

short history of our knowledge of the group from the first observation of 'small water-bears' by J. A. E. Goeze in 1773.

The systematic part contains clear descriptions of nineteen genera and subgenera, and of 274 species, 107 of which are regarded as doubtful. The bibliography contains a list of 188 publications, and there is an excellent index. The author, who is a keen investigator of the Tardigrada, has expended much thought and care on the preparation of this monograph, which maintains the high standard of the great series of which it forms a worthy part.

*The Immunology of Parasitic Infections.* By Prof. William H. Taliaferro. (The Century Biological Series.) Pp. xv + 414. (New York and London: The Century Co., 1929.) 6 dollars.

THIS book, which is dedicated to Theobald Smith, a pioneer in many fields of biological inquiry, is the first of its kind to present to the reader a collation and analysis of practically all the papers of any importance which have been written on the subject of immunity processes in protozoal, helminthic, and other non-bacterial infections. Immunological inquiry in this field has been by no means barren in practical and theoretical results. The demonstration of specific antibodies in the sera of persons suffering from helminth infection, hydatid disease, and schistosomiasis particularly, has greatly assisted diagnosis. So also have the many allergic skin reactions capable of being elicited when extracts of protozoa, helminths, etc., are introduced into the dermis.

Such applications of immunology to practical diagnosis are, however, excelled in interest by the light which these studies are likely to throw on problems of normal resistance and susceptibility to parasitic infections. The antigenic constitution of the protozoal or helminthic unit is now receiving the attention it deserves, and specialists in this field will be grateful to Prof. Taliaferro for his admirable survey of the relevant literature. As well over a thousand papers are cited with their full titles, the work forms a most valuable book of reference. J. C. G. L.

*Jahrbuch des Forschungs-Instituts der Allgemeinen Elektrizitäts-Gesellschaft.* Band 1: 1928-1929. Pp. 240. (Berlin: Julius Springer, 1930.)

THIS volume is the first issued by the Research Institution of the Allgemeine Elektrizitäts-Gesellschaft. It contains a wonderful record of research work in both applied and pure science of the highest class. Brief historical introductions are given to the various subjects. The book opens with a section on acoustics. The A.E.G. method of connecting up tone (talkie) films is first described and then the experimental groundwork on which it is based is given. The line diagrams are very clear and the photographs of the apparatus are instructive. The advanced mathematics of the vibrations of membranes are given and very striking examples of nodal figures are drawn.

The section on electrotechnics is very brief. Photographs are given of the A.E.G. relays suit-

able for long-distance communication. The sections on atom and electron physics record a great deal of valuable research. Corpuscular waves and their application for analysing crystal structures are well described. Instructive data are given about the contact potential between two similar metals. Under electro-optics two useful papers on the polarisation of canal rays are given. The volume finishes up with an article by C. Ramsauer pointing out the importance of technical research laboratories and emphasising the connexion between prosperity and research.

*Annals of the Pickett-Thomson Research Laboratory.* Vol. 5: *The Pathogenic Streptococci, their Rôle in Human and Animal Disease (continued).* Pp. xi + 392 + 46 plates. (London: Baillière, Tindall and Cox; Baltimore, Md.: Williams and Wilkins Co., 1929.) 42s. net.

VOL. 5 of the Annals of the Pickett-Thomson Research Laboratory continues the photographic register of streptococcal growths from oral, dental, tonsillar, and puerperal sources. It contains 46 plates of excellent photographs and a letterpress of nearly 400 pages devoted to lengthy excerpts from a curiously unselected mass of literature on streptococci and their many activities. The work fully merits the authors' own estimate of 'gigantic', but it is not science. To the authors a streptococcus is known by the appearance of its colony on a particular medium, and on this basis there is little room left for variation. It is difficult to see why it should be thought worth while to spend money on the production of these expensive volumes. It is of some interest, perhaps, that the first two plates illustrate the alteration in the flora of the gums following the use of a proprietary tooth-paste containing a streptococcal vaccine prepared by the authors.

*The Kinetics of Chemical Change in Gaseous Systems.* By C. N. Hinshelwood. Second edition. Pp. vi + 266. (Oxford: Clarendon Press; London: Oxford University Press, 1929.) 12s. 6d. net.

IN order that the progress made in the past three years in the study of the kinetics of chemical change in gaseous systems may be adequately recorded, Mr. Hinshelwood has prepared a second edition of his book. For this purpose the chapters on energy of activation and on unimolecular reactions have been completely rewritten and a chapter on chain reactions has been added. This new chapter contains the interesting suggestion that 'intensive drying' is efficient only in a limited range of chemical actions, which proceed either instantaneously or not at all, and that the trace of water, which makes it possible to propagate these actions, provides centres from which branching chains proceed. A sharp distinction is drawn between changes of this type and reactions which proceed with stable and measurable velocities, and it is contended that observations made with one group of changes cannot logically be extended to the other.