that toilet fluids and antiseptic powders (all vastly different and even chemically non-compatible) are poured willy-nilly into the toilet systems. Eventually this potent brew of germicides may be poured down the sewage system of a small tropical or sub-tropical airport's sewage farm in the middle of the dry season, with disastrous results on its biological working.

Although written with such small airports in under-developed lands in mind (as well as the large international airfields), this otherwise excellent account fails to mention the sort of practical difficulties outlined above.

OWEN MCGIRR

Data Sheets on Dust Collectors. By British Steel Castings Research Association. (Pp. 38 + Index; illustrated. 30s.) Sheffield. 1960.

This compilation of data sheets relating to the performance of commercial dust collectors available in this country is one that will be extremely useful to industrial hygienists and works engineers.

Each data sheet states the type classification of the dust collector, and a sketch illustrates the principle of operation. The pressure drop, and where applicable, water usage, are stated and examples of installations with volume of air handled are quoted.

An endeavour has been made to provide data on collection efficiency, in terms of particle size but for some products this information has not been available. However, a series of collection efficiency curves for the basic types of dust collectors are given, so that the performance of a particular collector can be predicted to some extent.

The variation in the availability of manufacturers' data, however, indicates the desirability of the formulation of a standard testing procedure, and for users to require the results of such tests as an essential part of the specification of the equipment they are purchasing.

D. E. HICKISH

Air Sampling Instruments for Evaluation of Atmospheric Contaminants: American Conference of Governmental Industrial Hygienists, Cincinnati (1960). (Illustrated. \$7.50.) Ohio, U.S.A. 1960.

The United States of America leads the world in industrial hygiene, so one looks somewhat humbly at her latest production in this field. This is a descriptive manual of air sampling instruments which are readily available in America. It deals comprehensively with instruments for gases, vapours, mists, fumes, and dusts.

The book opens with a group of seven papers which discuss in general terms the ways in which air sampling should be done, and how instruments are devised to meet these requirements as nearly as possible. There is a first-rate opening paper by Silverman, giving a systematic review of the methods used for sampling and analysing air contaminants. This is followed by an enthusiastic contribution on "home-assembled" instruments by Setterlind, who apparently can make anything with a syringe, a piece of plywood, and a couple of elastic bands. The remaining opening papers are dull.

The introductory papers are followed by full technical descriptions of over 100 different air samplers, ranging from a \$1.00 "do-it-yourself" dust sampler to a magnificent \$7,100 machine which produces a continuous record of the concentration of three different gases simultaneously. As the information on each sampler has been compiled from descriptions provided by manufacturers and designers, it is inevitably somewhat uneven; but there has been a considerable effort to give a systematic account of the uses and operating principles of each instrument, together with a description of the performance, construction, and operating instructions. Notes are also given on the maintenance and calibration of the instruments. Especially helpful is the information on where each instrument can be bought or who designed it.

This unusual book, with its rather unattractive print and loose-leaf paper-covered back, gives a false impression of being poorly finished. It would have been well worth an extra dollar or so to have a stiff cover. Even so, it manages to stand erect when supported on one side by Patty's "Industrial Hygiene" and on the other by Drinker and Hatch's "Industrial Dust"! I recommend it to every industrial hygienist.

S. A. ROACH

Individuelle Vorbeugungsmassnahmen gegen Berufliche Augenschadigungen. By A. S. Schafranowa. (Pp. 132; 29 figures. DM. 14.20.) Berlin: VEB Verlag Volk und Gesundheit. 1959.

This book, a German translation from the original Russian edition, gives a comprehensive review of the protective appliances used in the U.S.S.R.

The first chapter deals with the anatomy of the eye and the basic principles of optics are discussed. The second chapter gives the general principles for construction of individual eye protections. The protective appliances are designed to meet the following three hazards: (1) Protection of the eye against small particles flying off from machines at high speed; (2) Radiation, infra-red and ultra-violet light; (3) Chemical agents. The author also describes an appliance for testing the protective value of the lenses supplied in goggles and masks. A steel ball in an adjustable tube is held by an electro-magnet. The ball is released and it falls on the lens to be tested from various heights.

The types of protective goggles which are used in the U.S.S.R. are enumerated and filter absorption curves are given. Masks which protect the whole face are also described.

The author gives a very full Russian bibliography. All the references most of which are pre-war (1930-1941) are taken from Russian journals, especially the Soviet Ophthalmological Journal. There are several references dealing with the recent work (1953, 1954 and 1955) on protection of the eye in the U.S.S.R., but the author gives no references from international ophthalmological literature, nor from international industrial medicine.

JOSEPH MINTON