

method, which, however far it may be removed from his own ideas, must receive the consideration of every psychiatrist.

*Principles of Human Geography.* By P. Vidal de la Blache. Edited by Emmanuel de Martonne. Authorised translation from the French by Dr. Millicent Todd Bingham. Pp. xv + 511 + 6 plates. (London: Constable and Co., Ltd., 1926.) 18s. net.

HUMAN geography is a new subject, but its facts are old. It is the outcome of the growth of ideas rather than the result of discovery. Man is not an abstraction in the world in which he lives, but his evolution is related to the environment in which he occurs. The study of environment is not static but one that involves continual change in values as man evolves. Prof. Vidal de la Blache shows that there is more in geography than merely a study of the stage on which man has played his part, for man himself is a geographical factor changing and moulding his environment, and the study of progress entails a study of his struggles with physical and other obstacles. His distribution over the globe and his varying degrees of progress are the expression of the geographical conditions he has met.

The book is incomplete except for the early chapters on the distribution of population, and it has been put together from the author's notes after his death. Some of the more interesting sections on the factors of civilisation and the growth and influence of transport are fragmentary, but long enough to show the author's trend of thought. Fortunately, some important maps were complete and are included. In spite of its imperfections, the book is an important contribution to a side of geography which is specially associated with French workers.

*Körper und Keimbahnen.* Von Prof. Jürgen W. Harms. (4 Monographien aus dem Gesamtgebiet der Physiologie der Pflanzen und der Tiere, Band 9.) Teil I. Pp. x + 516. 33 gold marks. Teil 2. Pp. iii + 517-1023. 33 gold marks. (Berlin: Julius Springer, 1926.)

THE author, holding that a proper understanding of the relation of germplasm to soma is a prerequisite in the investigation of all problems of biology, has set himself the task of giving in broad review an account of the established facts concerning this relationship as it exists in the animal kingdom (including man). The result of his endeavour is this excellent and most useful book. The objective method of presentation, the historical review followed by a fair statement of modern opinion, the judicious comparison of opposing doctrines, the avoidance of any exhibition of preference save only in those matters upon which the author is a recognised authority, make the reading of this book both pleasant and profitable.

The subject of the endocrine activity of the gonads is treated in a most thorough manner, and any one who seeks trustworthy guidance in the Steinach-Stieve controversy will find it here. Castration,

gonad implantation, substitution therapy, and rejuvenation are discussed fully, and the rôle of the nervous system in the maintenance of the sexual characters is examined by reference to the author's well-known work concerning the thumb-pad of the frog. The bibliography does not include all the names and papers to which reference is made in the text.

This work, into which Harms's earlier book is worked in ("Die innere Sekretion der Keimdrüsen," Jena, 1914), can be warmly recommended. Not the least of its good qualities is that the author indicates everywhere lines of profitable research.

*Indicators: their Use in Quantitative Analysis and in the Colorimetric Determination of Hydrogen-Ion Concentration.* By Dr. I. M. Kolthoff. An authorised translation based upon the second German edition, revised and enlarged, by Dr. N. Howell Furman. Pp. xii + 269. (New York: John Wiley and Sons, Inc.; London: Chapman and Hall, Ltd., 1926.) 17s. 6d. net.

UNTIL the development of the conception of hydrogen-ion concentration, the use of indicators was confined within more or less empirical boundaries. It is therefore only during comparatively recent years that any appreciable insight has been obtained of the principles underlying the reactions of these bodies.

The volume under notice fully realises the avowed intention of its author to present a treatise the practical nature of which should be developed from theoretical considerations, without being overwhelmed by them. In the early chapters dealing with neutralisations generally, with amphoteric compounds and with the colour change of indicators, experimental examples are described, wherever possible, to illustrate the various points as they arise. The uses of indicators in quantitative neutralisations and in the colorimetric determination of hydrogen-ion concentration, with practical applications, are then discussed. Short chapters deal with indicator papers and with the theories of the colour changes of indicators, as distinct from the causes which bring about such changes.

Apart from an occasional loose phrase, the translation is well done; misprints are but few. Some useful tables and indexes conclude a volume which merits careful study by those who desire to obtain fullest benefit from the intelligent use of indicators.

B. A. E.

*Atoms and Molecules: being Part 1 and Chapter xii. of "The Foundations of Chemical Theory."* By Prof. R. M. Gwyer. Pp. viii + 141. (London and Glasgow: Blackie and Son, Ltd., 1927.) 7s. net.

THE chapters which have been retained in this abbreviation deal with atomic and molecular theories, atomic and molecular weights, valency and chemical constitution, classification of the elements, the modern view of the atom and the molecule, and finally the colloidal state. The chapters omitted have reference chiefly to the states of matter, the properties of solutions and the various types of chemical change.