It appears that Mr. Ricker has not only assisted in the bibliography and citations to diatom literature, but has passed upon the many taxonomic problems involved. The painstaking manner in which this has been done adds greatly to the value of the report.

The new species, together with a few others, are well figured by some very good microphotographs.

GEORGE T. MOORE

Leitfaden für den biologischen Unterricht. Von K. KRAEPELIN, Direktor des Natürhistorischen Museums in Hamburg. Leipzig und Berlin, B. G. Teubner. 1907.

This little manual forms one of a series devoted to the extension of biological interest and the improvement of teaching in the German schools. Others of the series are devoted explicitly to the teaching of botany and zoology. Of similar import are still others devoted to nature study, for example, "Naturstudien in Wald und Feld"; and "Naturstudien in der Sommerfrische." All of which may be taken as indicative of the broadening and liberalizing movements in education the world over.

This particular book, as its name implies, is devoted to the distinctively biological aspects of nature study, but with reference to the higher schools, as indicated in the full title, "Leitfaden für den Biologischen unterricht in den Oberen Klassen der Höheren Schulen."

The book comprises something over three hundred pages of well-printed and amply and beautifully illustrated matter. One finds, as the author himself admits, some question as to just where to draw the line of a happy medium between the "Scylla" of too much, and the "Charybdis" of too little; and to the reviewer it seems as if the former rock had been barely missed. At any rate, for American high schools we should regard of doubtful educational value the introduction of the intricate problems of prehistoric man and archeology. It must be said, however, that these are touched upon in the present book in only a very elementary manner.

Something of the scope of the book may be gathered from the following partial glimpse of the table of contents.

First Section. The dependence of life on the influence of the surrounding world. Of the factors may be mentioned: (1) The *temperature* limits of plant life, and in a later section the same in reference to animal life. (2) Influence of light on plant life. (3) Surrounding media, soil, atmosphere, water, etc.

A section is devoted to the relations of plants to each other, and also to animals, or what we usually understand as ecology. The author employs this and several other terms in designating phases of these relations, going into what seems to the reviewer unnecessary details for an elementary treatise.

The second section is devoted to the "structure and vital activities of the organic world." Under this head are presented some of the more profound and difficult problems of his subject, yet on the whole the treatment is clear and stimulating, though rather difficult for pupils of the age of those concerned.

The third section deals with man as an object of scientific consideration. Brief reference has already been made to phases of this section. In general it deals with the structure and functions of the human body, problems of nutrition, metabolism, etc.

On the whole the book is worthy of cordial approval. It is well printed on good paper, and is marred by very few typographical errors.

CHAS. W. HARGITT

SYRACUSE UNIVERSITY

Elements of Physiology. By THEODORE HOUGH and WILLIAM T. SEDGWICK. Boston, Ginn & Co.

The present book is a reprint of the physiological portion of our larger work entitled "The Human Mechanism," together with chapter XX., . . . which has been added to meet the requirements of law in some states with regard to the teaching of physiology. (From the preface.)

It fell to the lot of the present writer to review the "larger work" referred to above in the issue of SCIENCE for April 19 of the current year. And since the present book is, as stated above, a reprint of the former, it will