

Rydberg series lines. In 1914 he ascribed these series to proto-helium.

An English writer would have referred to the Franklin-Adams star charts, and instead of the atlases of Heis, Schurig, or Upton, British readers will no doubt prefer, according to ambition and purses, Cottam's charts, or the atlases of Peck, Proctor, or Norton.

It is a decided merit of the book that it contains a large number of references to original publications. Moreover, it is well printed and free from typographical faults (a gross example was noticed on p. 165). It may be pointed out that the "Rutherford" several times mentioned should be "Rutherford," and that a revised edition of the late Miss Clerke's "System of the Stars" appeared about ten years ago. These two books, it may be stated, are in a degree complementary.

H. E. GOODSON.

OUR BOOKSHELF.

Alcohol and the Human Body. By Sir Victor Horsley and Dr. M. D. Sturge. Fifth edition. Pp. xxviii + 339. (London: Macmillan and Co., Ltd., 1915.) Price 1s. net.

IN this book, which has now reached a fifth edition, a striking array of statements and facts is marshalled on the deleterious effects of alcohol on the human body. The first chapter deals with the action of alcohol as a drug, the second with the chemistry of alcohol and of alcoholic beverages. The remainder of the book deals with the action and effects of alcohol—on the cell, on the various tissues and organs, on the metabolism of the body, and on the emotions. Concluding chapters discuss the relation of alcohol to disease and tropical conditions, and its use in the Services, and finally Dr. Arthur Newsholme sums up the influence of the drinking of alcoholic beverages on the national health.

The authors are well known for their pronounced views on the alcohol question, and the book must therefore be regarded as being somewhat of a partisan nature, but a good case is made out for the deleterious effects of alcohol even in small quantities, and as a general summary of the whole alcohol question there is probably no better, with the limitation expressed. The text is plentifully illustrated with a number of plates and drawings of the effects of alcohol on the tissues, etc., and with diagrams of statistical and other data.

Proceedings of the Yorkshire Geological Society. Vol. xviii. *Bibliography of Yorkshire Geology* (C. Fox-Strangways Memorial Volume). By T. Sheppard. Pp. xxxvi + 629. (London, Hull, and York: A. Brown and Sons, Ltd., 1915.) Price 15s. net.

YORKSHIRE long ago made its appeal to geologists on account of its magnificent coast-sections, carved out of strata abounding in marine remains. In

memory of the work of the late Mr. C. Fox-Strangways, who was so long connected with the Geological Survey, the Yorkshire Geological Society has issued a bibliography which will be of value wherever Carboniferous, Jurassic, and Glacial deposits arouse interest. The work has been based on an incomplete manuscript prepared by Mr. Fox-Strangways, and has been undertaken in a most thorough spirit by Mr. T. Sheppard, of the Hull Museums, who is well known by his "Geological Rambles in East Yorkshire."

The material is arranged chronologically, beginning with Leland's "Itinerary" of 1534. We are glad to see Holinshed's "Chronicle" (1577) quoted as adding something to geology, though here, probably, a page-reference should have been given. The mineral waters attracted scientific attention before the fossil molluscs; but we find M. Lister in 1671 acknowledging in Yorkshire the influence of "M." Steno "concerning Petrify'd shells." An index of 126 pages renders reference easy, and even delightful, to the bibliography. The search for some particular piece of information at once reveals how much more has been published than any reader could have suspected from his own general knowledge.

G. A. J. C.

Chemical Constitution and Physiological Action. By Prof. L. Spiegel. Translated, with additions, from the German by Dr. C. Luedeking and A. C. Boylston. Pp. iv + 155. (London: Constable and Co., Ltd., 1915.) Price 5s. net.

THIS modern branch of treatment is based upon organic chemistry, and in the synthetic preparation of remedies a knowledge of the relationship between chemical constitution and physiological action is obviously necessary. This knowledge, however, is not so advanced that it is possible to foretell what change in a drug's action will be produced by the introduction into it, or the removal from it, of certain organic radicals (alkyls, carboxyl, etc.). Certain chemists take a different view, and hold that data have sufficiently accumulated to warrant such predictions, and the little book under review is written from that point of view.

Pharmacologists and therapeutists, however, who alone have the right to pronounce an opinion because they have practical experience of the action of drugs, are opposed to this enthusiastic opinion. They know that the so-called laws of the chemists have so many exceptions (in fact, as a rule, the exceptions are more numerous than the cases which fit into the chemists' views) that they maintain that the only proof of a drug is the administration thereof. Accurate, careful, and critical discussion of these questions will be found in any standard English text-book of pharmacology, and it is not easy to understand why anyone should have considered it worth while to present to English readers a translation of Prof. Spiegel's German ideas. W. D. H.