who will appreciate it are medical men in practice as Medical Officers of Health, many of whom find guidance in this connection necessary occasionally.

"Hewlett and Nankivell," as the book will inevitably be called, is certain of a great welcome, and equally certain to be classed as good. The feeling cannot, however, be escaped that it would have been better if the authors had avoided the faults in style to which reference has been made. In the second edition, which, no doubt, will soon be required, an opportunity for dropping some of the more lurid of the descriptive matter will occur, and it is to be hoped that the space thus released may be utilised for the presentation of some illustrations in addition to, or even in place of, a number of the charts and diagrams which alone adorn the present edition.

Non-Ferrous Metallurgy.

Handbook of Metallurgy. By Prof. C. Schnabel. Translated by Prof. H. Louis. Third edition, revised by the translator. Vol. i., *Copper—Lead—Silver—Gold.* Pp. xxi+1171. (London: Macmillan and Co., Ltd., 1921.) 40*s.* net.

THIS well-known work on the metallurgy of the non-ferrous metals was first made available to the English metallurgist in 1898 by Prof. H. Louis. At that time there was not, in the English language, a complete treatise on this branch of the subject, and it was at once recognised that the book was an addition to our literature. The fact that Prof. Louis had rendered metallurgists a valuable service receives confirmation in the demand for a third edition. In preparing this new edition, Prof. Louis wisely decided to bring the work up to date himself, and not to wait for the publication of the third German edition, for, as he states in the preface, "all the important modern improvements in metallurgical practices are to be found in English-speaking countries."

A work of this kind, which covers such a wide field, takes considerable time to revise, and the war, having intervened during its preparation, has prevented some of the more recent developments from being recorded; but, in spite of this, the book will be found to be most useful and to have distinct value.

The volume which is now published deals with the metallurgy of copper, lead, silver, and gold. The original form of the work is still maintained, but the previous edition has been increased by about forty-five pages. The actual addition of new matter is greater than is represented by this increase, for obsolete processes have been deleted. Considering the progress made in recent years, it is evident that Prof. Louis has had a difficult task in including the descriptions of modern methods without seriously increasing the size of the volume. For this reason the cutting down of the older processes might perhaps have been somewhat more drastic. Some of the processes described under silver, and also the "chlorination process" for the extraction of gold, have not a wide application at the present time, and are scarcely worthy of the space they have been allowed.

Besides the general revision, the section on calcination furnaces in the part on copper has been extended, the chief furnaces being described; also a concise description of the blast-roasting of copper ores is given, and the section on the Bessemer process of copper extraction has been enlarged. Among the additions made under lead are: The Savelsberg process, blast-roasting without lime, pot-roasting, and down-draught sintering processes. The part devoted to gold has received much attention, and has been improved by a clear and, in the space available, complete account of the cyanidation process—fine-grinding, various methods of classification, and the "all-slime process" being included.

There are two points open to criticism. In regard to the original matter, no indication is given that any of it has become of less practical value; consequently, students may receive the impression that some of the older processes are as important as, or even more important than, some of the chief modern methods. Moreover, the retention of a statement such as "the more recent form of" made in connection with the description of a plant which was given in the first edition twenty-three years ago is liable to be misleading.

The volume, as a whole, is comprehensive and accurate, and can be recommended with confidence. Prof. Louis is to be congratulated on having prepared this new edition and brought the book up to date. It is a pity that most readers will not be able to determine which is really the translator's work and so to judge of its excellence.

E. C.

The Confidences of Men of Science.

The Purple Sapphire, and other Posthumous Papers. Selected from the Unofficial Records of the University of Cosmopoli by Christopher Blayre. Pp. x+210. (London: Philip Allan and Co., 1921.) 7*s.* 6*d.* net.

THE author—or, to be more accurate, the editor—of this fascinating but blazingly indiscreet volume refers to NATURE as "that