the stomachs of millions of flounders after they are thin from February spawning. It would be difficult for these millions of flounders to find other food. That takes me to the question if the "sideswiping" mouth of flounders is not a matter of adaptation of a species to food conditions in the course of descent.

Many years ago as a boy at New Haven I took home a fish basket of young bullheads still alive that my father said were not worth the bother of skinning. I took them to the numerous small pond holes in Beaver Meadows west of New Haven and forgot them until the meadows were filled in, when local residents collected basketfuls of well-fed bullheads as the filling in crowded them out. There was little beside the top layer of mud for them as food supply. Now I want a word for this food supply. I have asked my friends who are Greek and Latin scholars, but they have failed me after my own limitations had been reached.

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SPECIAL ARTICLES

THE ULTRACENTRIFUGAL CONCENTRATION OF PNEUMOCOCCIC ANTIBODIES

THE ultracentrifugal analysis[1] of concentrates of the Type I pneumococcic antibodies from horse serum has shown that their proteins consist mainly of molecules with a sedimentation constant of about 16×10^{-13} cm. sec^{-1} $dynes^{-1}$. This, together with the presence of such molecules in the untreated antipneumococcic horse serum and their complete or almost complete absence from normal serum, is evidence that they are the real bearers of the antibody activity. Further support for this view is supplied by the observation[2] that after ultracentrifugation, most of the antibody activity appears at the bottom of the cell. The fol-

[1] Frank Smith, *Bull. Ill. St. Nat. Hist. Surv.*, 14: 11: 9–22, 1921.

[2] M. C. Old, *Trans. Amer. Micr. Soc.*, 51: 4: 239–242, 1932.

[1] J. Biscoe, F. Herčík and R. W. G. Wyckoff, SCIENCE, 83: 602, 1936; M. Heidelberger, K. O. Pedersen and A. Tiselius, *Nature*, 138: 165, 1936.

[2] M. Heidelberger, K. O. Pedersen and A. Tiselius, *op. cit.*