

This invaluable study, conducted with typical American team work and thoroughness, presents the results of a clinical and environmental survey of six factories and 897 workers concerned with the manufacture of chromates and bichromates. The process consists of roasting finely ground chromite ore with soda ash or a soda ash-lime mixture to produce sodium chromate which is converted by acidification and crystallization into sodium bichromate.

Ten men, mean age 54.5 years and mean exposure to chromates 22.8 years, were found to have bronchogenic carcinoma. This represents a rate of 1,115 per 100,000, which is far higher than the rate found in a comparative group. A study of morbidity and mortality statistics for the industry showed that there were nearly 29 times as many deaths from respiratory cancer among chromate workers as the expected rate for all males in the United States. The rate for coloured males was higher than for white males. The excess incidence was confined to cancer of the respiratory tract. There was no excess for other sites.

Perforation of the nasal septum was found in 56.7% of chromate workers and again the incidence was higher among coloured men. The condition also developed more rapidly in this group. Fifty-four per cent. had skin ulcers or their scars, but only 2% had chrome dermatitis. There was no evidence of an undue incidence of dental caries though gingivitis and periodontitis were noticed with greater frequency among chromate workers.

The main feature of the environmental investigation was the discovery of an acid-soluble-water-insoluble chromium fraction, differing from the commoner trivalent or hexavalent compounds, which is present in the roast and residue from the leaching tanks. It is considered that this material, probably a calcium chromate-chromite complex, may be responsible for the occurrence of the disease. The practice in Germany and America is to use the residue to mix with the fresh ore, while in Britain it is discarded. This fact may explain Bidstrup's finding that there has been no unusual incidence of pulmonary carcinoma in the British chromate-producing industry.

The recommendations arising out of the survey include: (1) More complete enclosure of processes; (2) dust control features incorporated in design of new equipment; (3) local exhaust ventilation; (4) regular routine air analyses by competent persons; (5) good housekeeping to prevent spillage and accumulation of dust; (6) personal protection until air concentrations are reduced to a safe level; (7) routine radiograph every three months on men who have worked in the industry more than five years; (8) continuation of morbidity and mortality statistics; (9) continuation of biochemical and toxicological research on all chromium compounds.

R. MURRAY

Price's Textbook of the Practice of Medicine. Edited by Donald Hunter. (Pp. xiv + 1,774; 2 figures. 63s.) Oxford University Press (London: Cumberlege). 1956.

"Price's Textbook of Medicine" was always a mixed bag with some outstandingly good and some equally bad sections. Now, under the editorship of Dr. Donald

Hunter, it retains this characteristic feature. Dr. Hunter claims that it is a "unique compilation of modern knowledge". It is, indeed, encyclopaedic, including many rare diseases, but yet some common disorders appear to have slipped through the editor's mesh; for instance, I could find no reference in the index to cough syncope or senile osteoporosis. Unfortunately it also retains a fair sprinkling of Edwardian folk lore. In the treatment of cough in influenza it is stated that "dry cupping is often of service" and a nasal spray of chlorbutol and menthol in liquid paraffin is recommended without reference to its dangers. In the section on pulmonary tuberculosis two pages are devoted to collapse therapy, but only one to chemotherapy. The régimes described here are out of date and there is no clear statement on the necessity for using combinations of antibacterial drugs. Under portal cirrhosis there is no mention of portal systemic encephalopathy, and high-protein diets which may precipitate it are advised without warning. In the cardiac section there are four pages on electrocardiography but no illustrations; on the other hand, there is one illustration of an electroencephalogram in the neurological section. These random gleanings lead to a sense of wariness in accepting the reliability and balance of the book. Much of it is, however, excellent. Especially good are the introductory chapters on "Antibacterial Drugs" (but why more space to sulphonomides than to all the others put together?), the "Anaemias" (by L. J. Witts) and "Diseases of the Kidney" (by Horace Evans and Clifford Wilson). What a pity it is that publishers do not issue offprints of the separate sections of these vast omnibuses so that we could pick the good ones without having to take the rubbish. To get 1,700 pages of text for 63s. is a good bargain, but it is rather like a mixed lot at an auction.

C. M. FLETCHER

Hutchison's Clinical Methods. By Donald Hunter and R. R. Bomford. (Pp. xv + 452; 25 plates, 95 figures. 18s. 6d.) London: Cassell. 1956.

Every British medical student and practitioner probably is or has been familiar with this remarkable book, which started its life in the year 1897 and after flourishing for 12 editions has now blossomed into a new and exciting thirteenth edition.

While we must deeply regret that Sir Robert Hutchison should have retired from the authorship of a work which he has for so long personally inspired, the present authors have thoughtfully altered the title to perpetuate not only his name in this connexion but also the fundamental philosophy with which Sir Robert Hutchison taught his students.

