

The early chapters are spoilt by a florid style of writing, of which two examples will suffice. About vitamin D, it is said that, "the sun . . . pours forth this vitamin like a divine manna from the cornucopia of the heavens", and scurvy is described as "one of the more vivid of human miseries, gaudy with blood from the hæmorrhages of its victims, the strange bruised appearance of their purple skins and the ghastly stench of their rotting gums".

The issues dealt with in this book are, as Lord Boyd-Orr says, "of the first magnitude". They are urgent and immense, and they call for care and wisdom from both men of science and politicians, if they are to be solved. The emotional approach of this book does little to help.

M. W. GRANT

ON GROWING OLD

Commentary on Age

By Kenneth Walker. Pp. 192. (London: Jonathan Cape, Ltd., 1952.) 12s. 6d. net.

DR. KENNETH WALKER is a distinguished surgeon; his book is part philosophy, part science and part common sense. The philosophy is philosophical in the good old-fashioned sense: it is a reflexion on the conduct of life, in one of its epochs, and the dispositions that must be made to meet its enemies, with special reference to the last enemy of all. Dr. Walker writes simply, and sometimes movingly, of the rewards and sadnesses of growing old, and skilfully dissects the inevitable disabilities of ageing from those which, arising from unpreparedness, are the punishment for an earlier spiritual improvidence. He has not much new to say, it is true, and the title of his book makes no such claim for it; but wide reading and a genial eclecticism make what is true seem manifestly true, and to do that is the chief business of the commentator. What Dr. Walker says of our ageing population and the provision that must be made for the elderly is all good sense, and with such reasonable and even-tempered advocacy it may not be too long before opinion becomes policy, and policy becomes practice.

The reader must be warned, however, that the part of the book that purports to be scientific scarcely deserves to be so described. Ominous minor errors such as the mis-spellings of the names of Ebeling, McCay and Korenchevsky, the confusion of Bogomolets *père* with *filis* and of Jacques with Leo Loeb make it all too clear that Dr. Walker is not too familiar with his original sources. It is not simply a matter of minor misconceptions, such as the suggestion that elephants may live for two hundred years, or the mayfly for but a few hours, or of the uncritical acceptance of the importance of senile dehydration, the sexual rejuvenation of *Paramecium*, or the beguiling metaphor of 'physiological time'. It is mainly that the entire treatment is in a multitude of ways inexpert and unanalytic; there is no real grasp of the problem of measuring senescence, of the importance of studying the expectation of life of wild animals in the wild, or of the degree to which the senile state is one which only domesticated animals are spared to display. More serious still, one gets the feeling that Dr. Walker is inclined to equate the analysis of the scientific problem of ageing with *ad hoc* researches into the prolongation of life.

This is harsh criticism, which may be more than half countered by the retort that the book is not addressed to a professional audience and that, except

in one respect, the man of science is not likely to use it as a work of reference. The exception is Dr. Walker's appraisal of the clinical value of testicular grafting, as it had been practised by Voronoff to revive the flagging energies of the elderly. He finds that even homoio-transplants of human testes are rapidly absorbed, and is highly sceptical of Voronoff's claim to have succeeded with heterografts of testes from chimpanzees. This is useful evidence on a subject on which Dr. Walker writes with personal authority.

P. B. MEDAWAR

A FAUNA OF FARM ANIMALS

A World Dictionary of Breeds, Types and Varieties of Livestock

By I. L. Mason. (Commonwealth Bureau of Animal Breeding and Genetics, Technical Communication No. 8.) Pp. 272. (Farnham Royal: Commonwealth Agricultural Bureaux, 1951.) 30s.

ALTHOUGH complete lists and descriptions of wild animals, birds and even insects exist, no world list of the different breeds, types and varieties of farm animals has been available. The first part of this book attempts to supply this.

As mentioned in the introduction, this list requires supplementing with maps and illustrations of the breeds, and it is hoped that these may be forthcoming at a later date. It is comparatively easy to find details for improved breeds which have a herdbook; but there are a large number of native breeds in Asia and Africa about which knowledge is sadly lacking. This is required if production in the backward areas of the world is to be improved. As the title indicates, the book is a dictionary to be consulted and not one to be read; references are given, however, to papers which contain descriptions of the breed in question. The second part of the book, which gives livestock numbers and breeds by countries, together with references to publications concerning the breeds of these countries, should prove most useful to those who require a bird's-eye view of the livestock production of any area. For the temperate zones and the more highly developed areas of the world, a very good picture is presented; but, through no fault of the author, the information given for the tropical zones of the world is lamentably small, consisting of, in many cases, a catalogue of breeds only. Possibly steps already taken by the United Nations Food and Agriculture Organization to collect information for those areas may soon bring our knowledge of domestic animals on a par with our knowledge about wild species. New breeds with improved production qualities suitable for tropical areas, such as the Santa Gertrudis cattle (3/8 zebu, 5/8 shorthorn), are now being formed, and may before long drive many of the primitive breeds to extinction, as has occurred with improved breeds in Great Britain. Before this is done, these primitive breeds require study for qualities suiting them to their habitat, so that some of them at any rate may be preserved and the valuable genes they contain retained for use in the future.

The species dealt with are the horse, ass, cattle, buffalo, sheep, goat and pig. The first part gives some four thousand entries, listing the various names which have been used, and for each breed mentioned it recommends an English name. Some information about breed characters, origin and relationship to other breeds is given.

JOHN HAMMOND