

became inevitable, and Alexander had few difficulties when he invaded the country—nor had his captain Ptolemy after his death. The contacts with outsiders and their ideas following on these foreign conquests of the earlier years of the New Kingdom sapped fatally the strength of the old Egyptian culture.

The volume under review is written by a poet who has studied archaeology, and particularly Egyptology, thoroughly. We get, therefore, the best of both worlds—a knowledge of the available facts and a sensitive appreciation of what old Egyptian life and culture must have been like. The book is not meant for the specialist wanting every detail, but for the informed individual who wishes to realize what life and ideas were like in the remote past in this interesting land. The history of the dynasties is given very briefly in three chapters, but far more pertinent are those on the environment, the Pharaoh, the priest, the aristocrat, the architect, the craftsman and the commoner. There are a number of well-chosen illustrations and the work is an excellent introduction to the study of Egyptology.

MILES BURKITT

"A IS HAPPY—B IS NOT"?

British Scientists of the Twentieth Century

By J. G. Crowther. Pp. xiv + 320 + 8 plates. (London: Routledge and Kegan Paul, Ltd., 1952.) 25s. net.

THE theme of this book may be taken in the author's own words: "The parallelism of trends in biology and physics is noticeable, how the Mendel-Morgan genetics and the prostitution of Rutherford's nuclear physics are seen to flourish in the same place, side by side; and, in contrast, how sounder biological theories, together with beneficent applications of atomic energy, are flourishing elsewhere in great constructive works for the dignity and happiness of man".

This *motif* is varied with studies of the lives and works of J. J. Thomson, Rutherford, Jeans, A. S. Eddington, Gowland Hopkins and William Bateson. Excellent portraits of each of these are used to illustrate the book, and a photograph of Academician T. D. Lysenko also appears. With regard to the last, in view of the title of the book, the reader may well ask "Que diable fait-il dans cette galère?", but a study of the text will soon show why.

The book gives the impression that it is the work of two authors. There is *A*, the gifted writer with a neat and clear style, and with a wide reading in the literature of science, particularly in the biographies and publications of his characters; and there is *B*, the Marxist philosopher, ever seeking an opportunity to despise British intelligence, British institutions and British theoretical physics. Most of the writing is done by *A*, but *B* always has the last word. Some examples will show how this schizophrenic method of biography works itself out.

J. J. Thomson. *A*: "J. J. was not only a teacher and discoverer, he was a creator in the method and organization of research. . . . This world-wide movement of research students to Cambridge was stimulated by the need for science teaching. . . . Unique in the galaxy of J. J.'s collaborators was C. T. R. Wilson. This most admired and Scottish of Scotsmen". *B*: "The cost to mankind as a whole of a leisured life for Newton, Clerk Maxwell and the scores of geniuses who created the subtlety and depth of

the Cambridge tradition was great. . . . It is impossible to overlook the adolescent, uncultivated, unintellectual aspects of his mind and school".

Rutherford. *A*: "Rutherford departed suddenly in the midst of a healthy, happy, triumphant and glorious life". *B*: "An unconsciously tragic social figure".

Jeans. *A*: "Why was Jeans so successful as a popular writer? Because he was clear, vivid, confident". *B*: "The enormous circulation of 'The Mysterious Universe' owed much to its meretricious style and shallow philosophical thought. . . . Somehow or other, though, Jeans extracted £256,000 out of society. . . . The character of his writing for the people, revealed the intellectual bankruptcy of the British educated bourgeoisie".

Eddington. *A*: "He regarded his expositions as harmonious works of art and he made them so. It [Eddington's 'unified theory'] may prove to be the boldest, the most imaginative work of the twentieth century". *B*: "It seems probable that it will prove to be an extreme individualist aberration, a product of the weak side of Quaker solitary quietism and obstinacy, which remained uncorrected through the absence of an adequate system of mutual scientific criticism, because of a defect in social organization".

The reader can take what he pleases; but he may be left wondering how the work of Rutherford and Thomson could have been improved had they had the advantages of "an adequate system of mutual scientific criticism" in that Utopia of social organization so beloved by the author. It is, of course, possible that, instead of their superb achievements in experimental physics, they might only have succeeded in developing electric power and illumination had they been subjected to the demands of the party line; similarly, Faraday might have confined his attention to the improvement of the Leyden jar.

"See how the Fates their gifts allot,
For A is happy—B is not.
Yet B is worthy, I dare say,
Of more prosperity than A".

The Mikado.

W. L. SUMNER

MANAGEMENT AND BIOLOGY OF LIVESTOCK RANGES

Range Management

Principles and Practices. By Prof. Arthur W. Sampson. Pp. xiv + 570. (New York: John Wiley and Sons, Inc.; London: Chapman and Hall, Ltd., 1952.) 60s. net.

THIS book deals with a subject which, on the surface, might appear to have little interest to the British reader, but there is much in the book to interest students of many sciences as well as agriculturists to whom the book is of especial interest.

A vast subject is covered, and it is impossible to deal in minute detail with every section; but great credit must be given to the writer for the way in which he has selected his material, giving just enough of the scientific background to explain each point sufficiently for the practical man and at the same time to allow the student, who may not be so familiar with the practical aspects, to orientate himself. For the latter who wishes to pursue any section further,