During its long years and many editions, *Clinical Methods* must have been reviewed many hundreds of times, and those who have read such reviews will be familiar with the words of praise lavished upon it. We know already from our own experience that it fits into the pocket (not quite so easily as before perhaps) and that it is a mine of useful information. Whether we are humble students anxiously feeling our way in the awesome fog of our first clinical studies or ambitious diagnosticians

seeking higher honours, this virile little volume packs into its 450 pages a systematic approach to medical practice without which our efforts would be sadly wasted.

This book was never intended as a textbook of medicine; true to the intentions of its original authors, it still adheres to the principle of stressing, above all things, the simple but careful steps that the clinician should take in his investigation of the human problem facing him. It is this approach to the patient that is all too easily forgotten in the midst of the increasingly complex diagnostic features of contemporary medicine, and it is in reminding us, throughout this book, to consider the real basis of clinical investigation, namely the details of history taking and the critical observation of the patient, that the authors perform their greatest service.

Such a guide is indispensable to the student, whose whole future depends on the quality of his first lessons by the bedside; it is also a gentle reminder to all practitioners not to ignore the obvious, nor to take unwarranted short cuts which seldom save time in the long run. To those who choose to pursue their medical studies for higher examinations or who are returning to clinical medicine, this book is excellent both for the quick revision which is required initially and for helping to retain a stable and simple outlook on medical practice, at a time when so much knowledge has to be acquired.

The text of this edition has been substantially revised and together with the progress already made in the last edition, the style is now contemporary and pleasantly readable. The detailed revision of the neurological section is excellent and the new illustrations here are a great improvement on those published previously. Equally satisfactory are the additions and alterations made to the chapter on the cardiovascular system, and the inclusion of greater detail in the interpretation of electrocardiograms should be of considerable value. Altogether the many improvements of this edition will give *Clinical Methods* new life and enhance its already well established reputation.

What has this book to offer the industrial medical officer? Certainly this is primarily a clinician's guide, but to those medical officers whose duty it is to protect employees in the toxicological field or who are engaged in the routine inspection of employees as part of a positive health scheme, this book still carries its important message. Routine investigations and examinations are useless if the clinical methods employed become in any way sloppy and ill-defined. Here then is the industrial physician's conscience for scrupulous attention to those standards which he must set himself in his work amongst the potentially healthy members of society. In addition this book will provide him with most of the details of those techniques which he can well employ to advantage in the medical centre of his own particular industry.

P. R. BOYD

National Coal Board Medical Service: Research on Medical and Cognate Problems. Annual Report, 1955. (Pp. 19.) London: The National Coal Board.

This annual report for 1955, produced in a smaller

format than that for 1954, appears in Cambridge blue—*e tenebris lux*, as the motto on the crest on the cover puts it. The contents, however, follow the main lines for the previous report and indicate the extent of the National Coal Board's research interests. These range from the accuracy of the description of jobs on death certificates to miners' rescue breathing apparatus; from field surveys of pneumoconiosis to the physiological and psychological effects of work in hot and humid atmospheres; and from dermatitis and epidermophytosis in coal-miners to lung and bladder cancer in coke-oven workers. The cognate problems include statistical studies of the factors affecting attendance, investigation of compensatable accidents, and the mobility of mining populations. Some of the research described in this report has been carried out by outside organizations receiving financial and other assistance from the National Coal Board. This is clearly indicated in the text and references to published work are given under the appropriate sections.

Certain important administrative changes are described. Two new committees concerned with human problems and technical research and development are expected to lead to an increased interest in research in these fields and the replacement of the Interdepartmental Research Committee by a new Advisory Committee on Human Problems under the Board member for science and the medical service should ensure coordination of these services. The report ends with a list of the members of the four advisory panels on epidemiology, industrial medicine, physiology, and psychology.

I. T. T. HIGGINS

Surgery of the Hand, 3rd ed. By Sterling Bunnell. (Pp. xv + 1079; 1047 figures, 9 colour plates. £7 7s.) London: Pitman Medical Publishing Co. 1956.

There is now widespread recognition that work in this field demands special study and application if worthwhile results are to be obtained. All over the world there has been a general improvement in hand surgery, especially over the last 10 years. Much of this progress is due to the dissemination of knowledge and experience gained by such pioneers as Dr. Sterling Bunnell. It is fitting, therefore, that we should welcome the third edition of Dr. Bunnell's book. First published in 1944, and appearing again in 1948, it now emerges in a larger and more complete form, though retaining its original format and style.

The book is a complete treatise on all aspects of disease and injury of the upper extremity, set against a background of the relevant anatomy, physiology and pathology. Every conceivable aspect of the subject receives thorough and complete consideration. Each procedure is adequately illustrated by case notes and diagrams or photographs; a complete bibliography is appended. Thus the book can be described, without irreverence, as the "Bible" of hand surgery. It is certain that anyone whose work involves the surgery of the upper limb cannot possibly be fully equipped if they have not read it.