

BOOK REVIEWS : BOEKBESPREKINGS

ENERGIERYKE STRALE

Leitfaden des Strahlenschutzes für Naturwissenschaftler, Techniker und Mediziner. Von Dr. H. R. Beck, Dr. H. Dresel und Dr. H.-J. Melching. Pp. xii + 253. 100 Abbildungen. 19 Tabellen. DM 36.-. Stuttgart: Georg Thieme Verlag. 1959.

Enigeen wat 'n omvattende oorsig verlang van ons kennis van energieryke (ook bekend as ioniserende) strale tot 1959,

sal hierdie boek van waarde vind. Die begrippe „energieryke“ en „ioniserende“ behels subtiele verskille, wat dit nodig gemaak het om ander mate langs die röntgen of „r“ te gebruik, soos die rad en die rem.

Die werk handel veral oor beskerming, maar om beskerming verstaanbaar te maak word 'n oorsig gegee oor die geskiedenis en fisiese eienskappe van energieryke strale, hulle meting, biologiese uitwerking, bestralingsskade, en genetiese gevolge. Daar is dus baie wat basies is. Omdat dit nie alleen vir

medici bedoel is nie, maar ook vir natuurwetenskaplikes en tegnici, is daar 'n aantal formules wat vir ons beroep maar moeilik verstaanbaar is, maar wat onvermydelik is met so 'n oorvleueling van sfere.

Die vinnige ontwikkeling veroorsaak dat besliste uitsprake nog nie gegee kan word nie, maar omdat bestraling steeds meer aangewend word in die geneeskunde, die tegniek, in navorsing en op militêre gebied, word praktiese maatreëls vereis. Die tyd kom nou dat juriste, die versekerswese, en politici ook met hierdie probleme te doen kry.

Die begrip beskerming is meer een van die toelaatbare dosis, omdat daar 'n natuurlike bestraling is soos grondstrale en kosmiese strale waaraan 'n mens nie kan ontkom nie. Die ewewig is bereyk sover dit bogenoemde betref, maar weens die kunsmatige bestraling, wat kumulatief en skadelik is, moet die grootste toelaatbare dosisse vasgestel word. Daar is ook 'n pleidooi dat dit wetlik vasgelê moet word.

Eksperimenteel is reeds afdoende bewys dat energierekke strale die vrug *in utero* kan beskadig en mutasies kan veroorsaak. Oor die algemeen hang die skade af van die duurte van swangerskap — hoe vroeër die swangerskap, hoe groter die skade. Daar word aanbeveel dat gedurende swangerskap geen terapeutiese bestraling gegee word nie, en dat diagnostiese maatreëls in die bekkenomgewing tot die laaste maande beperk moet word. Verder moet by vrouens plate van die bekken by voorkeur onmiddellik na menstruasie geneem word.

Terwyl die toelaatbare dosis in die laaste jare steeds kleiner gemaak is, word steeds groter dele van die bevolking aan die invloed van strale blootgestel. Hierdie gesamentlike dosis is een van die belangrikste probleme wat ontstaan. Die grootste toelaatbare dosis vir die totale bevolking is 10 rem vir die eerste 30 lewensjare. Vir enkele persone wat met bestraling werk is dit 5 rem per jaar, volgens ons huidige kennis. A.D.K.

DRUGS OF ADDICTION AND HABITUATION

Problems of Addiction and Habituation. Edited by Paul H. Hoch, M.D. and Joseph Zubin, Ph.D. Pp. xii + 250. Illustrations. £6.50. New York and London: Grune & Stratton, Inc. 1958.

There are 15 papers in this volume, dealing with addiction to narcotic drugs, alcoholism, effects of the use of coffee, fits and insanity from withdrawal of drugs, and eating by children of substances not fit for food (pica). Interest is added by critical appraisal of the papers by discussants present at the 1957 meeting of the American Psycho-pathological Association.

Sandor Rado contributes a brilliant chapter on *narcotic bondage*, setting out his general theory of the dependence on drugs of addiction. The precipitating aetiological factor is a state of depression. Discovery of the drug enables the patient, by means of addiction, to induce upon himself a form of personality repair. 'The drug puts an end to my despair; it makes me feel happy; it restores my self-confidence . . . I cannot live without it'. However, this malignant attempt at personality repair through artificial narcotic elation leads to further problems. The pleasure derived from drugs corrupts the individual's ordinary adaptive efforts; the super-pleasure displaces the more slowly gained rewards of healthy life. Moreover, in addition to his basic depression, the addict has brought upon himself bodily changes which can only be palliated by still further doses of the drug. But it is the intoxicating pleasure-effect of the addictive drug which Rado identifies as the main threat to the addict's social adaptation.

