

Gas Chromatography

By Courtenay Phillips. Pp. x+105. (London: Butterworths Scientific Publications; New York: Academic Books, Inc., 1956.) 25s.

INTEREST in gas chromatography has become widespread in the few years which have elapsed since the development of gas-liquid partition chromatography by James and Martin, and it is already a major undertaking to read all the papers which have been published in this field. With this book, the first monograph on gas chromatography to appear, Mr. Phillips has done a great deal to lighten the task of anyone intending to make use of gas chromatography. There is a valuable theoretical treatment of the subject, a carefully documented survey of most of the recent work in the field, and a useful list of references.

An important feature of the book is the wide range of techniques discussed. Although there is understandable emphasis on gas-liquid partition chromatography, there is also a section on gas-adsorption chromatography, and the use of gas chromatography in the determination of distribution functions is discussed. The short section in which the uses of adsorption and partition methods are compared might, with advantage, have been expanded; and the inclusion of some practical examples would have been helpful. All the diagrams are clear, and carefully chosen; it would have been very helpful to have included a diagram of the Martin gas-density balance, however, for it is difficult to follow a purely verbal description of this instrument without a picture.

The book is confidently recommended to all who are interested in the applications of gas chromatography.

N. H. RAY

Kant's First Critique

An Appraisal of the Permanent Significance of Kant's Critique of Pure Reason. By H. W. Cassirer. (Muirhead Library of Philosophy.) Pp. 368. (New York: The Macmillan Company, 1954.) 30s. net.

THIS book is evidently a very able commentary upon one of the greatest philosophical works of all time. The sub-title is worthy of note, namely, the permanent significance which Kant's masterpiece has for posterity. In the light of his secluded existence at Königsberg and the rigour of his general outlook, it is scarcely to be expected that his successors would find nothing about which to differ. Perhaps to a scientist, the most important point is the justification which the present author finds for the logical dichotomy between the dual aspects of sense-giveness and the impact of the intellect upon what may be presented to it. Kant never thought of them as having a 'really' separate existence. This particular machinery was only introduced in order that some grasp of the nature of perceptual knowledge might follow.

Closely allied to this is the strong case made out by Kant that *a priori* thinking is a pre-requisite for 'knowledge proper'. Dr. Cassirer believes that much is to be gained by an approach of this kind to current problems, rather than by invoking a flood of empiricism. That a fair balance is maintained is illustrated by the writer's rejection of Kant's metaphysical deduction of the categories; but there is probably little need to stress the inacceptable character of his 'supersensible' *Ding-an-sich*, when the mind meets common objects of experience. F. I. G. RAWLINS

The Eighth Plague

By Denys Rhodes. Pp. vii+280. (London and New York: Longmans, Green and Co., Ltd., 1956.) 13s. 6d. net.

ALTHOUGH described by the author as "essentially a work of fiction", this book includes descriptions of locust swarms and hopper bands, of control operations against them with modern methods and, to a lesser extent, of field research, which must be based on first-hand knowledge, as they are extremely vivid and technically correct. The atmosphere in which this minor war between man and insect is waged in "an anonymous African territory" is effectively conveyed, and the personages—locust control officers, research workers and administrative officials—are very much alive and natural. An applied scientist reading the book will be interested in the attitude of practical field-workers to research workers, which is a mixture of amused contempt and carefully concealed respect. Less clearly brought out is the team-spirit during urgent operations; on such occasions, the author over-stresses individual leadership and makes the personages concerned exhibit heroics out of character. The not unusual conflict between scientists attempting to put their cherished ideas into practice and politicians and administrators who regard a particular approach to a problem mainly in the light of its immediate expediency is well presented. The book deserves attention, as it brings to the notice of a wide public, in a very readable form, a striking example of the kind of human problems arising in the application of science to the development of tropical countries.

Extrasensory Perception

Edited by G. E. W. Wolstenholme and Elaine C. P. Millar. (Ciba Foundation Symposia.) Pp. ix+240. (London: J. and A. Churchill, Ltd., 1956.) 27s. 6d. net.

THE sceptics are justified in ascribing much of the most interesting evidence in favour of telepathy and clairvoyance to chance; but this explanation cannot be applied to some of the experiments on card guessing, which have given results that would not have occurred by chance even if the whole human race had done nothing but guess cards from the dawn of history to the present day. Well-known statisticians have found no flaw in the calculations and the results present a challenge to scientists. In May 1955 the Ciba Foundation collected a number of people who might be able to explain the facts or suggest the next step. Parapsychology and psychiatry, magic and mathematics, zoology and the basic medical sciences were all well represented at the discussions, which lasted three days and have now been published. The resulting book contains much interesting information, not only about extrasensory perception, but also about bird navigation and the homing of bees. Many marvellous things can be done by conjuring, and some remarkable performances have been shown to be due to the subconscious interpretation of sensory clues; but the experts at this meeting were convinced that there are some things which cannot be explained in such ways. The main impediment to progress in this field is the fact that it is difficult to find percipients who can give statistically significant results, and much time is inevitably wasted on negative experiments. J. H. GADDUM