

contents, and among the miscellaneous poisons, the toxalbumens, poisonous plants and fungi, the sulphonamide drugs, together with the fur- and hair-dyes, are to be found. A useful table provides the various reactions of the different fur-dyes. It is a matter of widespread regret that the death of the author of this excellent handbook precluded him from seeing the finished product of the subject-matter on which he had lavished so much care and patience. His son, H. F. Bamford, and Dr. G. D. Elsdon are to be congratulated on their final

preparation of the book for the press. The publishers have maintained their usual high standard in the production of this volume, which is well indexed.

The reviewer fully concurs with the concluding sentence of the foreword by Prof. Sydney Smith, to the effect that this book is the product of a highly skilled specialist in toxicological analysis and that it can be recommended with complete confidence to all those whose work entails such analysis.

J. GLAISTER.

CONSERVATION OF THE SOIL

Soil Conservation

By Hugh Hammond Bennett. (McGraw-Hill Series in Geography.) Pp. xvii+993. (New York and London: McGraw-Hill Book Co., Inc., 1940.) 40s.

IN many countries distant from the storm centre of world politics the perpetual war between man and Nature has in the last two decades reached an acute phase. The maladjustment between an established form of human society that had transplanted itself to the unwonted environments of the New World had culminated in the remarkable phenomenon of soil erosion, the widespread disappearance of the very basis of life itself. Nowhere did the capitalistic form of society that colonized the world from its homeland in Europe take firmer root or grow more lustily than in the United States, and nowhere has soil erosion been more virulent, or is having such far-reaching effects on the structure of society.

During the last ten years a powerful reaction against the destruction of the soil by an agriculture inappropriate to the environment has set in in the United States, and has already produced a very extensive literature. This latest book, by the Chief of the Soil Conservation Service, is significant in that it stresses, both in its title and throughout the text, the conservation rather than the destructive aspect of the subject—significant in showing that the United States are passing out of the exploitative into the constructive phase of their agricultural evolution. Dr. Bennett is especially concerned with the human side of the soil-conservation problem, that is, with the correct adjustment of the agricultural basis of society to the natural environment. He believes that the means and knowledge for this adjustment are available, but the task must be tackled on a nation-wide basis and according to an all-embracing nation-wide plan of reconstruction. Dr. Bennett is a democrat

and individualist, and he recognizes the strains that must be set up in the body politic when the demands of the land for a pre-determined form of agriculture come into conflict with those of the people for a continuance of the freedom of action they have hitherto enjoyed.

So far, however, these strains have scarcely been felt. When the seriousness of the erosion question was realized by the nation the immediate task was to stop erosion, and it has only been within the last two or three years that the more difficult task of reorganizing the agricultural basis to prevent the soil exhaustion that precedes erosion has been taken in hand.

In the first part of his book Dr. Bennett describes the various manifestations of erosion; in the second and larger part the measures now being taken in the United States to check erosion and to rebuild fertile soils which will not erode. Measures to check erosion are mainly mechanical, designed to prevent water from running downhill or to curb the force of wind blowing over exposed land, but their co-ordinated application involves a revolution from an exploitative agriculture to systems based upon the inherent properties of the land. It is here that soil conservation gains a wider and more human interest. Dr. Bennett shows very clearly how a biological and ecological concept of soil conservation has developed out of the social problems that have arisen from the increasing application of mechanical measures for stopping soil erosion, and at the same time how the physical phenomenon of erosion can be traced to social and historical causes.

Although the book is entirely about the United States, much of its matter has universal validity. It is excellently planned, and more than 350 vivid illustrations complete the most comprehensive and authoritative treatise yet published on this urgent problem of the present day.

G. V. JACKS.