

Reviews

THE ETHICAL DILEMMA

The Ethical Dilemma of Science and Other Writings. By A. V. Hill. (Pp. 395+xiii. 52s.) New York: Rockefeller Institute Press. London: Oxford University Press. 1960.

The subject of Professor Hill's memorable presidential address to the British Association in 1952 gives the title to this volume. Science being universal, his ideal—an ideal shared by all true scientists—would be a world-wide community of learning, irrespective of politics, in which "world society can see a model of international co-operation carried on not merely for idealistic reasons but because it is the obvious and necessary basis of any system that is to work."

In this imperfect world the free, open, and disinterested pursuit of knowledge, divorced from political influences, seems impracticable. There are, for instance, the compromises enforced by the demands of secrecy and officialdom, when scientific researches are used for national security; and ethical considerations which perplex the scientist. There is no simple answer to the problem, but the author, out of his wisdom and experience, gives some helpful suggestions. His conclusion (p. 88) is as follows:

"It is true that scientific research has opened up the possibility of unprecedented good, or unlimited harm, for mankind, but the use that is made of it depends in the end on the moral judgments of the whole community of men. It is totally impossible now to reverse the process of discovery: it will certainly go on. To help to guide its use aright is not a scientific dilemma but the honourable and compelling duty of a good citizen."

The problem of the increase of world population, especially in India, resulting from the triumphs of preventive medicine, is also discussed.

Notes, all too short, about some great physiologists are here—Einthoven, Pavlov, Starling, Bayliss, for instance. Those who knew Joseph Barcroft, so enthusiastic and devoted in his study of blood and respiration, will welcome this sketch of a great and generous man. Tributes are given to the work of Sir Henry Dale, Lord Adrian, and others; there is a sensible note on germ warfare; and the Stephen Paget Lecture to the Research Defence Society treats of the benefits to mankind accruing from animal experiments.

Like Michael Finsbury in *The Wrong Box*, Professor Hill indulges in "a little judicious levity." He inserts parodies, verses, and satire as light relief in a mainly serious book. Anyone who has unexpectedly, temporarily, and possibly for no fault of his own become famous in the popular press will appreciate the amusing chapter on "The Donnan-Hill Effect [The Mystery of Life]," written by Mrs. Hill and her sister-in-law, Margaret Keynes.

ARTHUR S. MACNALT.

VASO-ACTIVE POLYPEPTIDES

Polypeptides Which Affect Smooth Muscles and Blood Vessels. Proceedings of a Symposium held in London on March 23 and 24, 1959. Edited by M. Schachter, M.D., M.Sc. (Pp. 336+xv; illustrated. 50s.) Oxford, London, New York, Paris: Symposium Publications Division, Pergamon Press. 1960.

One of the most striking recent advances in pharmacology has been the recognition of the existence

of a variety of vaso-active polypeptides, circulating in or produced in the blood-stream. Interest in these fascinating substances has been greatly stimulated by the elucidation of the structure and the subsequent synthesis of oxytocin, vasopressin, and angiotensin.

This report presents the full report of the fifth symposium organized by the Biological Council's Co-ordinating Committee for Symposia on Drug Action, others having been concerned with hypotensive drugs, 5-hydroxytryptamine, and quantitative methods in human pharmacology and therapeutics.

Where pure substances of known structure are available, our knowledge of their pharmacological action, in animals and in man, and of the various processes of inactivation is increasing rapidly. The demonstration of naturally occurring analogues, in different animals, as well as the synthesis of active analogues, has added much to our understanding of peptide structure and action. The presence of many of these substances, however, such as Substance P, leucotaxine, and the kinins, can still only be demonstrated by their pharmacological effects, though it should not be long before their structure too is known.

The section on angiotensin (hypertensin) illustrates the many difficulties of work with these compounds. The existence of a humoral hypertensive agent having been demonstrated in animals with ischaemic kidneys, angiotensin was ultimately isolated, identified, synthesized, and its pharmacological action defined, and yet there is still no clear evidence that it is responsible for renal hypertension in man.

The organizing committee are to be congratulated on having brought together so many of the original workers in this complex field, and this report not only provides an excellent review of present knowledge but gains much from the reported discussions.

M. L. ROSENHEIM.

INVALIDISM AND REHABILITATION

Invalidität und Rehabilitation in ärztlicher Sicht. Edited by Dr. med. A. Wernli-Hässig. (Pp. 183; illustrated. Sw. Fr. 30.) Basel and New York: S. Karger. 1961.

This book contains the proceedings of a postgraduate course on invalidism and rehabilitation convened by the "Zürich Kantonalen Liga gegen die Tuberkulose" in March, 1960. In an introductory paper, the editor, Wernli-Hässig, surveys the achievements in the prevention and treatment of tuberculosis in Switzerland during the last 10 years or so. There has been a decrease in morbidity from 3.8 to 2.1 per 1,000 and in mortality from 3.9 to 1.5 per 10,000 inhabitants. To-day, tuberculosis, properly treated, leads to death only in exceptional cases. The empty tuberculosis sanatoria in Switzerland are, as is the case in other countries, now used for the treatment of other diseases, such as asthma, chronic bronchitis, and circulatory and neuro-vegetative disturbances.

All the other twelve lectures of the course deal with the medical and social rehabilitation of patients suffering from non-tuberculous afflictions, such as congenital, traumatic, vascular, and mental diseases. Of special value are the papers of Francillon and Mützel on orthopaedic problems, Brügger and Krayenbühl on rehabilitation following head injuries and brain operations, Mohr on rehabilitation and psychiatry, and Heggin on rehabilitation in vascular diseases.