

## SCIENTIFIC BOOKS

HEREDITY AND ENVIRONMENT IN MAN<sup>1</sup>

FOR eugenics' progress good stock is essential and its reproduction is to be promoted. But how shall we know good stock when we see it? Certainly, it must be able to breed offspring who are intelligent and who have a socially fitting personality. And we shall know the degree of intelligence and of socially fit personality when we can measure that degree. But even after we have measured the degree the question arises: In how far are intelligence and personality really bred and in how far dependent upon training or, in general upon environment? This is the problem that Mr. Frederick Osborn has set, and the answer is to be found in the volume by Miss Gladys C. Schwesinger.

With incredible industry Miss Schwesinger has sought in hundreds of papers and scores of books material for her answer. The history of mental measurement is traced from its beginning and the modern results skilfully classified and described. The measurement of personality is more difficult, but lines of approach are being followed; and these are fully set forth.

For the problem of heredity and environment recourse has been had to the data from "identical twins" reared apart, on the one hand, and unrelated children reared together, on the other. Of course, a trouble here is that, on account of the selective nature of the individual, twins reared under "dissimilar" environments are making most use of the similar elements in such environments and unlike children placed in the same environment are picking up very different things out of that environment. A similar treatment can not be given to dissimilars; nor, within limits, a dissimilar treatment to identical twins.

Finally, a chapter discusses view-points on personality. This is not quantitative. Here are considered endocrines, psychoanalysis and the views of the behaviorist, Gestalt psychologist, and the social psychologist. This chapter is necessarily somewhat unformed, as our views in this field are yet philosophical rather than scientific.

The book is an excellent guide to a difficult field. The author has been industrious, selective, critical. Of much help will be the bibliographies and recommended readings. Nowhere else, we venture to say, can so comprehensive a survey be found. The book is recommended to all who wish to understand the genetic basis for behavior and the way behavior may be studied.

CHARLES B. DAVENPORT

CARNEGIE INSTITUTION OF WASHINGTON

<sup>1</sup> "Heredity and Environment: Studies in the Genesis of Psychological Characteristics," by Gladys C. Schwesinger. (Ed. by Frederick Osborn), 479 pp. N. Y.: Macmillan, 1933. \$4.00.

## THE PHYLOGENY OF APES AND MAN

*Functional Affinities of Man, Monkeys and Apes. A Study of the Bearings of Physiology and Behaviour on the Taxonomy and Phylogeny of Lemurs, Monkeys, Apes and Man.* By S. ZUCKERMAN. Harcourt, Brace and Company, New York, 1933. Pp. xviii + 203, with 4 figs. and 12 plates.

THIS stimulating and novel attempt to throw more light on the ultimate problem of man's phylogenetic place among the primates ends with the cautious statement: "It is indeed plain that we have still to wait before the fossil record will be able to provide the answer to a question which studies of anatomy and physiology fail to reveal. The available evidence can not even deny the possibility of man's independent evolution from as far back as the Oligocene, and through the Miocene up to the present day."

The author deserves great credit for his courage and optimistic labors in having collected a fair part of the rapidly accumulating recent results of comparative studies on functional characters of primates. In a pioneering enterprise, such as this volume represents, the introductory chapters are of more than usual interest. This can best be indicated by the following few random quotations which reveal the author's critical and frank attitude: "A survey of the literature suggests that present-day morphologists, perhaps because of the greater age of their subject, are more cautious with regard to the phyletic bearings of their work than are students of function." "... the real meaning of taxonomy . . . has in some quarters been narrowed to mean classification on the basis of a few arbitrary structural characters." "... the phylogeny of the Primates is mostly a preoccupation of anatomists with a medical training, whereas animal phylogeny as a general study is a problem of professional zoologists." "The anatomist . . . usually approaches the problem from a totally different angle, long acquaintance with the human form giving him a somewhat unwarranted confidence in the systematics of the *Hominidae*." "... the main result of this arbitrary 'anatomical' treatment of the bony remains of archaic men is that to-day we accept an altogether irrational classification for the family *Hominidae*." "... primate material has a peculiar power of over-weighting the conclusions of its students." After these and many other more or less deserved criticisms of methods and conclusions underlying the ineradicable and confusing controversies in regard to the descent of man the reader is prepared to listen to evidence of a new nature. This the author contributes by specializing in seldom used approaches to the problems of primate classification and evolution. The selection of topics can at present be only very incoherent and is not always restricted to really func-