

the metabolic function of the liver in preparing iron and fat for the production of erythrocytes. The aplastic form of anæmia has its cause in the failure of the poisoned liver to carry out this function, apart from the toxic changes in the bone-marrow. Iron deficiency is considered to be due to deficiency in milk of iron relative to protein or growth-stimulating substance and to the growth potential of the young animal.

The whole subject is presented with unusual lucidity, and Dr. McGowan's conclusions will be of considerable interest to students of pathology and comparative medicine.

*The Commerce of Agriculture: a Survey of Agricultural Resources.* By Prof. F. A. Buechel. (The Wiley Agricultural Series.) Pp. ix + 439. (New York: John Wiley and Sons, Inc.; London: Chapman and Hall, Ltd., 1926.) 18s. 6d. net.

THE framework of this book is ambitious. The agricultural resources of every part of the globe are explored, with, in some cases, disappointing brevity. Under 'resources,' aspects are considered which do not, as a rule, find a place in agricultural text-books. For example, there are sections on climate, soils, origin and development of trade, agricultural organisation, and so forth. The matter is so encyclopædic that a considered review is not possible here. As a test we turned to the section on 'Rice,' and would query the accuracy of the statement that "rice is *by far* the most important crop" in India. Again, under the heading of potato diseases it is disappointing to find that only two are mentioned, 'scab' and 'blight.' The botanical names should have been given, for, under the latter, two, 'early' blight and 'late' blight, are mentioned as if they were distinct diseases, whereas both, presumably, are *Phytophthora infestans*.

These criticisms should not, perhaps, detract from the real value of the book, which under one cover presents a really informative survey of world agriculture. We commend in particular the excellent statistical maps showing crop distribution in various countries, selected from the admirable series published by the U.S. Government.

*The Credibility of Herodotus' Account of Egypt in the Light of the Egyptian Monuments: being a Lecture delivered at the Fifty-fifth Congress of German Philologists and Schoolmasters at Erlangen.* By Wilhelm Spiegelberg. With a few Additional Notes by the Translator, Aylward M. Blackman. Pp. iv + 40 + 2 plates. (Oxford: Basil Blackwell, 1927.) 2s. 6d. net.

A TRANSLATION of Prof. Spiegelberg's lecture on the credibility of Herodotus as a recorder of Egyptian history will doubtless be welcome to many whose acquaintance with the language of the original is limited. Much of what he has to say is new, while his intimate acquaintance with the monuments has enabled him to give greater precision to views already put forward in general terms on the sources of the information recorded by the 'father of history.' His approach to the

problem is by way of two inquiries. First, what was the state of Egyptian civilisation at the time Herodotus visited the country? Secondly, in what circles of society did he move during his visit? His conclusion is that the intense preoccupation of the Egyptians in their own past had produced a number of popular ætiological legends evoked by the monuments, and that these were related to Herodotus by interpreters and members of the inferior ranks of the priesthood. The application of this theory to the story of the escape of Sesostris from the fire over the bodies of his two sons is certainly ingenious and more than probably correct.

*Wave Mechanics: an Introductory Sketch.* By H. F. Biggs. Pp. 77. (London: Oxford University Press, 1927.) 4s. net.

MR. Biggs has rendered a distinct service to physics by preparing this short account of Schrödinger's theory. Beginning with the hypotheses of Louis de Broglie, out of which the subject has developed, he traces the evolution of the idea that wave-mechanics bears to classical mechanics the same relation as wave-optics bears to ray-optics, and obtains the partial differential equation for the  $\psi$ -waves, proceeding then to its applications in spectroscopy. The style is lively and readable, the points are well made, and altogether no better introduction to the latest phase of the quantum theory can be desired. We may perhaps offer two slight criticisms: the translation of *Eigenwerte* by "special values" seems particularly unfortunate—for those who dislike "characteristic values" or "autovalues," the term "double numbers" may be suggested: and the mathematical treatment of the hydrogen-atom problem is greatly simplified, as Prof. Eddington pointed out some time ago in a letter to NATURE, by referring to the known properties of the  $W_{k,m}$  functions.

*Local Geology: a Guide to Sources of Information on the Geology of the British Isles.* By Dr. A. Morley Davies. Second edition. Pp. 16. (London: Thomas Murby and Co., 1927.) 1s. net.

IT is a pleasure to be given a second opportunity of directing attention to Dr. Morley Davies' extremely useful little pamphlet, partly because it is intrinsically of great educational value, and partly because the call for a second edition indicates that it is adequately serving its purpose. Our splendid series of geological maps are not nearly so well known as they should be. Dr. Davies has done the Geological Survey of Great Britain a service as well as the general public by providing this simple and interesting guide. An appendix has now been added listing new maps and leading references. One sentence is worth quoting in the hope that the Geological Survey may be encouraged to remove what is a common source of annoyance in the north of England and south of Scotland: "Unfortunately, sheets 1, 2, and 11 cover very small portions of England and much larger portions of Scotland, but they treat Scotland as a *terra incognita*."