BOOK REVIEWS

of the vat under anaerobic conditions, yielding lager beer, are explained.

It is interesting to read that the wine trade has such antiquity dating from Mesolithic time, more than ten thousand years ago, and to follow its progress to modern commercial production where countries and districts specialize to market a characteristic product.

The diseases which affect the vine are many and varied and, until the advent of the newer insecticides and fungicides, the struggle has been intense, with the vine grower barely holding his own in this war of attrition.

The commercial fermentation of the juice of the grape to yield wine is performed by the wine yeast Saccharomyces ellipsoides and the growth of the wild yeast and bacteria is discouraged by the addition of sulphur dioxide to the "must" (grape juice) before fermentation.

The section of the book which deals with the famous vintage wines is fascinating and differences in vines, soils, and climates, which combine to give the characteristic types of great wines, are stressed.

It is recorded that Arrack, a spirit made by distilling the juice of the coconut palm, was known in India at least 800 years before the Christian era.

The Irish are given the credit for being the first race to distil whiskey from fermented grain and this preceded the production of brandy by the French. The legend has it that the Irish were originally taught whiskey-making by St. Patrick.

The use of yeast by the baker to lighten his bread has considerable antiquity, as the process was developed by the ancient Egyptians and the same method is used commercially today in all countries of the world.

The chapter on moulds and antibiotics chronicles the tremendous developments in this field in recent years, since the original observation of Fleming when he described the inhibition of cultures of Staphylococcus aureus by Penicillium. However, it is pointed out that the Chinese used soy flour poultices to treat infected wounds and the Ebers Papyrus of 1500 B.C. extolled the virtues of "yeast of sweet beer" for similar use.

This book is of importance to doctors who work in industry for great care has been taken to give a concise and accurate description of all the processes in which micro-organisms play a part in industry.

No mention has been made of any occupational diseases attributable to these allies of industry but no doubt the author would consider such information as outside his terms of reference.

JOHN F. EUSTACE


This book is divided into two parts. The first, General Considerations, includes a brief account of the nomenclature and structure of the aromatic hydrocarbons, also the relationship between chemical constitution and physical properties, taste, smell, toxicity, and biochemistry. The biochemistry of these compounds includes sections on absorption, tissue distribution, excretion, and metabolism.

The final chapter of the section discusses what constitutes an industrial hazard, threshold limits, and treatment.

The second part deals in more detail with 20 aromatic hydrocarbons commonly encountered industrially, under the headings "physical and chemical properties", "sources and probable modes of contact", "analytical methods", "toxicity", "biochemistry", "prevention, detection and treatment of exposure". A brief section on the carcinogenicity of the polycyclic hydrocarbons is included, and an appendix containing a glossary of terms commonly encountered in the petroleum industry.

The industrial hygienist and toxicologist, for whom it is primarily intended, should find this a valuable handbook, containing in one volume much of the chemical, biochemical, and toxicological data he requires, set out in tabular form and including previously unpublished work of the author.

The book is printed on good quality paper, but the binding of the review copy was inadequate, loose pages appearing after minimal usage.
Angela smog problem is discussed in several places. A section on meteorology by Harry Wexler sets out in quite simple terms the principles underlying the dispersion of pollution. Translation difficulties may account for a few errors which appear in the section on sampling and instrumentation by F. Cambi (e.g. the term "colloidal matter" may mean collodion). Not all of the recommendations in this section are appropriate for the study of general air pollution. Many of the methods described are intended for industrial dusty and the sampling and analysis of urban smoke is not properly considered. There is a brief but useful section on the effects on animals by E. J. Catcott and a very well-documented account of the effects on plants by Moyer D. Thomas. This describes the effects of sulphur dioxide, fluorides, and "Los Angeles smog" on sensitive plants and it includes some excellent coloured plates. Legislation is dealt with by Albert Parker, and although he refers to the several Acts which have been passed in Great Britain, the implications of the Clean Air Act, 1956, seem sufficient to justify longer discussion. There is an excellent survey on radioactive pollution by J. P. Jammet, although it goes far beyond the field of practical interest at the present time. It is wise to consider possible hazards from a wide range of radionuclides, but little information is given regarding their actual occurrence in the air and nowhere is the naturally occurring activity of radon daughter products used as a yardstick.

Other sections deal with the identification of the air pollution problem (Louis C. McCabe), economic and social aspects (E. Leclerc), site selection (J. R. Taylor, A. Hasegawa, and Leslie A. Chambers), prevention and control by process changes (Andrew H. Rose Jr., David G. Stephan, and Robert L. Stenborg), and fuel selection and utilization (K. Barker and W. A. Macfarlane). Each section has its own bibliography, extending to over 400 references in one case. There is an index which successfully links similar topics in different sections and, taken as a whole, this inexpensive volume can be recommended as a useful introduction to the subject to those with more than a passing interest in air pollution.

R. E. WALLER


The thesis of this book is that industrial organization is inherently unjust since it attempts to impose a disparity between the amount of effort put out by the worker and the wages he receives; industrial unrest on this assumption, so far from being the exception, must be the most characteristic feature of industry. In order to discover the nature of effort, work is analysed into work realities, which are the physical working conditions, repetitiveness, and coercive routines, deprivations, which are impairment (i.e. actual physical discomfort caused by work), tedium, and weariness, and finally there are what Mr. Baldamus reluctantly describes as relative satisfactions including inurement, traction, contentment—the latter term denoting the absence of unpleasant feelings rather than the presence of good ones.

As wages are costs to the firm, so the deprivations inherent in effort represent "costs" to the employee for which he deserves remuneration whilst being continually bilked by the employer who attempts to lower the value of effort. In the process of putting forward these views the writer demolishes, or attempts to demolish, almost every concept in industrial psychology since Elton Mayo: that work can be really satisfying, that high employee morale results in greater efficiency, that formal and informal structures in the firm are of any significance, and so on. As for improving human relations and social satisfactions, their main function is "... to conceal from the worker precisely those managerial objectives which amount to increased wage disparity".

J. A. C. BROWN


This booklet was prepared under the guidance of a committee consisting of representatives of the Institute of Cost and Works Accountants, the Institute of Personnel Management, and the British Institute of Management. It is anonymous, however, so that it is not possible to examine the statistical or medical qualifications of the authors.

The section on Incidence deals with the experience of manual workers in some 70 companies in the 12 months ended June 1956 and with the effect on absence rates of sex, seasonal influences, length of working week, size of firm, industry group, and locality. The interaction of the last four factors suggests that the conclusions based on this small sample of firms should be viewed with caution. The figures are not standardized for age and the effect of age on absence is not studied in detail.

The section on Costs relates to studies in 11 companies. The results varied widely; the total cost of absence to these firms ranged from 9d. to 15s. per week for each employee.

The section dealing with methods of controlling absence in five organizations is based on interviews with Officers of the firms concerned, and is almost entirely descriptive.

There is a useful bibliography.

C. J. CORNWALL


This is an account of the proceedings of the second conference in the Royal Festival Hall promoted by the Chest and Heart Association.

For the industrial physician it contains very little with which he should not be already familiar. For the executives concerned, it must have been a stressful day, with 11 para-medical discourses to absorb, followed by question time. It might be asked for what purpose the Chest and Heart Association (formerly the National Association for the Prevention of Tuberculosis) gathers executives into the arms of its wisdom, when so many