

A STUDY OF HUMAN RELATIONS

Man the Slave and Master

By Mark Graubard. Pp. x+366. (London: J. M. Dent and Sons, Ltd., 1939.) 10s. 6d. net.

TO-DAY, as never before, the man of science is faced with the problem of the relation of science and society. Science is a powerful weapon for evil as well as good, and it is the business of the man of science to ensure so far as he can that his work is not misused. One of the great difficulties of such a task is that few modern men of science are well informed outside their own fields of work. Still more is the layman ignorant of science, especially in that he is seldom acquainted with that manner of approach which is often termed the 'scientific method'.

Dr. Graubard has set himself the task of helping to remove this difficulty by presenting, in simple terms, an analysis of human behaviour and the composition of society based on biological knowledge. He discusses conditioning, heredity and evolution, both biological and social, and he does it in a way that should commend the book to men of science and laymen alike. He then turns to the application of his knowledge to the scientific control of human affairs, and though at this stage it

is inevitable that some disagreement must arise, his analysis and proposals can be read with profit even by those whose views diverge most.

It is a pity that the book is marred in places by occasional inaccurate and loose statement. In the account of Mendel's work with peas, the round and wrinkled characters of the seed are described as determined by the mother plant's constitution, whereas they are, in fact, dependent on the genotype of the zygote itself. His implications that Mendelian inheritance in animals was first observed in rabbits and that departure from Mendel's second law, of independent assortment, was first found in *Drosophila*, show a lack of appreciation of Bateson's work with poultry and sweet peas. On p. 190, the author says "Hence they [that is, all the races of man] form a species" and on p. 195 "the Negro, who of all the species of man has the least hair". Other similar examples could be quoted.

These are, however, minor blemishes and should not be allowed to obscure the fact that Dr. Graubard has written a valuable book, at once critical and informatory. It should be read by all who are interested in the study of human relations.

K. MATHER.

CONSERVATION OF NATURAL RESOURCES

Conservation in the United States

By Prof. A. F. Gustafson, Prof. H. Ries, Prof. C. H. Guise and Prof. W. J. Hamilton, Jr. Pp. xi+445. (Ithaca, N.Y.: Comstock Publishing Company, Inc., 1939.) 3 dollars.

THE conservation and the restoration of its natural resources are perhaps the most important questions that the United States has to face. These are here divided into sections dealing with the soil, forests, wild life and minerals, especially coal and oil. Each is written by an expert who has researched with the view of ameliorating the present difficulties. Perhaps their most interesting feature is the close connexion, never stressed but everywhere made plain, between purely scientific investigation and the practical problems. This is as it should be, as the work is intended to be a text-book to stimulate students who have already had a broad scientific training.

It everywhere sets out the historical facts, the present position and the possible and desirable remedies so far as the necessities induced by increase of population allow.

While mineral resources may be regarded as waning assets merely to be treated with the greatest economy, the soil and water are as necessary to man's existence to-day as in all ages. Passing over a section dealing with the topography of the country and the consequent production of soil regions of varied productivity, these always associated with water, there arise questions of soil depletion by the loss of plant nutrients and of erosion losses due to wind and rain. The white man found the eastern part of the country unbroken forest which had to be cleared for crops. Organic matter disappeared from the soil so that its surface was carried away by the rainfall, already half the top soil being lost by this means over an area estimated at 855 million acres. Another 322 million acres are