Gliedman's article on group therapy in chronic alcoholism is excellent, and Masserman summarizes his own and other experimental work on induced neurotic and psychotic behaviour in animals.

H.W.

INFANT FEEDING

Notes on Infant Feeding. Fifth edition. By Stanley Graham, LL.D., M.D., F.R.C.P. (Ed.), F.R.F.P.S. (Glas.) and Robert A. Shanks, M.D., M.R.C.P. (Lond.), F.R.F.P.S. (Glas.). Pp. 76. 4s. 6d. net + 6d. postage. Edinburgh: E. & S. Livingstone Ltd. 1960.

These notes were compiled primarily for medical students although the authors express the hope that the family doctor will find them useful. Within some 60 pages of text a wide field is covered: breast feeding, artificial feeding, the feeding of prematures, correct and incorrect feeding, failure to thrive,

and vomiting and diarrhoea. It is obvious that these subjects cannot be dealt with in any detail in so short a book.

The artificial feeding method advocated is based on the calorie metabolic unit and some may find the computation of actual feeds on this basis, particularly for the undernourished infant, somewhat intricate. Only one of the dried-milk preparations mentioned is available in South Africa and it is clear that the British unsweetened condensed milks differ in dilution, and therefore in composition, from similar products procurable in this country.

Nevertheless, this booklet contains a considerable amount of useful information which should be valuable as an introduction to the feeding of healthy babies, prematures, and infants suffering from certain dietetic deficiency disorders. W.E.

CINEFLUOROGRAPHY

Cinefluorography. Proceedings of the First Annual Symposium on Cinefluorography, sponsored by the Department of Radiology, University of Rochester, School of Medicine and Dentistry, New York, Friday and Saturday, November 14 and 15, 1958. Edited by George H. S. Ramsey, M.D.; James S. Watson, Jr., M.D.; Theodore A. Tristan, M.D.; Sydney Weinberg; and William S. Cornwell, M.A. Pp. xvi + 266. Illustrated. 94s. Springfield, Ill.: Charles C. Thomas. Oxford: Blackwell Scientific Publications Ltd. 1960.

This book comprises the proceedings of the First Annual Symposium on Cinefluorography, being a series of lectures with subsequent discussions. The emphasis is almost entirely on the technical aspects and apparatus, and little of the clinical application is included. It is clear from that book that many technical problems remain to be solved before cinefluorography can become a universal diagnostic procedure. In every choice, whether of intensifier, optical system, camera, films, or even processing and viewing techniques, a compromise is required between manoeuvrability, intensification, field size, definition, contrast and both capital and running expense. Though these problems are discussed comprehensively and with great technical detail in this volume, the radiologist will derive little help in making his choice from it. On the other hand, no user of cinefluorography can afford to be without the book.

M.W.

BIOLOGY AND NEUROLOGICAL DISORDERS

Biochemical Aspects of Neurological Disorders. Edited by John N. Cumings, M.D., F.R.C.P. and Michael Kremer, M.D., B.Sc., F.R.C.P. Pp. x + 230. Figures. 37s. 6d. Oxford: Blackwell Scientific Publications Ltd. 1959.

This is a timely and successful book full of important material of major significance to all interested in scientific medicine, which means, of course, every doctor under the age of 70. Or is this too naive a view? While there is nothing strictly original about its contents, the editors have happily been able to gather together a number of contributors (including themselves) who, in their lectures, combine the scientific skill of the biochemist and the wise appreciation of clinical application, for this is a compilation from a series of lectures delivered at Queen Square. To search among the literature for all this information would be a laborious, even though worthwhile, task and one of the merits of this book is its wide survey of the relationship between many neurological disorders and biochemical disturbances. The reader will find it a most stimulating book and one full of promise for the future of medicine which seems, in many different medical spheres, to be closely bound up with chemistry.

S.B.

