The Columbia Greystone Associates seem to have proceeded throughout in a spirit of empiricism which selects tests and procedures without the benefit of theory. This must be held responsible for the failure of the whole experiment to give positive results; as A. Petrie has shown in Great Britain, suitable choice of theoretical concepts and the selection of experimental techniques based on such theory can uncover strongly marked changes after psychosurgery.

On the whole, then, we may conclude that while this book is of undoubted interest to the specialist and will be read widely by those professionally interested in psychosurgery, the contribution it makes to scientific knowledge is relatively small.

H. J. EYSENCK

SAND- AND WATER-CULTURE OF PLANTS

Sand and Water Culture Methods used in the Study of Plant Nutrition

By Dr. E. J. Hewitt. (Commonwealth Bureau of Horticulture and Plantation Crops: Technical Communication No. 22.) Pp. x+241+9 plates. (Farnham Royal: Commonwealth Agricultural Bureaux, 1952.) 42*s*.

THE first recorded use of the water-culture method for the growing of plants was that of Woodward, who in 1699 grew potatoes, vetches and mint in water from springs, wells, rain and distillation. Sixty years later Duhamel du Monceau grew tree seedlings in filtered water from the Seine; but it was not until 1804 that the first controlled water-culture experiments were attempted, by De Saussure in France. He was the first to show that nitrates were necessary for growth and that differential absorption of solutes was usual. The method of sand culture was introduced by Boussingault in 1851 and greatly extended by Salm-Horstmar, who, even at that early date, used a technique sufficiently refined to show the essential nature of manganese and iron as well as the 'macronutrients' for plant growth.

Since the time of these early workers, more and more elaborate and precise techniques have been evolved by hundreds of workers in the field of plant nutrition. In the investigation of the roles of the 'micronutrients' or 'trace elements' in plant physiology, and even more in the study of the interrelations of nutrients, small details in the purification of growing-media or nutrient solution, in the preparation of containers, or in the protection of the cultures from chance contamination, may be of vital importance. Any new worker in the field must therefore make himself familiar with the experience of many hundreds before him to be sure that he has missed no point essential to his proposed technique.

In this task Dr. E. J. Hewitt's book will be of quite inestimable value. He has brought together in one volume a prodigious amount of detailed information, critically reviewed, from a literature of some eleven hundred titles. No aspect of the subject escapes minute attention, and the author throws his net wide enough to include even methods for the control of the environment in plant chambers and the design and interpretation of experiments. In the second part of the book, Dr. Hewitt gives a detailed account of the special technique developed at the Long Ashton Research Station, mainly by himself, for large-scale sand culture in pots, an illustration of the perfection achieved by learning from the experience of others.

Few reviews of literature have been so exhaustive, informative and valuable as this, and the author and the Commonwealth Bureau are to be congratulated on the production of a book which will save research workers many weary hours of searching through original papers.

R. H. STOUGHTON

A PSYCHIATRIST'S CREDO

Speaking of Man

By Dr. Abraham Myerson. Pp. 255. (London: Martin Secker and Warburg, Ltd., 1952.) 15*s*. net.

THIS is not a serious scientific contribution but a collection of essays loosely linked together, describing the author's views on life and mankind. The style varies and is sometimes grave and erudite, and at others slangy and cynical. Yet invariably the personality of the author permeates the whole and shows him as a witty cynic.

Abraham Myerson was a New England neuropsychiatrist who was a student of Morton Prince and became his life-long friend. He was later elected assistant professor of neurology at Tufts Medical School, and after three years was made professor. Warren Stearns, a former dear of the School, said that the large number of students who specialized in neurology did so because of the popularity of Myerson's teaching.

The most important work which he performed was his investigation into the inheritance of mental diseases and upon which he published one of his numerous books. He did not limit himself to one section of psychiatry, however; but his endless curiosity compelled him to study everything from the neuroses of the nervous housewife to sleeping and waking mechanisms.

It is surprising that Myerson should have written so vigorously in this book when one considers that a great deal of it was produced when he was very near death from heart-block. The chapter headings show the type of material upon which he writes: on the worth of living; my father and I discuss matters; my prejudices and prepossessions; woman, the authorities' scapegoat; the liabilities of language; heredity and environment; the great unlearning; the low-down on authorities, including psychiatrists; genius; sterilization; desire and mental health; body and mind; concerning intelligence; etc.

As these essays show, Myerson was essentially broad-minded. It is said that, although he did not believe in psychoanalysis, he made no objection when his son wished to study it. This appears in his attitude to psychiatry, demonstrated by two of his aphorisms: "The physiological approach to the neuroses does not exclude nor minimise the importance of a complete understanding of the psychological life of the individual"; and "Scientific psychiatry should be sceptical, humble, and experimental".

Those who read this book will enjoy the distilled wisdom and wit of one who regarded everything with scepticism, yet who was strongly on the side of truth and who hated pompous inaccuracies.

CLIFFORD ALLEN