

Laboratory Investigations into Psychic Phenomena
By Hereward Carrington. Pp. 255 + 25 plates.
(London: Rider & Co., n.d.) 15s. net.

THIS volume is a useful handbook for those psychological researchers who want to have by them a well-documented and fairly critical account of the attempts that have been made to bring so-called supernormal phenomena into the laboratory and to subject them to tests made by instruments of precision.

After a brief historical introduction the author continues by describing the results of his own experiments, which consisted for the most part of an investigation of the validity of the instrumental tests which had been devised in the past. It is in this section that we meet again with the rather pathetic attempts to demonstrate such alleged phenomena as special human radiations proceeding from hands or eyes; the effect of the will on material objects; or some sort of instrumental communication with the spirit world. In his experiments, designed to repeat the results claimed by earlier enthusiasts, Mr. Carrington met with but little success, and he points out how, in a number of cases, the previous results may have been due to mechanical defects in the apparatus employed, to faulty procedure during the experiments, or more likely still to a false interpretation of the readings given by the various devices.

In trying to repeat many of these attempts Mr. Carrington has done a useful work, and the record here printed, even though largely negative (and indeed because of it), will be found to be a wholesome corrective to those who follow in the path of his predecessors, and again attempt to introduce dynamoscopes, magnetometers, sthenometers, volometers and the rest.

TECHNOLOGY

Photography, its Principles and Practice
A Manual of the Theory and Practice of Photography.
By C. B. Neblette. Third edition. Pp. xi + 590.
(London: Chapman & Hall, Ltd., 1939.) 30s. net.

ALTHOUGH photography enters very largely into all branches of scientific research, many investigators have only the most rudimentary knowledge of the characteristics of the materials with which they work. No doubt much time and trouble might have been saved had that information been available at the time of experiment. This well-known book—now in its third edition—is just the kind of manual for a scientific worker who is not specially interested in the theory of photography, but who desires a proper scientific account of all the processes of photography in order that he may use the tool to the best possible advantage.

The volume deals with every phase of photography, beginning with the camera and its optical system, emulsions, latent image and sensitometry. The whole of processing to the finished print is given in detail. Even the less usual types of printing process are described in such a manner that they may be practised. Colour photography is dealt with, but in less

detail. One very good feature of the book is the system of quoting references. The necessary references immediately relevant to the text are given, but in addition there is on nearly every page a series of references to general articles so that any given topic may be followed up in the photographic literature. 'Neblette' is therefore a useful addition to the library of anyone having to practise photography in a scientific laboratory. It is no less useful to the serious amateur photographer with a limited knowledge of chemistry and physics.

Theory and Design of Valve Oscillators
For Radio and other Frequencies. By Dr. H. A. Thomas. (Monographs on Electrical Engineering, Vol. 7.) Pp. xvii + 270. (London: Chapman & Hall, Ltd., 1939.) 18s. net.

THE thermionic valve occupies a unique place in the field of communication engineering, in which its use in the generation of oscillations is a particularly important aspect.

The present monograph aims at bringing together all the important work which has been done on valve oscillators of the usual types. Particular attention is given to a detailed theoretical examination of the factors which affect the character of the oscillation. Here, then, one finds, after a preliminary survey of fundamental principles, chapters devoted to efficiency, wave-form and frequency of oscillator systems. In dealing with frequency, the treatment is very full. The frequency changes induced by time changes in the oscillatory circuit itself are given the importance they deserve in a scientific presentation of the subject. Finally, the question of frequency stability is surveyed in all its ramifications.

Dr. Thomas has presented his subject in a clear and ordered way. Due to his expert knowledge, he is able to lay bare the core of a problem with a conciseness that is admirable. This is a book which radio engineers, particularly those on the research side, will find really helpful.

L. J.

A Handbook on Ventilation, including Air Conditioning
By Percy L. Marks. Pp. viii + 138 + 1 plate. (London: The Technical Press, Ltd., 1938.) 7s. 6d. net.

THIS short treatise is not concerned with theories but confines itself to established facts and usage and, in some cases, expresses the views of consulting engineers and manufacturers recognized as experts. The author has adopted a discursive style and, after presenting the general considerations, goes on to describe the several methods employed in various circumstances and the fittings and material used. On the activities of dry rot some valuable information is given, and there is a chapter of ventilation suggestions for different classes of buildings which should prove useful. While the book does not go nearly far enough into detail to constitute an independent guide, it would make a valuable addition to a more formal text-book by reason of the numerous practical ideas it contains.