

The Avian Egg

By Prof. Alexis L. Romanoff and Anastasia J. Romanoff. Pp. xiii+918. (New York: John Wiley and Sons, Inc.; London: Chapman and Hall, Ltd., 1949.) 84s. net.

PROF. and Mrs. Romanoff have long been widely known as leading authorities on the biochemistry of the avian egg. In this exhaustive book they have brought together all that is known about the physiology of laying, the formation and structure of the egg, its physico-chemical properties, and its employment in the food industry. Although embryological considerations are excluded from the frame of reference chosen, the book will be indispensable for all who are concerned with the biochemistry of development and morphogenesis, since it unfolds the whole panorama of the very complex assembly of chemical substances which have to be made ready by the parent organisms for what one might call 'zero hour'.

The illustrations, many of which have been prepared especially for the work, are clear and excellent. No less than 2,600 references to original literature are assembled, and the index is adequate. Perhaps it is ungrateful to refer to them, but I do not like the somewhat sententious statements of the obvious which are dignified by italics as mottoes at the head of each of the chapters, nor do the symbolic charts (for example, that on p. 490) add anything helpful.

It seems a pity that, in the section on industrial uses, the authors did not include a chapter on the large-scale commercial incubation of eggs in the poultry industry, about which they probably know as much as anyone living; but doubtless they are reserving this for a companion volume of another thousand pages. In a second edition, it would be desirable either to expand the treatment of the place of the egg in folk-lore and philosophy, or else to delete the last few pages on "traditional uses" of eggs, which are trivial and form an anti-climax to an otherwise worthy work. JOSEPH NEEDHAM

Logical Positivism and Ethics

The Symposia read at the Joint Session of the Aristotelian Society and the Mind Association at Durham, July 9-11, 1948. (Aristotelian Society, Supplementary Vol. 22.) Pp. iv+215. (London: Harrison and Sons, Ltd., 1948.) 21s. net.

THESE essays are characteristic of the Symposia Reports issued from time to time by the Aristotelian Society. In this case they emanate from a joint session with the Mind Association. While not professing to settle anything, they are the result of philosophers thinking aloud among themselves. There are four parts dealing (in brief) with language, the emotive theory, logic, things and persons. In addition, there is an address on the theme of ethics without propositions. This reaches the broad conclusion that moral philosophy can be interpreted in a new way, though the 'risk' of making morality subjective is foreseen.

Prof. K. R. Popper produces the interesting remark that philosophical problems perhaps contain an empirical, as well as a logical, component; Mr. W. C. Kneale, however, is not convinced that this explains what is meant by logic, or how it can serve philosophy. Such are age-long questions, incapable of short answers. Prof. H. A. Hodges makes the valuable point that our present scientific

outlook is probably inimical to a due respect for persons. Some there be that realize this, whereas 'other some' (to recapture a phrase used long ago at Athens) do not.

Dr. J. O. Wisdom is much concerned about the difficulties of 'taking ethics seriously'. But he throws out the intriguing suggestion that certain kinds of science, philosophy and art reveal what is hidden in the obvious. F. I. G. RAWLINS

The Science Masters' Book

Series 3, Part 1: Physics; being Experiments selected from the *School Science Review*. Editors: G. H. J. Adlam, S. R. Humby and G. N. Pingriff. Pp. xviii+318. (London: John Murray, 1950.) 15s. net.

ALL teachers of physics will give a hearty welcome to the new issue of this well-known and extremely useful book, which contains experiments selected from the *School Science Review*, covering the period 1937-45. More than two hundred experiments are included, and nearly half of these deal with electricity, though all branches of physics are generously represented. In their choice of contributions the editors have certainly moved with the times, for the increase in space given to electricity is accounted for mainly by wireless and the cathode ray oscillograph, an instrument which the editors rightly say will probably be much used in the future in schools. Then again, more space is taken up than in previous issues by notes on the construction of new apparatus. This development of making apparatus has probably been forced upon schools by the war-time dearth of apparatus, and it certainly has its advantages.

Apart from appreciating the help which the book gives to teachers and students, one is struck by the enthusiasm and interest of the contributors—some old, others new—in their jobs, and one feels that while we have men of this calibre the teaching of science in our schools is safe; however, one is tempted to ask, with a certain amount of misgiving, what about the future?

This is an excellent book which should be in the hands of all teachers of physics in all institutions where science is taught.

Rarer Metals

By J. de Ment and H. C. Dake. Pp. xv+345. (London: Temple Press, Ltd., 1949.) 25s. net.

THE original of this is an American book by the two authors named. This has been revised and extended by E. R. Roberts and R. C. Williams, who have added chapters on the rarer alkali metals, calcium, barium, rhenium and boron. In the American book practically only American sources of minerals were mentioned, more important sources elsewhere being completely ignored. This tendency has not been adequately rectified in the present edition, and it very seriously diminishes its value. In other cases where some additions have been made, only foreign materials have been mentioned, as in the case of the alloy steels for permanent magnets.

The book is essentially a compilation and is often uncritical; but it has a considerable value and gives a large amount of information not easily found elsewhere. The older German books, which such American books as this are supplanting, usually took account of work without preoccupation about its country of origin, and for that reason have a permanent value the newer books cannot achieve. J. R. P.