

*The Microscopic Examination of Cattle Foods.* By S. T. Parkinson and W. L. Fielding. Pp. viii + 97 (15 plates). (Ashford and London: Headley Bros., 1930.) 6s. 6d. net.

THE growing demand for detailed knowledge of the constituents of cattle foods has brought into prominence the need for adequate methods of analysis. Microscopic examination affords the only certain means of identification of the materials present, and hitherto a concise and systematic treatise dealing with the subject has been lacking. Parkinson and Fielding have now elaborated their own methods and have successfully attempted to set them out in such a way as to provide the student with a ready means of attacking a problem which bristles with difficulties.

The preliminary chapter is devoted to a description of methods, which are given in detail and would appear sufficient to meet most situations that are likely to arise. The main food plants are then dealt with in groups, including oil-containing plants, cereals, and leguminous plants, with a further chapter on such miscellaneous constituents as weed seeds, beet pulp, potato residues, and spent hops. Methods of identifying undesirable adulterants, such as sawdust, are also given to provide a test for purity. For each group, tables have been drawn up which enable comparisons between the different constituents to be made readily by selection and elimination. Additional information is provided by annotated photomicrographs of the chief features described and of the principal weed seeds. The volume meets a distinct need, and should prove most useful on the commercial side, as well as for training agricultural students in a better understanding of certain aspects of animal nutrition.

*Cacao.* By Dr. C. J. J. Van Hall. Second edition. Pp. xviii + 514. (London: Macmillan and Co., Ltd., 1932.) 28s. net.

DURING the last few years, increasing interest has been taken in problems relating to cacao cultivation and production. It is singularly appropriate, therefore, that a second and revised edition of what is generally regarded as the standard work on the subject should now make its appearance. In this new edition, the author, an acknowledged authority with wide experience of the crop, includes the results of all the outstanding work on cacao that has been carried out in various parts of the tropics since the appearance of the first edition in 1914.

The most notable addition to the work is the chapter devoted to breeding and selection. Here the author outlines the methods that are being adopted in such countries as Java, Trinidad, and Surinam to improve the yield and quality of the crop, and does not omit to point out the numerous difficulties that have to be faced. The information relating to pollination and fertilisation is of special botanical interest, as these phenomena in cacao have been so long shrouded in mystery, and it is only in recent years that light has been thrown upon them. The account of the improved technique in budding that has now been evolved should

be of value to all those concerned in any way with propagation. In the chapter devoted to pests and diseases much that is new has been added, including accounts of the valuable work that has been carried out in this sphere in the West African cacao-producing countries.

*The Phenomenology of Mind.* By G. W. F. Hegel. Translation, with an Introduction and Notes by J. B. Baillie. (Library of Philosophy.) Second edition, revised and corrected throughout. Pp. 814. (London: George Allen and Unwin, Ltd.; New York: The Macmillan Co., 1931.) 25s. net.

THE philosophy of Hegel is for the very large majority of people a closed book. Of all the philosophers, he is by far the most difficult to understand, and Sir James Baillie has performed a very great service in translating and editing a new edition of his "Phenomenology of Mind", which may be fairly looked upon as Hegel's *magnum opus*. The subject matter is, however, so abstruse that it is very difficult to understand, and a modern psychiatrist might be forgiven for regarding some of it as definitely derelict thinking, a term which Bleuler has well defined as thinking away from reality.

The translator has very much lightened the reader's task by a well thought out and reasoned introduction of some fifty pages. We think it might well have been indicated, when discussing phrenology and physiognomy, that the ideas of Lombroso are not necessarily accepted by scientific criminologists of to-day. The value of the table of contents has been very much enhanced by the addition in brackets of remarks of the translator. These help to clarify the plan of the work, and help the reader on what cannot really be otherwise than a weary way.

*Solutions superficielles, fluides à deux dimensions et stratifications monomoléculaires.* Par André Marcelin. (Recueil des Conférences-Rapports de Documentation sur la Physique.) Pp. 163 + 4 planches. (Paris: Les Presses universitaires de France, 1932.) 80 francs.

M. MARCELIN'S book will be heartily welcomed by all those workers who are concerned with the chemistry and physics of surface phenomena. The author opens the book with a historical exposition, and, after a brief discussion of the physical state of surface solution, goes on to describe in full detail and very clearly the experimental methods in use to-day. He then, by means of a very full discussion of surface solutions of oleic and other acids, illustrates the properties of and regularities shown by such solutions.

Very interesting chapters follow, dealing with pseudo-solutions and their transformation into true surface solutions, and with the equilibrium between a solution and a surface solution. The influence on the Volta effect produced by the presence of a monomolecular layer is very carefully examined, and the book closes with an account of the properties of thin films. It is fully documented, is written with admirable clearness, and is a notable addition to a notable series.

ALLAN FERGUSON.