Short Reviews

(1) *Fortschritte der Biochemie.* Teil 2 (1924–1931). Von Prof. Dr. Felix Haurowitz. (Wissenschaftliche Forschungsberichte, Naturwissenschaftliche Reihe, herausgegeben von Dr. Raphael Ed. Liesegang, Band 26.) Pp. x + 152. (Dresden und Leipzig: Theodor Steinkopff, 1932.) 11 gold marks.

(2) *Les problèmes de la biochimie moderne.* Par Prof. G. Florence et Dr. J. Enselme. Pp. 312. (Paris: G. Doin et Cie, 1932.) 45 francs.

(1) THIS small book is a comprehensive review of biochemical literature during the period 1924–1931; it is a continuation of Part I. (1914–1924). An index mentions 900 authors, and more than one thousand papers must have been referred to, so that little of importance has escaped. The size of the book has imposed considerable brevity (wave mechanics are treated in a single page); hence it is scarcely a continuation of older textbooks, as the preface seems to suggest, but rather a valuable guide to the recent literature, which every biochemist should possess. There is even a useful final section on methods. Robinson on p. 14 should be Robison, and on p. 28 we are referred to a formula on p. 00 which does not seem to have been included anywhere.

(2) The title suggests a resemblance to the preceding, but a study of the contents reveals considerable differences. The French authors include older work and often little that is recent. Thus the section on muscle metabolism does not extend beyond 1928, and seems actually based on the junior author's M.D. thesis of 1924; it is consequently completely out of date. The sections on hæmin and chlorophyll are likewise antiquated. The range is smaller than that of the German book, and even those topics which have been selected are often treated inadequately, for example, the sterols. The section on carbohydrates is among the more satisfactory. Sometimes there is considerable detail; thus the (old) method of preparing glutathion (still a dipeptide) is described at great length, and the mathematical theory of Svedberg's ultracentrifuge is included, so that the book has its occasional uses. It is marred by numerous misprints. There is not only disregard for the spelling of proper names (Lotter-Maser; Deloye and Scherrer in the text, Debye and Sherrer in the index); such mistakes are merely inartistic to foreign eyes, but when it comes to Year instead of Goodyear, and the page of the journal is also wrongly quoted, these mistakes become distinctly inconvenient. G. B.

Across the Gobi Desert. By Sven Hedin. Pp. xxii + 402 + 67 plates. (London: George Routledge and Sons, Ltd., 1931.) 25*s.* net.

THIS volume is the English edition of the account, originally published in Sweden, of Dr. Sven Hedin's great expedition to the Gobi Desert, or rather of the first stage, which in the winter of 1927–1928 brought him to Urumchi. The author considers this the greatest expedition of his life; and it was certainly a marvel of organisation and equipment. Unfortunately, it was impossible to carry out one part of the programme. At Urumchi the governor of the Province of Sikiang refused to allow the eight German airmen to fly over the inaccessible parts of the desert and they had to return home. In other branches of investigation, but especially in geology, geography, and archæology, the expedition has achieved some remarkable results, of which the scope is outlined in this book.

In the summer of 1928 Dr. Sven Hedin returned to Sweden to raise funds for the continuance of the work, and the expedition then became a joint Sino-Swedish undertaking with a staff of Chinese scientific workers and students collaborating with the European members. The author speaks in high terms of praise of his Chinese colleagues, both in regard to their scientific work for the expedition and in reference to his personal relations with them. Although it may be inferred that there have been difficulties in his dealings with the Chinese, Dr. Sven Hedin has no criticisms to offer; and indeed in so far as he might be cited as a witness on the question of friction between Europeans and the Chinese authorities, he would seem to suggest that in some cases at least the Europeans rather than the Chinese are to blame. He is, of course, referring only to matters in which the interests of science are affected.

The interval which has elapsed before the publication of the English edition of his book has enabled the author to add chapters dealing with the discoveries which have confirmed the fact of the diversion of Lop Nor Lake to its ancient bed after five hundred years, and to give its exact position as determined by members of the expedition in April 1931.

An Introduction to the Mathematics of Map Projections. By R. K. Melluish. Pp. viii + 145. (Cambridge: At the University Press, 1931.) 8*s.* 6*d.* net.

THIS book, in the earlier chapters, traces the history of projection, and presents an account of the general theory, together with deductions. Then follows a chapter on the theory of the indicatrix and the method of comparing one projection with another; next the question of finite measurements and the errors of finite representation. The last chapter is concerned with the selection, from mathematical considerations, of the best projection for a given country. The work is both useful and interesting, although not a complete treatment, even on the mathematical aspect of this subject. The title must not be taken to mean that the mathematics are therein explained. The reader will soon discover that it is assumed he has a fair knowledge of calculus to enable him to work out many details. The author has made no concessions to weaker mathematicians.

The book is "the outcome of a mathematical essay on maps written at Cambridge in 1922" The author was later influenced by Mr. A. R. Hinks and by the late Mr. A. E. Young's work on the "Minimum Error".