BOOK REVIEWS

Environmental Radioactivity. By Merrill Eisenbud. (Pp. vi + 430; 97s.) New York and London: McGraw Hill. 1963

"During the year 1960, of more than 82,000 employees of the U.S. Atomic Energy Commission 0.056 percent received radiation exposures in excess of the maximum permissible annual dose of 5 rems." These figures give some indication of the effective planning and code of practice in an industry started only two decades ago and in which potentially the health hazards are high. The vast amount of information which has been obtained on the behaviour of radioactive substances in the ecological system is presented in the present volume in a most attractive way, with numerous diagrams and figures, by an author with a high reputation in this field.

The book is divided into four parts: the biological effects of radiation, physical and biological transport, sources of environmental radioactivity, and a most interesting reflection by the author on the experience gained. The treatment is in language which will be readily appreciated by a variety of scientists.

The presentation is excellent and a most valuable collection of scientific data on a subject of wide interest and importance are produced for the first time in book form.

G. E. HARRISON

An Industrial Hygiene Study in a Ferro-Manganese Plant. Report No. 22. (Pp. 33; 4 figs. + 19 tables; n.p.) Government of India, Ministry of Labour & Employment. 1962.

This is a useful report. It deals with a clinical and environmental investigation in a factory which commenced operation in 1957.

Of the 147 workers exposed to manganese dust and fume, 13 were completely disabled, 30 were partly disabled, and 19 had "symptoms only". No data are given for workmen who left the factory during its five years operation, and there are no data giving exposure time related to disability except that only 15 had the maximum exposure of five years or more.

The environmental studies showed manganese concentrations normally below the M.A.C. of 6 mg./m.³, with two positions slightly above. (It is doubtful whether the M.A.C. can be related to fume concentrations.) Process and ventilation changes during the operating time made it impossible to relate measured concentrations to degree of poisoning.

Biochemical investigation showed raised concentrations of manganese in hair and blood, unrelated to disability. These findings were complicated by the presence of manganese in certain Indian foodstuffs. It is suggested that manganese ingested in this way caused a

form of manganese poisoning differing slightly from that following inhalation.

E. KING

Internal Medicine in World War II. Vol. II. Infectious Diseases. Ed. W. Paul Havens. (Pp. 649; illustrated. \$6.75.) Washington: U.S. Army Medical Service. 1963.

For the United States, as for many other combatant nations, the Second World War created medical history. For the first time, the loss of life among troops due to disease was less than the loss due to wounds and battle injuries. This great saving of the lives of military personnel was largely due to the effective control and treatment of infectious diseases. The second volume of the U.S. Army history of internal medicine in World War II records the war-long successful battle of the U.S. Army Medical Services against infectious disease. It has been compiled by 19 authors who specialized in the various fields covered, and who played important parts in ensuring the victory. They frankly record their problems and mistakes as well as their triumphs, and consequently the book presents a fascinating picture of applied epidemiology on a world scale. New ground was broken in many diseases, some of which only emerged from the diagnostic rag-bag as a result of the wartime concentration of persons under a unified system of medical care, and the diligent observation of the doctors in the field. In other diseases, such as tuberculosis and the venereal diseases, improved standards of hygiene, diagnosis, and treatment resulted in dramatic reductions in death, disability, and ineffectiveness.

This book is full of interest for anyone who has the responsibility of guarding the health of groups or of recording changes in the patterns of disease.

J. LEESON

Preventive Medicine in World War II. Vol. VI. Communicable Diseases, Malaria. (Pp. 642 + xxiv; \$6.25.) Washington, D.C.: Office of the Surgeon General, Department of the Army. 1963.

The fact that a large and weighty volume is devoted to the efforts necessary to control a single disease is a reminder of the power of malaria to defeat armies.

After an introduction to the general work of malaria control, the bulk of the book is devoted to detailed accounts of the work carried out in every malarial area in which United States troops were engaged during the war. There is a wealth of detail regarding the terrain, the vectors, the methods of control, and the problems of supply and personnel.

The failures are reported as well as the successes in the hope that the lessons will be remembered for the future.