

are mainly due to the great encouragement given by the manufacturers to mathematical and physical research. In this volume Mr. Beaver discusses the materials used in the manufacture and the design of electric cables. An excellent résumé is given of the latest practice and the most modern theories which are used in design.

So far as conductors are concerned, aluminium seems to be coming to the front. A very careful comparison is made of the relative properties of conductors. It is pointed out that for conductors of equal resistance, aluminium conductors are only half the weight of copper conductors. Hence as the price of aluminium per pound is less than double the price of copper, aluminium conductors are indicated for many purposes. During the War, Germany was very short of these metals and so invented a method of producing zinc in the form of a ductile wire, but its low melting-point renders the soldering of joints with this material a very difficult operation. The increasing use of high pressures has made very elaborate researches on the properties of dielectrics necessary. The author describes many of these problems. Reference is made to the use of vulcanised bitumen as an 'ozone-proof' covering for rubber dielectrics. We can recommend this book.

*Rambles in Vedânta.* By B. R. Rajam Aiyar. Being a Collection of his Contributions to the *Prabuddha Bhârata*, 1896-98. Pp. xlvii + 888. (London: George Allen and Unwin, Ltd., 1925.) 12s. 6d. net.

RAJAM AIYAR, scholar, poet, and philosopher, was born in 1872 at Batlagundai, a village in the Madura district. He entered the Christian College, Madras, in 1887, graduating in 1889, and attended the Law College for three years. He then devoted himself for a time to letters, but later turned to philosophy and religion. After a period of preparation he took up what can only be described as the rôle of an evangelist. He founded a monthly magazine, *Prabuddha Bhârata*, which ran for two years with some success, but was brought to an end by his premature decease at the age of twenty-eight years. This brief sketch of his career is necessary for a just appreciation of this reprint of some of his work. In "Rambles in Vedânta" we have a number of the articles, poems, aphorisms, essays, and tales which he contributed to the magazine, both under his own name and under various pseudonyms. He himself describes them as an exposition of the principles of the ideals of the Vedânta which he aimed at presenting in their purest and simplest form, removing the misconceptions and mysticism which had gathered round them. He had studied arduously the Upanishads, the Gita, and the work of Sankara to this end. But his interpretation was peculiar and individual; and his work shows that he had been strongly influenced by his reading in English literature, of which he had a real and keen but critical appreciation. If, therefore, his guidance in Hindu philosophy and religion can be accepted only with some reserve, the book is none the less valuable to Western readers as affording an insight into a personality which could perhaps have been produced nowhere but in the India of the end of the nineteenth century.

*The Pathology of Tumours.* By Prof. E. H. Kettle. Second edition. Pp. viii + 285 + 4 plates. (London: H. K. Lewis and Co., Ltd., 1925.) 12s. 6d. net.

THE second edition of Prof. Kettle's book is arranged on the plan of the first, with the addition of many new diagrams and some revision of the text, particularly in the section on the general biology of tumours. The substitution of drawings for many of the photographs contained in the previous edition is a welcome improvement, since to the student entering on the study of pathology photographs are rarely satisfactory. The inclusion of a chapter on treatment is unusual in a volume of this type, but it is not altogether out-of-place, and a correlation of pathology and therapeutics enables the student more readily to grasp the general principles of both these branches of medicine.

Prof. Kettle's brief summary of the experimental study of cancer is excellent. He recognises fully the value of research work on the tumours of fowls and animals, considering it proved that the criteria by which we recognise a malignant tumour in mankind hold good in the mouse and other creatures. The work of W. E. Gye raises questions of the first moment, and "the parasitic nature of, at any rate, one form of malignant growth would seem to be proved."

The book is very well illustrated and indexed, and for medical students is ideal as an introduction to the subject of neoplasms and to the study of pathology in general.

*A Text-Book of Inorganic Chemistry.* Edited by Dr. J. Newton Friend. Vol. 3, Part 1: The Alkaline Earth Metals. By Dr. May Sybil Burr (*née* Leslie). (Griffin's Scientific Text-Books.) Pp. xxvi + 346. (London: C. Griffin and Co., Ltd., 1925.) 20s. net.

THIS part of Dr. Friend's "Inorganic Chemistry" deals with the triad of alkaline earth metals (calcium, strontium, barium) and with radium and its compounds. It contains an immense amount of detail, as is indicated by the fact that the footnotes include on the average at least one reference for every three or four lines in the text; but for this very reason the book is much more suitable for use as a work of reference than for continuous reading. In accordance with general policy, illustrations have been restricted to half-a-dozen equilibrium diagrams, and no figures are given of the plant used to manufacture products such as calcium carbide, cement, or glass. Special attention has been paid to agricultural questions arising out of the use of calcium cyanamide and of calcium phosphates as fertilisers.

*La lumière et les radiations invisibles.* Par Prof. A. Boutaric. (Bibliothèque de philosophie scientifique.) Pp. 284. (Paris: Ernest Flammarion, 1925.) 10 francs.

THIS book gives a somewhat popular and non-mathematical survey of the theories of light and the phenomena of radiation. It embraces a very wide range of phenomena, including, for example, the colour of the night sky, the pressure of light and its cosmic importance, and the behaviour of a ray of light passing through a gravitational field. The final chapter deals with the ether and is very well written; the more difficult experiments associated with the ether are described in an appendix.