identical with that of the painting of the sorcerer of Trois Frères and his attendants.

Notwithstanding these points—suggestions for consideration rather than criticisms—Dr. James's theories cannot be lightly dismissed. He is to be congratulated on a bold attack on an intricate subject.

Photoelectric Cell Applications: a Practical Book describing the Uses of Photoelectric Cells in Television, Talking Pictures, Electrical Alarms, Counting Devices, etc. By R. C. Walker and T. M. C. Lance. Pp. viii+193. (London: Sir Isaac Pitman and Sons, Ltd., 1933.) 8s. 6d. net.

VERY few physicists who can recall experimental work on photoelectricity a quarter of a century ago could have anticipated the remarkable developments and practical applications which have since occurred. In this book, the authors, who are connected with the Research Laboratories of the General Electric Company, have described some typical examples of the applications of the photoelectric cell. Thus their work may be regarded as the complement of "Photoelectric Cells" by Campbell and Ritchie (Pitman). They have dealt exclusively with the alkali metal cells with which they have most acquaintance, and emphasise the distinction between the older type 'mass' layer cathode and the more modern 'thin film' cathode. They state that, so far, the caesium on silver oxide cathode has proved to be the most efficient for general purposes.

The wide range of the applications of such cells may be indicated by mentioning some of the chapter headings:—counting and timing gear, alarms, advertising, talking films, photo-telegraphy, television, and scientific instruments. "The photo-cell partnered by the thermionic valve or the grid glow tube will undoubtedly play a great part in future industrial development."

The book may be recommended to all who are interested in the technical applications of scientific principles.

H. S. ALLEN.

Union Académique Internationale. *Catalogue des manuscrits alchimiques grecs. 4: Manuscrits d'Allemagne, d'Autriche, de Danemark, de Hollande et de Suisse.* Décrits par le Dr. G. Goldschmidt. Pp. xxvi+447. (Bruxelles: Union Académique Internationale, 1932.) 30 belgas.

WITH the present volume, the publication of which has been much delayed, the seven volumes of the catalogue proper stand complete. Besides the catalogues indicated in the title, the volume contains a reprint of the famous account by Reinesius of the inferior Gotha MS., published in Latin by Fabricius ("Bibliotheca Græca", Hamburg, 12, 748; 1724) but now presented again in the original rather rugged German; also a continuation of the polemic of Lagercrantz with Reitzenstein, carried over from vol. 2.

Since the full texts of nearly all the treatises entered in the catalogue, from better MSS. than

any of those described, have long been available in the edition of Berthelot and Ruelle, which gives variant readings, the present work is mainly of bibliographical interest. Dr. Goldschmidt has added an interesting preface (in German) which gives information as to the origin of some of the manuscripts. The volume is one which possessors of the parts of the Catalogue previously published will wish to add to the series.

Primitive Arts and Crafts: an Introduction to the Study of Material Culture. By R. U. Sayce. Pp. xiii+291. (Cambridge: At the University Press, 1933.) 8s. 6d. net.

MR. SAYCE's book is not, as its title may suggest, a descriptive account of the technology of primitive peoples; but it deals with the principles of the study of that subject. It is written primarily to meet the needs of the student, a purpose which it serves admirably, but at the same time it has a broader appeal in its bearing on the outlook generally of ethnological studies. Thus Mr. Sayce points out how technology cannot be considered effectively merely as a question of processes and products, but must take into account environment, both geographical and cultural, including social organisation and religious belief and practice. Not unnaturally, questions of contact and borrowing, as well as 'diffusion', occupy a considerable place in the treatment of the subject matter. On such points as these, Mr. Sayce will be found to be eminently sane and well-balanced.

Organic Chemistry. By Dr. F. Sherwood Taylor. Pp. xii+587. (London: William Heinemann, Ltd., 1933.) 10s. 6d.

THE author has written a sound account of organic chemistry, arranged on familiar lines, and has taken pains to make it accurate and up-to-date. He states that "the requirements of the medical student have been given the first place in deciding upon the matter to be treated". The treatment is, however, much more comprehensive than this aim would imply. The book contains a great deal of material suitable for students reading for an honours degree in chemistry, and is in some respects to be assessed as an advanced rather than an elementary textbook of the subject.

Enchanted Ways. By John Prioleau. Pp. xiv+288. (London and Toronto: J. M. Dent and Sons, Ltd., 1933.) 5s. net.

"ENCHANTED WAYS" is a happily chosen title to express the author's attitude towards the country he traverses in this series of motor runs, planned to cover the most beautiful and characteristic features in the countryside of England and Scotland, to the charm of which he is keenly sensitive in all seasons, winter and summer, autumn and spring. Most of the book will be familiar to, and have been enjoyed by, readers of the *Observer*; but its appearance in permanent form deserves to be noted.