

REVIEWS

Social Studies and World Citizenship. By L. J. F. Brimble and F. J. May. (Macmillan & Co., Ltd., London), 1943. Pp. 158. Price 6 sh.

Not only teachers, but those parents who take more than superficial interest in the spiritual welfare of their children may profit by this wholesome and stimulating book, which aims at social unity and internationality. Adopting Canon Leeson's definition of citizenship as an activity of the personality to secure certain benefits for the community to which the citizen belongs, the authors proceed from the foundation of their thesis to guiding teachers in the application of history, geography, literature and science to a realisation of world citizenship by their pupils. For instance, of history they say that the most important attitude of mind to be gained from its study is the concept of progress through co-operation, and of the retrograde steps which follow aggression and self-seeking.

Geography they recognise as an effective discipline for promoting sympathetic understanding between individuals, and between different groups of individuals. Literature and science, like the arts, are already international, but this aspect of them can be further developed in the direction of biography; and in the case of music by radio. The book is refreshingly free from political bias, and from slogans. Here is no holiday from planning, but in so far as the authors are themselves planners, they seem to know that without goodwill the most elaborate plans are predestined to failure, whilst with goodwill the most artless may succeed. They know also that civic duty begins in the life of the family; and while claiming that the whole of our youth education should have a religious, as opposed to an agnostic background, they would base it on rational observation, not on emotional feelings and mythical beliefs.

Controversy is invited only when dealing with world citizenship in relation to the language problem. Accepting the desirability of an international auxiliary language, they agree with the British Association Committee of 1921 in condemning adoption of any national modern language because it would confer undue advantages and excite jealousy. To some, that might have the air of pandering to the very vice they seek to destroy—supernationalism; because, whatever the attractions of a synthetic language like *esperanto* may be, the fact remains that English is mother-tongue to more people than any other one language, and is already the second language of many millions more. For those who find the British people distasteful there are always the Americans in counterpoise, and the conventional whine about English spelling derives from a widespread misapprehension, namely, that you spell by memory. Actually,

you spell mainly by observation: you know when a word "looks right" and correct it when it "looks wrong". For example, my reactions to the authors' "Leibniz" were (1) it looks wrong, and then (2) the common spelling is "Leibnitz": they did not begin with remembering the common spelling. Thus the habitually reviled English spelling is not so much a super-tax on memory as a vast gymnasium of observational exercise; and incidentally a mine of history. M. O. F.

The Cathode-Ray Oscillograph in Industry.—By W. Wilson, D.Sc., B.E., M.I.E.E. (Chapman and Hall, London), 1943. Pp. 160. 156 Figs. Price 12sh. 6d. net.

Of all the modern instruments which the experimental physicist created for his investigations none has found so extensive and increasing a use in almost all the branches of science and engineering as the Cathode-Ray Oscillograph either in its usual form or with some modifications. It has become an indispensable test instrument in electrical industries. Considering its importance, therefore, not many books have been published on it and the present volume written primarily for the industrial user forms a useful addition to their existing list.

The book consists of 12 chapters and one Appendix. Of these the first three are devoted to a general description of the assembly and a detailed description of its component parts and accessory circuits, their functions and alternative forms. The modern types of the Cathode-Ray equipments as available to the industry are then described at some length—particularly the Cossor and Du Mont sets in the glass tube variety and the Cambridge Oscillograph using a metal tube. Various kinds of tests and observations that can be carried out with these instruments are given with practical examples and records obtained from actual industrial applications in each case.

A chapter is devoted to a description of the electron microscope and the diffraction camera as they are cathode-ray tubes based on the same general principles but curiously one does not find any mention of the Iconoscope or allied tubes. The final chapter gives some constructional details with a view to help the worker carry out any minor repairs. General outlines of vacuum tubes, photoelectric cells and piezoelectric crystals are given in the Appendix.

The book is profusely illustrated with numerous photographic reproductions and neat circuit diagrams.

The treatment is rather concise for the standard of the average worker whom the author has kept in mind; and the worker may find it unclear at some places. Mathematics is avoided to make room for practical aspects.