

BOOK REVIEWS

Safety in the Chemical Laboratory, 2nd edit. By H. A. J. Pieters and J. W. Creighton. (Pp. 305. 40s. \$7.50.) London: Butterworths Scientific Publications; New York: Academic Press. 1957.

Much has been written on the general problems relating to personal safety but little has been directed to schools, technical colleges, universities, and indeed industrial establishments where laboratory work is carried out. The authors of this book are to be congratulated on bringing so much valuable information into such a small space and they stress, and rightly so, that "the book should be used on the laboratory bench and not in the library".

The first chapters deal with the general considerations of safety, fire hazards, dangerous substances and explosives. There is an excellent chapter on the physiological effects of chemical substances, dealing with respiration, the mode of entry of poisons into the body and their method of action. Special attention is paid to methods of handling toxic substances and the nature and action of toxic dusts and gases.

The subject of protective devices and first aid is very adequately dealt with both in Chapter 9 and in the tables at the end of the book. One of the problems which confronts those who are responsible for general management is that of analytical procedures relating to toxic and hazardous substances. The authors have devoted, and rightly so, over 60 pages to this important subject.

The book is unusually well written, it is clear and concise, and should find a place not only on every laboratory bench but also in every library. This is a book which can be thoroughly recommended.

A. J. AMOR

Bus Workers in their Later Lives. By F. Le Gros Clark. (Pp. 26. Limited number of copies available free of charge from the Nuffield Foundation.) London: Nuffield Foundation.

It is unfortunate that ageing, being a gradual process, produces no clear lines of demarcation; as a result, it can best be measured by the subjective feelings of the patient rather than the objective findings of a medical examination. A man's assessment of his personal disablement due to age tends to be based on several factors, not all of them medical or physiological. Relevant factors include the satisfaction derived from his job, financial needs, the health of his family, and other purely domestic matters. Two men, to all intents and purposes identical, have very different assessments of identical disabilities. Assuming that the number of cases reviewed is large enough, most of the variables mentioned cancel each other out, but

the number required to do so must be very large. The report of Le Gros Clark and his colleagues is valuable in that it provides a guide to what has happened amongst a group of men, and as such it gives an indication as to what is probable amongst any similar group. If the conclusions are to be applied to industry in general it is unfortunate that conditions have not remained uniform throughout the period of employment of the men under review. Productivity has been increased in the operation of buses by increasing the capacity and speed of the vehicles, both factors which demand more physical effort from conductors. Thus the process of ageing has been accompanied by more strenuous work, which is the reverse of what has occurred in most industries. It was not until after Le Gros Clark's study had been made that the issue of labour-saving ticket machines assumed any great proportions. No differentiation is made between bus and tram conductors. The final transfer of all tram conductors to buses was completed during the period under review and ex-tram conductors not infrequently complain of the vibration of buses. This can only be explained by the two vehicles having different effects upon joints and their supports. Furthermore, in their final years the trams tended to be less used by the public, so that transference to bus conducting also meant an increased number of passengers with which to cope. If ex-tram conductors form a large proportion of those leaving the service, wrong conclusions may be drawn. So far as drivers are concerned, the job has probably become somewhat easier in spite of the increased speed and traffic congestion. Before the War a busman's wages were high compared with other industrial workers. After the war the reverse was the case and particularly so in the early 1950s. Furthermore these latter years were easy ones in which to obtain other employment. The period under review was therefore one in which the advantages of leaving appeared brightest.

The suggestion that transfer to country areas would provide easier working is interesting but probably unreal. In some of the older market towns near London conditions are worse than in the suburbs. Many older men tend to choose their routes rather than garages and base their choice largely on the times of the first and last buses. This may be due to the need of the wives for companionship in later years when children have left home or it may be due to the high incidence of bronchitis and rheumatic conditions in older people, both conditions which are aggravated in early morning and late evening. It might be well worth while to follow up this study with one of staff on routes which are known to be popular with older men. The survey is most useful and one which can only be criticized in minor details.

J. FAIRLEE