

did win". This idea and its expression are typical of the general tone of the poems, face to face with ultimate questions. It cannot be said to be satisfying or even encouraging to the further clear and steady pursuit of truth. But it stirs one to a world of rather conflicting thoughts and ideals. At one time the thinker is led to picture the Golden Age of peace and happiness in the remote and purely imaginary past before "Man the Arch-Slayer" arose in his might. Nowhere does he lead our thoughts to a future earthly ideal built up by science. For poets of that temper we must, it seems, wait a little longer, until more of the present tempest is overpast.

F. S. M.

The Road to Modern Science

By H. A. Reason. Pp. xii + 306 + 24 plates. (London : G. Bell and Sons, Ltd., 1935.) 6s. net.

ONE of the most important needs of the present day is the acquisition by the ordinary citizen and the statesmen alike of an adequate general scientific knowledge as a background for the problems with which they are both confronted and the decisions they are called upon to make in this scientific age. An essential step to that knowledge is an understanding of the way in which science has reached its present position in the sum of human knowledge and culture. In this book, Mr. H. A. Reason gives a very competent account of the way in which the present structure of scientific knowledge has been built up and of the contribution of individual men of science from the times of Thales, Pythagoras and Hippocrates onwards. He has a sense of values, and his account of the development of the individual sciences from the time of Newton, without being superficial, is never unbalanced or too detailed, and his final chapter on the present day, if brief, is adequate and accurate. Although written primarily for young people, the book is never childish and has equal claims to a place in reading and courses of general science which form an indispensable element in the training of the adolescent for citizenship to-day and in those courses of adult education which endeavour to rectify the gaps in older and more inadequate curricula.

Training in Industry :

a Report embodying the Results of Inquiries conducted between 1931 and 1934 by the Association for Education in Industry and Commerce. Edited by R. W. Ferguson. Pp. xi + 156. (London : Sir Isaac Pitman and Sons, Ltd., 1935.) 6s. net.

MR. R. W. FERGUSON in "Training for Industry" presents a well-documented account of various training and educational schemes which have been introduced by certain important business concerns. It deals mainly with training facilities provided by the firms themselves, rather than those provided by universities, colleges and technical schools. The book suffers from the defects of the method by which the material has been collected—it is based on the answers to inquiries conducted by the Association for Education in Industry and Commerce. Though its scope is limited to describing those schemes of which particulars were obtained, it should serve a useful

purpose in giving some idea of the amount of educational and training work which is being quietly undertaken in Great Britain by industry itself. A valuable feature is the inclusion of fourteen detailed appendixes relating to specific educational schemes which have been introduced by various large firms or industries.

The author shows that industrial training and education is carried out in various ways, including day continuation schools or their equivalent within the works ; evening studies at technical schools coupled perhaps with incentives to encourage regular attendance or steady work ; provision of lectures, group meetings, discussion circles or conferences within the factory ; and trainee or pupilship schemes. Little, however, is said about training for higher administrative posts.

K. G. F.

Handbook of the Heavens

Sponsored by the American Museum of Natural History. Editors : Hubert J. Bernhard, Dorothy A. Bennett, Hugh S. Rice. Pp. xvi + 131. (New York and London : McGraw-Hill Book Co., Inc., 1935.) 5s. net.

THIS volume, produced by members of the Junior Astronomy Club at the American Museum of Natural History, is written by enthusiasts for their hobby, and is intended to appeal to equally enthusiastic amateurs.

It is admirably adapted for its purpose. The star maps (for both hemispheres) are not overloaded with detail, and the directions for "Exploring on the Moon" similarly concentrate on the broader features. Other sections deal with the planets, the sun, double and variable stars, nebulae and clusters, meteors and comets, asteroid hunting, telescope usage and amateur photography.

An interesting feature is a series of maps showing *dotted* paths of the planets among the stars. By combining the information given in these charts with that given in the constellation maps, it is easy to locate the position of a planet. Altogether, this is a volume to be recommended.

A. F.

Physics

A Textbook of Physics

By E. Grimsehl. Edited by Dr. R. Tomaschek. Authorized translation from the seventh German edition by Dr. L. A. Woodward. Vol. 5 : Physics of the Atom. Pp. xiii + 474. (London, Glasgow and Bombay : Blackie and Son, Ltd., 1935.) 17s. 6d. net.

THIS volume, completing a series of text-books, preserves the almost unique character of its complementary numbers in presenting, in a setting usually associated with an advanced treatise, an encyclopaedic elementary survey of atomic physics, the experimental side predominating in range rather than in detail, with a limited amount of mathematics simplified to the extreme. The order and scope may be indicated in the broadest terms as an exhaustive subdivision of the general chapter headings : electrical structure of matter ; the nucleus ; light and matter ;