

daily Press. It is an account of the men who were subjected to mixed neutrons and γ -rays from an unanticipated critical assembly of enriched uranium, five to doses of some 200–400 rads, three to some 30–60 rads. The clinical features and progress are compared with haematological findings and the dosimetric estimations and calculations of the health physicists. Twelve sections are contributed either by the various physicians and scientists responsible for the routine handling of the cases or by special research workers. A final section is a complete appreciation by Dr. Marshall Bruce, chairman of the Medical Division, Oak Ridge Institute of Nuclear Studies. Dr. Bruce makes the point that initially the physician is on his own. The health physicist can at first classify those at risk only into three groups according to dose: low (less than 250 rads), high (greater than 1,000 rads) and intermediate. The first need no specific medical treatment, the second humanitarian care, but the third present problems requiring judgment. The symptoms (especially vomiting and fatigue) can help the physician initially to identify the three classes. The lymphocyte-count in peripheral blood is the next guide. Later, particular amino-acidurias will be important, and later still the platelet-count of the blood. Meanwhile, the health physicist can have reconstructed the incident, assayed the body fluids for induced radioactivity and made a more refined assessment of the doses received. "A conservative rule to follow during the first few weeks is that there should be a plain and unmistakable indication for anything that is injected into the body. Probably the most important feature in treating psychological upsets is to see to it that the hospital is not turned into a zoo."

Health and Industry

THE annual report of the Chief Inspector of Factories on Industrial Health for 1958 is notable for two special chapters, one of which deals with occupational cancer, while the other describes a study of medical supervision in 210 factories (Ministry of Labour and National Service. Pp. iv+61. Cmnd. 811. London: H.M. Stationery Office, 1959. 3s. 6d. net). The report also particularly invites members of the medical profession generally who could add to available knowledge of health hazards to report to the Medical Branch of the Inspectorate cases of interest coming to their notice in which occupational factors might be involved. Such information could assist the discovery of new industrial hazards and lead to a fuller assessment of the extent and distribution of recognized industrial diseases. The Industrial Health Advisory Committee, besides considering the report of a survey by the factory inspectorate on cardrooms in the cotton industry, designed to ascertain progress made in meeting exhaust ventilation requirements, appointed a sub-committee to collect and assess information as to the need for more chemical, physical and biological testing in factories with a view of reducing the risks of injury to health. Although the Work in Compressed Air Special Regulations, 1958, have not been in force sufficiently long to assess their effect on the incidence of compressed air illness, progress is apparently being made and often a high standard of welfare achieved beyond the minimum standards laid down. Attention is directed to the need for a careful watch for any health hazard from dust from the new 'chromizing' process of forming a surface

layer of chromium over steel articles, and of aiming at complete suppression of dust or fume in the fabrication of alloys by addition of 2 per cent of beryllium to copper. The chapter on occupational cancer gives a concise summary of existing knowledge: that medical supervision in factories indicates that medical examination of work-people is usually regarded as the most important function of a works doctor; advice about factory conditions appear to come next; and then emergency and accident treatment and treatment for minor sickness.

Study of Corrosion

THE fifth report of the Corrosion Committee of the Iron and Steel Institute appeared more than twenty years ago. Although no further report was published, the work has been carried on continuously, and the present sixth report which is now available deals with this (Iron and Steel Institute. Sixth Report of the Corrosion Committee. Compiled by Dr. J. C. Hudson. Pp. x+217. Special Report No. 66. London: Iron and Steel Institute, 1959. 63s.). The Committee of the Iron and Steel Institute ceased to function as such in 1946 when its work was taken over by the British Iron and Steel Research Association, and the work now published was therefore carried out under the auspices of both organizations. This report consists of an extensive introduction in which the work of the Committee since 1938 is discussed as a whole. This is followed by two sections dealing at length with unreported work on atmospheric corrosion in air, soil and water. The final results are given of an extensive series of field tests on a wide variety of structural irons and steels carried out all over the world, and in some cases with an exposure time of up to fifteen years. Section 3 of the report deals with the protection of steel against highly corrosive, humid atmospheres at temperatures up to 300° C., while Section 4 is devoted to marine corrosion and includes the results of several service trials of painting procedures and anti-corrosive compositions for ships' hulls. There can be no doubt that the work published is of first-rate importance to all concerned with the preservation of structures, land and marine, against rust, and it is doubtful whether the Iron and Steel Institute has ever published a report of more far-reaching significance.

Building Research in Britain

THE annual report of the Building Research Board of the Department of Scientific and Industrial Research will be of interest to all who plan, design or construct buildings (The Report of the Building Research Board with the Report of the Director of Building Research. Pp. iv+72+12 plates. London: H.M. Stationery Office, 1959. 5s. 6d. net). The summary of research work in hand, or recently completed, includes topics as diverse as the development of large perforated bricks, design of radiation shields, earth pressures on tunnels, supplementary artificial lighting, reinforced light-weight concrete, and rubber concreting skips. The need for durability in buildings causes some investigations to extend over many years, and summaries of results obtained so far are a useful feature of the report. The building industry is often accused of being the least efficient branch of engineering, and the slowest to apply the results of research, although the Building Research Station devotes much effort to making its discoveries known. In order to improve the methods employed, a survey