importance of long-term exposure to low levels of air pollution, a problem highly relevant to morbidity in the United Kingdom.

The fourth section deals with "Specific Problems". Professor Jethro Gough reviews the effects of mineral, metallic, and vegetable dusts on the lungs in a space of only 15 pages and provides a list of 40 references. M. B. McIlroy and J. A. Nadel describe recent work in alveolar physiology, and C. P. Yaglou’s posthumous paper on air ions as a biological factor summarizes his work in this field.

The symposium, which was generously supported by the Tobacco Manufacturers’ Association, ends with four authoritative papers by Paul Kotin, E. C. Hammond, Joseph Berkson, and D. F. Eastcott, with 122 references in all, on the epidemiology and experimental production of lung cancer.

The style of much of the text is informal, sometimes colloquial, and easy to read. Figures and tables are numerous and clearly set out. Most of the papers are provided with good lists of references, and the editors have provided the reader with a comprehensive 22-page subject index. The printing and binding are good, too. Candidates for the D.P.H. and D.I.H. should find the book useful for supplementary reading in epidemiology and applied physiology.


In the Spring of 1960 the British Occupational Hygiene Society organized an international symposium under the above title, and the present volume records both the papers and the discussions which followed them. Of the 38 papers given, 15 came from U.S.A., 11 from this country, six from Germany, two from France, and one each from Czechoslovakia, Israel, Italy, and Sweden.

The symposium was organized in the following seven sessions:
1. Anatomy and physiology
2. Physical and chemical aspects of particle retention
3. Radioactive aerosols
4. Vapours and particle-vapour interactions
5. Pulmonary elimination and storage of dust
6. Asbestosis
7. Selective sampling and pneumoconiosis.

It is impossible to do more than draw attention to the very wide range of subjects in a borderland in which mathematicians, physicists, and chemists meet with bacteriologists, biologists, physiologists, and pathologists. Although several of the papers reviewed, and often extended, previously published work there was also a large volume of new data, and the book with its nearly 500 pages is a mine of information on the interaction of the respiratory tract with dust, toxic vapours, and on particle-vapour interaction. Studies with radioactive aerosols seem to be an American speciality as all six papers in this session came from the U.S.A.

The book begins with a thoughtful preface by the editor who tries the impossible, to sum up a newly-developing field in which each new result poses more questions than it answers.

G. Nagelschmidt


It is too common an experience for those engaged in occupational medicine and hygiene to find instances of toxic or dangerous materials being introduced for reasons of technical advantage but with a lack of understanding of the probable impact on the health and comfort of the workers. Professor Browne attributes this state of affairs largely to the lack of instruction in these matters during the technical education of the engineers, scientists, and commercial men who are responsible for the management of industrial processes.

Having attempted to remedy this situation for the present generations of students at Newcastle by providing lecture courses, the author now seeks to enlighten past generations, and in doing so has produced a book that will repay reading by those already familiar with occupational hygiene.

The early chapters deal with the health of the executive, sickness absence statistics and their interpretation, equipment design, accidents, automation, and fatigue. Then follows a section dealing with the physical aspects of the environment—lighting, heating, and ventilation, noise, and ionizing radiations. While there are some terminological inexactitudes in the sections on lighting and noise, these sections nevertheless give a very concise introduction to the subject.

The final chapter is devoted to the problem of chemical substances in the environment, including the dangers of handling chemicals, gases and gassing, the effects of lead, mercury, and other metals, organic compounds, and dust.

Professor Browne writes in a pleasing, rather informal style, and the manager who begins this book is likely to continue to its end.

D. E. Hickish


The content of this 145-page monograph, which does not pretend to be a textbook on industrial physiology, is adequately described by its sub-title. The book is mainly based on experiments by the author.

Dr. Brouha argues that the work a man may safely do can be evaluated by measuring the physiological energy expenditure of the human machine, and because physical work plays an important part in industry greater consideration should be given to the functional characteristics of the human body. He discusses the physiology of muscular activity, its assessment, and factors influencing it; the effects of the physical environment on work, and