

of work, fatigue and monotony and the most effective method of carrying out a specific operation or process have almost invariably increased the efficiency or output of the worker has frequently led to an even more important result being overlooked—the improvement in the health of the worker, who is also less fatigued by the effort required for the greater output under the new conditions. Industrial psychology is clearly of the utmost importance from both points of view and this book tends to redress the balance of emphasis by stressing the importance of such methods to the worker in the prevention of accidents, in the planning of work and elimination of waste, the selection and training of personnel, etc.

Material has been taken freely from the reports of the Industrial Health Research Board, the Home Office Pamphlets, the investigations of the National Institute of Industrial Psychology, as well as from foreign sources, and the book demonstrates conclusively the immense value of the human sciences to the community, and the wide possibilities in the settlement of human problems not by opinion, rule of thumb or tradition, but by scientific methods based on ascertained facts. It should be of great service in enlisting further support for the work of the Industrial Health Research Board and the National Institute of Industrial Psychology, and in encouraging the wider application of such methods in industry.

R. B.

*Bibliographical Survey of Vitamins, 1650–1930: with a Section on Patents.* By Mark H. Wodlinger. Compiled by Ella M. Salmonsén. Pp. viii + 334. (Chicago: Mark H. Wodlinger, 1932.)

THE literature of the vitamins now runs to several thousand original papers. In this bibliography, more than 11,000 publications are mentioned; 326 references appear in the historical section covering the period 1650–1910. Thereafter the papers of each year are listed separately, and from 1916 onwards a separate section is devoted to each vitamin: vitamin E first appears in 1921.

The earlier references are, of course, to the deficiency diseases, which we now know to be caused by the absence of a particular vitamin from the diet, and also to medicaments such as cod liver oil which owe their efficacy to their content of vitamins, although this was not realised at the time their use was originally advocated. These early references will be of special value to those interested in the historical side of the subject and might form the basis of a study of the development of our knowledge of the real cause of different deficiency diseases.

The references to each vitamin are arranged in the alphabetical order of the authors' names: provided the name is known it takes but a moment to find any particular paper, even although the year of publication is not known. It would take only a short time to extract from these pages a list of papers dealing with any particular aspect

of the vitamin problem, since the title of each paper (or book) is given in full.

This book should be of great use to all workers in this field: it supplements the reviews and monographs on the vitamins and precedes the issue of *Nutrition Abstracts and Reviews*, which should now provide an adequate index to the literature. In the last section the list of 240 patents should be of value to manufacturers or to research workers who may wish to patent their process.

*A History of the Birds of Suffolk.* By Claud B. Ticehurst. Pp. xi + 502 + 18 plates. (London and Edinburgh: Gurney and Jackson, 1932.) 24s. net.

WITH the progress of ornithological interest it is impossible to work with a book that is forty-five years old, however good it was when published. Those interested in the birds of Suffolk will welcome an up-to-date work by one who is singularly competent to write it. From the hours of a busy life, Dr. Claud Ticehurst was able to take some leisure and to make his notes and record his observations. He has spent twenty years in producing this volume, seventeen of which were spent in Lowestoft.

In the introduction are given a description of the country; changes in the avifauna; migration; a list of the collection of Suffolk birds; the names of former Suffolk ornithologists and the scope of the volume explained. The order and nomenclature used are those of the "List of British Birds" published in 1915. We think the 1923 "List" would have been preferable. The species are treated on modern lines, doubtful records examined and the latest and most reliable views expressed. The photographic plates add to the work and the map of Suffolk is, of course, a necessity.

*Einführung in die Mechanik und Akustik.* Von Prof. R. W. Pohl. (Einführung in die Physik, Band I.) Zweite verbesserte Auflage. Pp. viii + 251. (Berlin: Julius Springer, 1931.) 15.80 gold marks.

THIS second edition of Prof. Pohl's elementary treatise should need little commendation to the notice of English readers. Its treatment of the subject is well off the lines of the traditional method and, both in its insistence on apt experimental illustration, and in the small demand it makes on the reader's mathematical knowledge, it forms an effective foil to the conventional English textbook. It is to be hoped that a translation, modified a little (in scope rather than in outlook) to suit the work of the junior university and senior classes of schools, will make the book available to those who cannot read the German text. Despite the excellence of the text, such modifications would seem to be needed, more especially in that section which deals with acoustics.

A notable feature of the book is its wealth of illustrations, many of them produced most effectively as deep black silhouettes.

A. F.