NEUROLOGICAL RESEARCH

Recent Neurological Research. Edited by A. Biemond, et al. Pp. x + 330. 7 figures. 47s. 6d. Amsterdam, London, New York, Princeton: Elsevier Publishing Company. 1959.

This is a sort of *Jahresbericht* compiled on the occasion of the 50th anniversary of the Amsterdam Neurological Society. It comprises some 28 papers covering both clinical neurology and a vast field in the related neurological sciences. Some idea of the diversity of interests of Dutch neurologists may be gathered from a few of the titles: Pleocytosis in the CSF as a

first symptom of malignant growth in the CNS; Histopathogenesis and malignant degeneration of experimental oligodendroglomas in the rat; Diabetes insipidus in neurosurgical cases; A comparative study of the hodology of the cord of some ungulates and the elephant.

Holland is a small country but it has an impressive scientific tradition and in the field of neurology and its related sciences it has set an example to many a larger and wealthier state. One pays tribute to the organized development of scientific neurology that exists there, and this book is recommended to neurologists and pathologists for its intrinsic interest, and also to those in any way concerned with the encouragement of scientific medical developments in this country, who may perhaps be prompted to do a little in this neurologically backward land of ours.

S.B.

OBSTETRICS AND GYNAECOLOGY

Clinical Obstetrics and Gynecology, vol. 2, no. 4, *Cesarean Section*, edited by Edwin J. de Costa, M.D. *Advances in Gynecologic Surgery*, edited by S. B. Gusberg, M.D. Pp. 303. Illustrated. Subscription \$18.00 a year. New York: Paul B. Hoeber, Inc. 1959.

Caesarean section has of late taken a very prominent place in obstetrical practice, and very few books give such a complete account of the indications, techniques and results as the first part of this volume. A whole chapter is given to Caesarean hysterectomy and the author recommends it in cases where a sterilization is necessary in conjunction with a Caesarean section. This is a dangerous recommendation, especially in South Africa, where so many Caesarean sections are carried out by general practitioners and sometimes under very primitive circumstances. An interesting chapter is that on supravesical extraperitoneal Caesarean section, which is not much practised in this country. In this age of diminishing dangers of sepsis, this form of the operation surely does not need much consideration.

Although the latter part of this volume is entitled 'advances in gynecological surgery', very little is mentioned which has not been in gynaecological literature for a few years. Cervical

incompetence, which has received an unduly prominent place in gynaecology, is again discussed in detail; an interesting technique is described for the non-pregnant woman. The last chapter, on gynaecological examination, is extremely useful for the medical student.

For the busy gynaecologist with little time to read, these volumes still remain valuable additions to his library.

R.W.A.N.

BORS- EN HARTSIEKTES

Diseases of the Chest including the Heart. Edited by J. Arthur Myers, Ph.D., M.D. Pp. x + 1015. Illustrations. £13 16s. Springfield, Ill.: Charles C. Thomas. Oxford: Blackwell Scientific Publications Ltd. 1959.

Hierdie boek poog om die gebied van long- en hartsiektes volledig te dek. Die klem word egter gele op die muistels beskouings en ontwikkelings. Omrede van die wye gebied wat behandel word, moet dit noodwendig geskied dat baie hoofstukke maar 'n beknopte samevatting gee van die onderwerp (bv. die hoofstuk in verband met hipertensie).

Die skrywers van die verskillende onderdele is almal ervare en bekende persone elk op sy eie gebied, en hulle is dus in staat om die belangrikste aspekte te kies en kortlik weer te gee.

Deel I, wat oor die longe handel, maak die grootste gedeelte van die boek uit — sowat twee-dertes. Dié deel is dan ook meer volledig en beter opgestel as deel II wat oor die hart handel. Laasgenoemde onderwerp kan dan ook met moeite in 360 bladsye behoorlik aangehandel word.

Benewens die uitbeelding van sietketoestande word daar hoofstukke afgestaan aan die meer belangrike anatomiese en fisiologiese begrippe. Ook word die mikrobiologiese aspekte nie verontgaan nie, en dele word selfs afgestaan aan 'n uiteensetting van chirurgiese metodes, veral met aanpassing van oop hart-operasies. Daar is ook 'n hoofstuk gewy aan beserings van die hart en die groot vate.

Die geheel maak 'n nuttige naslaanboek uit en behoort deur almal wat belangstel in borskassiektes aangeskaf te word.

A.J.B.