

script partly prepared. It is therefore to be hoped that this part will soon follow and thus the entire order of Coleoptera be covered.

The edition was limited to one thousand copies and, we understand, is practically exhausted. It is to be hoped that a revised edition, in generally available form, will soon be forthcoming. With the general demand for a work of this character there should be an extensive sale for the work for many years to come.

FREDERICK KNAB

Leitfaden der experimentellen Psychopathologie. Von ADALBERT GREGOR. Pp. 222. Berlin, S. Karger. 1910. M. 6.80.

In this book the author attempts to give, in a series of sixteen lectures, the applications of the methods of experimental psychology to the study of mental diseases. Considering the limited amount of literature of experimental psychopathology, and the still more limited extent of its established fact, it would appear a difficult task to produce a book of such scope with strict adherence to its subject, nor is it accomplished save through the inclusion of much detailed analytical discussion. The single topics are treated quite distinctly in the successive lectures, and in another edition it will be well if page and chapter headings are provided for the text and bibliography. A very critical introductory chapter is followed by another of equal merit on the time sense, of which the author has himself made some pathological studies. The chapter on reaction time is also well constructed, but these three lectures set a standard that is scarcely reached elsewhere in the book, save perhaps in the seventh and eighth, on memory, and in the fourteenth, on the involuntary expressive movements. The chapters on association give only the merest elements of the question at issue, and the two chapters on *Aussage* might well have been condensed. One might, as a psychopathologist, also criticize the sense of proportion that gives two indifferent chapters to *Aufmerksamkeit* and but one to voluntary movement—practically confined to discussion of the ergograph and the *Schriftwage*. The

questions of the work-curve in the higher mental processes are discussed in the fifteenth lecture, while the last deals with measures of intelligence—without a mention, even bibliographical, of Binet and Simon.

The seven pages of bibliography are nevertheless useful, for while they omit a good deal that the psychologist would ordinarily know of, as Hoch's pathological work with the ergograph, the studies of Kramer and of Wolfskehl on memory, and of Vogt or Alechsieff on feeling, it contains a good many titles of importance not apt to be familiar to the worker whose horizon does not extend well beyond the literature of normal psychology; examples are the too little known studies of Ranschburg on memory, and the various papers of Gregor himself.

In a general treatise, equal merit throughout could be achieved only by an equal lack of it, and the author has probably done what he tried to do as well as any single writer on the hither side of Kraepelin could have done it. And yet the book suffers from an underlying fault in conception that to the psychopathologist will go far indeed to outweigh all its virtues. It is the last weakness that one would expect in a physician, accustomed to clinical contact with actual cases. The book seeks not only to translate the methods of normal psychology into pathological terms, but also its problems. Now normal psychology has its well-defined problems, as the reader of this journal knows them, but it reckons little of such pressing questions of psychopathology as the experimental criterion of confusion, the distinction between retardation and blocking, or the differential psychology of hallucinosis. To the psychological reader, the volume would scarcely give a hint that such questions existed. It is a doubtful service to explain how various methods of normal psychology, adapted to its own special problems, can be tried on pathological cases, too. It were a very real service to discuss the various psychotic symptoms in their appropriate clinical settings, and to explain the application of psychological methods to their further elucidation. Here the book fails grievously; and one can not but

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.