American periodicals, 24 French, Belgian, and Swiss periodicals, 21 German and Dutch, and 2 Italian periodicals. It must not, however, be assumed that the " Index " is complete, even as regards English and American periodicals; for in order to avoid overlapping, and also to restrict the size, no attempt has been made to index periodicals covered by certain named publications, such as *Science Abstracts*, sections A (Physics) and B (Electrical Engineering), *Journal of the Society of Dyers and Colourists*, *Revue de Géologie, Minéralogie et Crystallographie*, etc.

We do not think that the exclusion of papers already indexed in publications readily accessible to the scientific investigator will be considered a disadvantage. In any event, the " Index " for 1929 contains references to some 24,000 articles arranged under alphabetical subject headings. Verse and fiction are excluded from this catalogue.

The general editor is Mr. E. E. G. Tucker, who has been assisted by a very large number of voluntary contributors, including the chief librarians and staffs of a large number of important British libraries.

Astronomy : an Introduction. By Prof. Robert H. Baker. Pp. xix + 521. (London : Macmillan and Co., Ltd., 1930.) 16s. net.

THIS book is intended for use as a text in introductory college courses in astronomy. It covers a very wide field, but the subject is so large that, in spite of the considerable size of the volume, only the most cursory treatment of the material is possible. Problems of practical astronomy, as the preface states, have for this reason been almost entirely excluded. Bearing this general and inevitable characteristic of the book in mind, it may be recommended as a thoroughly sound and well-constructed textbook, as far up to date as the time of publication allowed, and enriched by a large number of excellent, well-chosen, and well-reproduced illustrations. It demands little previous knowledge of physics or mathematics, and is clearly and interestingly written.

The economy in expression is well exemplified by the title. Roughly about half the book is devoted to the solar system and the remainder to the stellar universe—perhaps a fair distribution of space among applicants to consideration whose claims are of such widely different character. As a reference book it will be of value to a much larger public than that formed by elementary college students. The only point of criticism serious enough to refer to relates to the method of numbering the paragraphs. Each paragraph is indicated by the number of the chapter containing it, followed, after a dot, by the serial number of the paragraph in that chapter; for example, 11·16 is the 16th paragraph in chapter 11. This is quite clear when the system is grasped (it is not explained in the preface), but the dot is so reminiscent of a decimal point that one would naturally expect to find 11·16 before 11·3, and accordingly may fail to locate a reference. This defect should be remedied in some way in future editions.

A Manual of the Slide Rule : its History, Principle and Operation. By J. E. Thompson. Second printing. Pp. vii + 220. (London : Chapman and Hall, Ltd., 1931.) 5s. net.

MANY users of the slide rule will be surprised to find that it can provide enough material for a book of 220 pages.

The first of the five chapters is perhaps the most interesting ; in it the history of the slide rule is given in full. Most of the information in Chap. ii., which deals with the elementary theory and operation of the slide rule, will be familiar to many users of the instrument.

The remaining chapters of the book deal with special forms and typical settings of the slide rule. In this part of the book the solution of right-angled and oblique triangles is explained. This particular use of the slide rule is of special interest in gunnery and the solution of the *BOT* triangle might have been included. Incidentally, the solution of triangles deserves a place in Chap. ii., for most readers will be more interested in the first two than in the remaining chapters.

The Treatment of Chronic Deafness by the Electrophonoïde Method of Zünd-Burguet. By Dr. George C. Cathcart. (Oxford Medical Publications.) Second edition. Pp. xiii + 111. (London : Oxford University Press, 1931.) 5s. net.

THE successes obtained by Dr. Cathcart in the treatment of 665 cases of deafness by re-education are of peculiar interest to otologists and to patients with this crippling affliction ; he obtained definite improvement in three-quarters of his cases of nerve-deafness, two-thirds of the cases of chronic otitis media, and in a half of the cases of otosclerosis. The treatment involves one or two exercises of five minutes' duration daily. He used the electrophone as the source of sound ; this is an electro-mechanical oscillator of the vibrating reed type, with controls for variation of pitch and intensity. Nowadays, an audio-frequency oscillator incorporating two or more thermionic valves would be found easier to handle, but the arrangement of the exercises might well follow the plan of Dr. Cathcart, which has already proved so successful.

An Elementary Course in General Physiology. Part 1 : *Principles and Theory.* By Prof. G. W. Scarth. Part 2 : *Laboratory Exercises.* By Prof. F. E. Lloyd and Prof. G. W. Scarth. Pp. xxi + 258. (New York : John Wiley and Sons, Inc. ; London : Chapman and Hall, Ltd., 1930.) 13s. 6d. net.

THE best avenue of approach to the study of biology and medicine is by way of the physical chemistry underlying the general principles of plant and animal physiology. For students who have not had the advantage of a preliminary training in physical chemistry, the first part of this book, which is written by Prof. Scarth, will just supply the deficiency. The second part of the book, under the combined authorship, provides a course of carefully planned laboratory exercises in general physiology suitable for class use.