the species he includes under it. He has evidently no first-hand knowledge of this branch of the subject, and his statements are antiquated and sometimes erroneous, as for example when the names of *Unio pictorum* and *U. tumidus* are interchanged. Fifteen plates depicting these species are appended to complete the book. Four are in gaudy, unnatural colours, the remainder in bistre half-tone, based principally, it would seem, on photographs, and for the most part devoid of their characteristic surface-markings or sculpturing.

Animal Husbandry. By H. J. Waters and F. G. King. Pp. viii+546. (Boston, New York and London: Ginn and Co., 1925.) 7*s.* 6*d.* net.

No phase of agriculture has made more distinct advance within the last century than that which relates to the care and management of domestic animals. Certainly no other makes quite so attractive an appeal to human nature. This may explain the numerous text-books on this subject which appear from time to time. In one of the latest of these, by means of a judicious interweaving of theoretical principles and sound practical instruction, Messrs. Waters and King have succeeded in promoting that degree of co-ordination which should exist between the science and practice of stock farming.

A well-marked feature of the book is the attention devoted to the improvement in live-stock production, emphasis being laid on the attainment of the breeder's ideal through years of judicious selection and the vigorous culling of the scrub animal. It is pleasing to see that a few chapters are devoted to the encouragement of boys' and girls' clubs. This movement originated in the United States and has now assumed very large dimensions; doubtless it has been a factor of considerable importance in the general advancement in live-stock production. Useful hints are given regarding the formation of such clubs and what should be the ideals of club members.

We are of the opinion that the sections relating to the nutrition of the farm animal might have contained somewhat more detail. However, considering the size of the volume, the authors appear to have covered the ground with remarkable thoroughness.

The whole work is well produced (there are many beautifully reproduced photographs to illustrate the text), and should serve as an introductory or intermediate text-book for rural economy classes in schools and colleges.

Bibliographia Genetica. Onder redactie van Dr. J. P. Lotsy en Dr. H. N. Kooiman. Deel 1. Pp. v+462. ('s-Gravenhage: Martinus Nijhoff, 1925.) 25 guilders.

Dr. Lotsy and Dr. Kooiman have undertaken the task of editing this work, the first volume of which appeared last year. In a series of volumes, contributed to by geneticists from all over the world, it is intended to summarise the whole field of modern genetics. The enormous and rapid development of genetics, which began in 1900 and is still going on at an increasing pace, makes such a series of summaries very valuable to workers in this field and to those who wish to know the present state of the subject without looking up the original papers. Each author covers the field in which his own contributions figure most prominently.

Thus in the present volume of 460 pages we find Fritz von Wettstein summarising—in 38 pages—the genetical work on mosses, including his own important work on polyploidy in these forms. Similarly, Punnett takes up the genetics of the sweet pea, giving a chromosome map of the various linkage groups; Castle deals with rabbits and guinea-pigs, with illustrations of the more important types; Fruwirth sets forth in 48 pages the genetic results on the potato, and Lehmann in 56 pages those with Epilobium.

Of somewhat different character is Haecker's "Aufgaben und Ergebnisse der Phänogenetik," which occupies 222 pages and is divided into eight chapters, dealing with such topics as size and its inheritance, asymmetry, pigmentation, skull shape, etc., in a comparative way.

Each contribution ends with a list of literature and an index which places all the information in the most available form. The volumes are well bound and should find a place in every productive biological library. R. R. G.

A Course of Geometrical Analysis. By Dr. Haridas Bagchi. Pp. xi+562. (Calcutta: Chuckervertty, Chatterji and Co., Ltd., 1926.) 20 rupees.

It is evident from this book, which is concerned with differential geometry, that Dr. Bagchi knows a great deal of mathematics and that he is a charming man, but it is equally clear that he would have been well advised not to publish this work in its present form. It consists of a kind of commentary or gloss on Forsyth's "Differential Geometry," to which the author makes handsome acknowledgments—see in particular on p. 228 the disarming way in which he ventures to point out a misprint. He deals at great length with rather elementary and trivial points, referring to Forsyth for the serious algebra and for the explanation of his terms, so that the book is unintelligible by itself. There are long digressions on such matters as homogeneous functions and Jacobians, in which the author has really nothing to say which should not be well known to any one beginning the subject. In fact, the book would be intolerably prolix and quite unreadable were it not for the delightfully quaint turns of speech which are to be found on every other page, but from which, in spite of the temptation, we refrain from quoting. Twenty rupees is a large sum to pay for this kind of amusement; after all, Mr. Anstey has done it quite as well long ago. It is a great pity, because Dr. Bagchi is undoubtedly capable of doing good work in mathematics, if he would not spread himself so much.

Kleines Praktikum der Vegetationskunde. Von Dr. Friedrich Markgraf. (Biologische Studienbücher, 4.) Pp. v+64. (Berlin: Julius Springer, 1926.) 4·20 gold marks.

Dr. Markgraf's introduction to the practical study of vegetation is chiefly of interest because of a somewhat detailed consideration of the use of the quadrat method in the field, illustrated especially by reference to bogs and woodlands. This occupies nearly half the volume and, by comparison, the second section dealing with methods of investigating the features of the habitat appears all too brief, even for a beginner.