small groups of mixed disciplines meeting together in this country and in the U.S.A. to exchange ideas about this provocative new point of view in biology and human affairs. Dr. Wiener has now written a book for the layman in which he entirely avoids mathematical symbolism and attempts to emphasize the social consequences of the new insights.

The first chapter gives a brief outline of cybernetics in which the significance of feedback is mentioned, but rather more space is devoted to the argument that information in communication systems can usefully be regarded as the negative of probability and of entropy. These ideas are further developed in a chapter on "Progress and Entropy" in which, however, he very soon plunges into a discussion of the ultimate fate of the universe and the illusory basis of ideas about the inevitability of progress. From that point onwards the arguments, although interesting and sometimes fascinating, often seem to have little relevance to cybernetics; there is, for instance, a good deal about the philosopher's contribution to the understanding of language and semantics, and even more about the present social and political crisis in America. When Dr. Wiener speaks of the nature of the new industrial revolution in which we are unwittingly involved he speaks with authority, for he has taken a leading part in the development of systems of automatic control which include judgment and memory. He argues that just as the first industrial revolution has up to the present displaced man and beast as a source of power, so in a more completely automatic age, the more mediocré skills and judgments will become redundant. This new era is not remote but might arrive in the U.S.A., especially under the pressure of a war economy, in a matter of a very few years. He describes the possible results as a decade or more of ruin and despair in which the depression of the '30s would seem a pleasant joke.

Medicine is still facing the social consequences and the diseases of the older industrialization; it is depressing but nevertheless probably necessary to begin to think about the consequences of the next phase. As Dr. Wiener puts it, the "know-how" of the technologist, which is what government is becoming, is not enough: the "know-what", which involves a consideration of human values and human aims, is much more necessary in the long run, and this implies the fullest realization of the human capacities of the governed—the human use of human beings.

T. Ferguson Rodger


This book is written to cover the whole range of health education. It is not a textbook of hygiene but something much more valuable—a series of essays endeavouring to give a liberal orientation to what may be described as the newest of the humanities. The chapters cover in a general way the philosophy, facts, and media through which health education is done, and try to apply these particularly to home, school, college, and the community environment. Industrial aspects are only hinted at.

In such a general review of a vast subject it is inevitable that Mr. Bibby's study is extensive rather than intensive, but in a subject where so little research has been done it is safer to treat it somewhat superficially.

The author has a wide cultural background and a sympathetic and sensitive appreciation of human motivation. It is precisely these qualities which are so precious in workers in this field; as Mr. Bibby constantly implies, it is the attitudes which field workers communicate towards health and disease which are more important than a knowledge of the facts.

Since Mr. Bibby is concerned mainly with the training of teachers it is understandable that the accent should be mainly on schools and the whole of health education seen from the teacher's point of view. The impression that this orientation gives is by no means a reflection on the way in which health education is in point of fact done, but the health visitors, midwives, and medical officers, on whom so much depends, will find much refreshing and provocative material.

The appendices, which were obviously the subjects of considerable thought and effort, are useful summaries focusing points for the practical worker, though the draft syllabus for a qualification in health education is still only at the stage of a "letter to Nature".

The directory of health education organizations, though a prodigious achievement, is perhaps out of place in such a volume.

The book can be safely recommended to all those seriously interested in the subject, and will be of interest to any concerned in health or education, or those debating the question, "What shall I tell my child?"

J. Burton

BOOKS RECEIVED

(Review in a later issue is not precluded by notice here of books recently received.)


