

regret that this opportunity should have been so lightly passed over by a writer with every appearance of unusual fitness to improve it.

FREDERIC LYMAN WELLS

SCIENTIFIC JOURNALS AND ARTICLES

The Internationale Revue der Gesamten Hydrobiologie und Hydrographie published at Leipzig with an editorial board consisting of Dr. Bjorn Helland-Hansen (Bergen), Professor George Karsten (Halle), Professor Charles A. Kofoed (Berkeley), Professor Albrecht Penck (Berlin), Dr. Carl Wesenberg-Lund (Copenhagen), Professor Friedrich Zschokke (Basel) with Professor R. Woltereck (Leipzig) as editor-in-chief, has with the beginning of volume 3 enlarged its scope and modified the form of its publication. In addition to the *Revue* proper, which will be issued in six parts per year forming an annual volume of 600 pages, there will be also biological and hydrographical supplements, forming annual volumes of 300 pages each, a *Jahresbericht* of literature in the hydrobiological and hydrographical fields, of about 300 pages, and a quarto series of monographs. The *Revue* proper will contain shorter original articles, critical summary of special fields of investigation, reviews of pertinent literature from various countries and of important works, news items regarding biological stations, expeditions, university instruction in the field of the *Revue*, etc. The supplement volumes will contain the more extensive papers with plates and the monograph series, the still larger reports of expeditions, lake surveys, etc., and the more extensive biological memoirs. Contributions for the journal and papers for review may be sent to the American editor, Professor Charles A. Kofoed, Berkeley, California, or directly to the Editor-in-Chief.

SPECIAL ARTICLES

THE SARGASSO SEA

SOMEWHAT more than fifty years ago, Maury¹ announced that midway in the At-

¹M. F. Maury, "Physical Geography of the Sea," new edition, New York, 1856, pp. 30, pl. vi.

lantic, in a triangular space between the Azores, Canaries and Cape Verde islands, the sargasso sea embraces an area equalling the Mississippi Valley in extent and so thickly covered with gulf weed that the speed of vessels is often impeded. To the eye at a little distance it seems substantial enough to walk on. His map represents the area of weed as shaped like an hourglass, with the broader space toward the west. It extends from 19° to 66° west longitude, the eastern portion from 17° to 30° and the western from 22° to 28° north latitude.

A few years later, Ansted² said that a considerable space between 20° and 40° west longitude and 15° to 30° north latitude is sometimes so matted with brownish weed as to hide the water, resembling a drowned meadow on which one can walk. It holds trees and plants from the Mississippi and Amazon.

Thomson³ does not define the limits of the sargasso sea, but places the northern border near the Azores. He seems to think that it extends to south from the Bermudas. The floating islands of gulf weed are usually from a couple of feet to two or three yards in diameter, but he saw on one or two occasions fields several acres in extent; and he thinks that such expanses are probably more frequent near the center of the area of distribution. They consist of a single layer of feathery bunches of *Sargassum bacciferum*, not matted but floating nearly free of each other, only enough entangled for the mass to keep together.

Carpenter⁴ limited the area more closely, for he says that the sargasso sea is comparatively still water between 30° and 60° west longitude and 20° and 35° north latitude, into which is gathered a considerable portion of the drift or wreck of the north Atlantic.

²D. F. Ansted, "Physical Geography," 2d ed., Philadelphia, 1867, p. 148.

³C. Wyville Thomson, "The Atlantic," New York, 1878, II., pp. 15, 16, 24.

⁴W. B. Carpenter, "Encyclopedia Britannica," 1887, III., p. 20.