

and the method of expression used is at once clear and sufficiently human to maintain the reader's interest.

Mr. Foster is careful to state that his work does not do more than touch lightly on the subject of farm costing. The difference between financial and cost accounts is not always clearly seen by persons who are new to book-keeping. Theoretically both may be necessary to the really efficient management of a large holding, but for the immediate purposes of sound trading and daily guidance, it is the financial accounts which are so very important. It is to be hoped that more accountants will follow Mr. Foster's example and develop the subject of farm book-keeping to the mutual benefit of their rural clients and themselves.

C. H.

*The Science of Soils and Manures.* By J. Alan Murray. Third edition, revised and enlarged. Pp. xiv + 298. (London: Constable and Co., Ltd., 1925.) 12s. 6d. net.

The third edition of this text-book, issued under a slight change of title, aims at bringing its subject up-to-date for the use of students of advanced university standard. The considerable recent advances in our knowledge of soil structure and chemistry, and in the bearings of soil biology on plant growth, have been incorporated, compensation of space being made by judicious omissions of certain ideas and methods which are either out-of-date or have failed to fulfil their promise of usefulness. A concession to more advanced students is made by the inclusion of pertinent mathematical data in the appendix, to which are also removed from the text various tables only required for occasional reference, whereby the handiness of the book is considerably increased.

Certain features of the work deserve special commendation. The horticultural, as opposed to the agricultural, aspect of the fertiliser problem is considered, and manurial tables are included applicable to garden crops, of which the requirements vary considerably. Attention is given to the various manufacturing processes of artificial fertilisers, with illustrations of plant actually in use, thus enabling the student to obtain a clearer idea of what he is really dealing with when applying manures. A useful chapter on fertiliser valuation is included, concrete examples being given, illustrating the misleading nature of the system of unit prices, and showing simple methods by which the actual value of fertilisers to the farmer can be calculated.

W. E. B.

*Outlines of Qualitative Chemical Analysis.* By Prof. Frank Austin Gooch and Prof. Philip Embury Browning. Fifth edition, revised. Pp. viii + 184. (New York: J. Wiley and Sons, Inc.; London: Chapman and Hall, Ltd., 1924.) 7s. 6d. net.

This work supplies a "systematic scheme of analysis" for the usual set of commoner basic and acidic ions. One would like to see these somewhat hackneyed limits extended to include a few 'rare' elements. It is difficult to know where to stop, but surely it is time that ordinary courses in chemistry dealt with such commercially important elements as, for example, titanium, molybdenum, tungsten, and possibly even thorium.

So far as it goes, the book deals excellently with the subject. An introductory chapter treats briefly but well of the ionic principles underlying the reactions; and the usual systematic examination, condensed into tabular form with commentaries on important points, is supplied with ample references to this first chapter. The methods given are well arranged and up-to-date, and a student who works carefully through them and answers the questions set should learn some chemistry as well as 'tests.' The book is marred by a final short chapter on some haphazard tests for a few commoner organic compounds—acids, alcohols, sugars, alkaloids—a chapter which, with little system and no instruction in principles, is decidedly inferior to the preceding matter.

The book is well turned out, and few printing errors have been noticed.

T. W. H.

*Half-Hours with the Telescope: a Popular Guide to the Use of the Telescope as a Means of Amusement and Instruction.* By R. A. Proctor. Revised and brought up to date by Dr. W. H. Steavenson. Pp. xii + 131 + 7 plates. (London: Longmans, Green and Co., Ltd., 1926.) 5s. net.

This is the fifteenth impression of this book since its inception in 1868. Under Dr. Steavenson's revision, a number of necessary corrections and additions have been made with the view of continuing its former usefulness. New illustrations have been substituted throughout. It may be mentioned that the book is essentially one for the amateur possessing a telescope which he is prepared to use. He will then find in this little publication an excellent guide to the many objects of interest within reach of modest telescopic means, together with a simple account of the construction of his instrument and valuable hints for its successful use. The book is of pocket size, and the type is clear. There are, however, a few misprints, as on pp. 59, 70, and 107. A brief note on the nomenclature of the stars, or a reference to the British Astronomical Association Handbook for 1924 (in which all star catalogues are briefly described), would have been helpful to the beginner. From a cursory glance at the pages, the would-be purchaser might be inclined to object to the price, but its worth will be readily admitted by a purchaser who, with its aid, has spent some very profitable half-hours with his telescope.

*Sympathetic Training of Horse and Man.* By Major T. S. Paterson. Pp. xi + 205 + 8 plates. (London: H. F. and G. Witherby, 1925.) 12s. 6d. net.

This book is described as "a Handbook on Present-day Training in Equitation," and, as the title indicates, it includes the necessary training of both man and horse in the methods by which that remarkable sympathy between horse and man can be established. As the author so admirably shows, successful equitation depends on the establishment of this link. Scientifically, we may be permitted to doubt whether the material indications of intention (the rein, spur and so forth) are the true media of communication between man and horse. The manner in which the dog, too, divines his master's mind, is scarcely capable of simple explanation. A well-written and attractive book.