

know the extent to which the author's own observations have played a part in supplying material for this interesting volume.

A useful appendix has been contributed by the late Dr. William Crooke, in the form of a *questionnaire* on folklore. This enumerates many of the chief topics upon which information is needed, and should prove of considerable service to those residents who are anxious to increase our knowledge of the peoples among whom they live. The field-student should be warned that, in pursuing his investigations, *direct questions* should be avoided at all costs. HENRY BALFOUR.

Our Bookshelf.

Geschichte der Rübe (Beta) als Kulturpflanze von den ältesten Zeiten an bis zum Erscheinen von Achard's Hauptwerk (1809). *Festschrift zum 75jährigen bestande des Vereins der Deutschen Zuckerindustrie*. Von Prof. Dr. Edmund O. von Lippmann. Pp. vi + 184. (Berlin: Julius Springer, 1925.) 12 gold marks.

PROF. E. O. VON LIPPMANN, Director of the Zucker- raffinerie, Halle, to whom we are indebted for such a vast quantity of accurate information upon the history of chemistry, has now written a book which will interest not only those engaged in the sugar industry, but also botanists, chemists, and agriculturists. It is unnecessary to say that this latest production is characterised by the same sound scholarship and exhaustive research which marked the "Entstehung und Ausbreitung der Alchemie."

The earliest mention of the mangold appears to be in the "Acharnians" of Aristophanes (455-388 B.C.?). It is described by Theophrastus in the "Historia plantarum," and was certainly cultivated by the Greeks. Among the Romans, again, the plant was well known and is mentioned by Cicero, Catullus, and others. Since species of Beta grow wild on the North African shores of the Mediterranean, it is possible that turnips and mangolds may have been known to the ancient Egyptians. Whether this is so or not, they were common in Egypt at the time of Alexander the Great (333 B.C.), and are often mentioned by the Alexandrian alchemists of the third to fifth centuries A.D.

In later times, turnips, mangolds, and beetroot were all widely cultivated, and Prof. Lippmann takes his story up to the beginning of the nineteenth century. Although he modestly says of his book, with Luther, *Exemplum vobis dedi ut plura faciatis*, he has obviously searched the available literature with great care.

E. J. H.

Coal and Civilisation. By Prof. Edward Charles Jeffrey. Pp. xvi + 178. (New York: The Macmillan Co., 1925.) 10s. 6d. net.

THIS work may be considered as consisting of two parts, namely, a description of coal, its origin and structure on one side, and the application of coal in the service of mankind on the other. The former is of great interest and contains much novel matter, as might be expected from so distinguished a botanist as Dr. Jeffrey. The second theme is, however, very indifferently handled and forms a sad contrast to the former. Dr. Jeffrey

has evidently failed to appreciate the real effect of coal upon the history of civilisation; thus he repeatedly urges that British supremacy in the eighteenth century was due to the application of mineral fuel to the smelting of iron, but entirely overlooks the far greater issue, namely, that almost simultaneously the steam engine was developed in Great Britain, thus for the first time pressing latent energy into the service of mankind, which had up to then been forced to rely upon kinetic energy only. The author's technical knowledge of the subject is also not so sound as it might be. For example, he states that brown coals are treated "by briquetting with suitable binding media," whereas the chief value of brown coal lies in the fact that it is capable of being briquetted without the use of a binder.

In respect of the structure of coal and of the plants that enter into its composition, the views of Dr. Jeffrey are important and instructive; it may, however, be suggested that he seems inclined to put too much stress upon the fresh-water origin of coals and to have somewhat neglected the evidence of marine conditions. It might have been expected that the Delta theory of Fayol would have received some attention; Dr. Jeffrey is a convinced supporter of the view that coal is the product of plant remains transported to the waters in which the organic matter was deposited, but scarcely deals effectually with evidence contradicting that view, such as that afforded by the existence of under-clays with stigmarian rootlets.

An Introduction to Psychology. By Prof. Hugh A. Reyburn. Pp. v + 324. (Cape Town: Maskew Miller, Ltd., n.d.) n.p.

THIS is an attempt to compress a protean subject into 316 small pages, and, on the whole, a successful one. The fact that a well-chosen and comprehensive bibliography of 52 works follows the 16 chapters shows that the author recognises that his "Introduction to Psychology" is an introduction and nothing more, but it is no mere summary of what is already known, being very definite as to points of agreement with, and dissent from, other authorities.

The introduction of new terminology, always to be feared when opening a work on psychology, is avoided, and where there would otherwise be the possibility of doubt as to the application of any term, the context renders the meaning intended unmistakable.

Prof. Reyburn defines his subject as "the science of immediate experience." He does not, however, deal with objective manifestations to the neglect of the subjective, but attaches a good deal of importance to introspection. All that is most valuable in modern psychological schools of thought has been utilised or incorporated, but the extremist views of Freud and the behaviourists are not supported. A fear is expressed in the preface that the section containing an account of the nervous system may prove too long, but a closer condensation than the succinct summary given would scarcely be possible. Indeed, an amplification of the paragraph dealing with the cerebral cortex would be a desirable addition to future editions. It is rather remarkable that in a work on psychology containing much clear reasoning and sound judgment, the terms reasoning and judgment are not given even an indical reference.