

Reviews

DANGEROUS DRUGS

The Yale University has just published a booklet of some 120 pages, entitled *Dangerous Drugs: The World Fight against Illicit Traffic in Narcotics*.¹ The author, Mr. ARTHUR WOODS, was formerly Police Commissioner in New York City, and acted as an assessor to the Advisory Committee on Opium of the League of Nations. In six chapters he deals with the history of the question, the physical and moral actions of morphine, heroin, and cocaine, and their influence on social life; after reviewing what has been attempted in the past to restrict the traffic in drugs of addiction to legitimate uses, Mr. Woods concludes with recommendations as to what, in his opinion, should be done. The author's experience leads him to approach the problem chiefly from a legal or police point of view. He cites evidence to prove, what is now admitted, that the abuse of narcotics and the illicit traffic therein are enormous, are increasing, and ought to be reduced or suppressed.

Morphine, when first derived from crude opium in 1803, and popularized by hypodermic injection from 1853 onwards, and heroin, when produced in 1898, were at first regarded as having only beneficent and no maleficent properties. It is the "character changes" and "moral deterioration" of morphine, heroin, and cocaine addicts that Mr. Woods seeks to emphasize. Such addicts are to be found in all walks of life, and the vicious habit is attributed to injudicious prescription, self-medication, bad associates, imitation, or mere bravado. The number of drug addicts in the United States has been variously estimated at from 100,000 to over 1,000,000. The author holds that "there can be no doubt that narcotic addiction, if not exactly the primary cause of much major crime, has played a very large part in its commission," and that "drugs become part of a vicious circle of social corruption." He traces the efforts at international control of the traffic in narcotics from the Shanghai Commission of 1909 to the action by the League of Nations under the Geneva Convention of 1925. Although most of the nations have bound themselves, in accordance with Article 9 of the Hague Opium Convention, to limit the manufacture, sale, and use of medicinal opium, morphine, heroin, cocaine, and their preparations to exclusively medical or legitimate purposes, and to co-operate internationally to prevent their use for any other purpose, yet illicit production and distribution of these drugs is admittedly "enormous" and "appalling." The huge financial interests involved in the contraband traffic, and the ingenious methods of the international gang of smugglers who thrive on the gigantic profits derived from this illicit commerce, are abundantly demonstrated.

Mr. Woods's final chapter on "What is to be done?" has little that is new to suggest in order to remedy the evil he has exposed. He says "the need for drastic action is clear," but such action amounts to little else than the vigorous and universal enforcement of the provisions of Article 9 of the Hague Opium Convention of 1912, referred to above. He holds that it is also essential that the acreage devoted to the culture of the poppy and coca leaf should be reduced. The default of even one producing country may "put the world at its mercy," and so long as Turkey, Persia, and China are unable, or unwilling, to ratify and effectuate the opium conventions, the leak of illicit production has not been stopped. Even some European countries have notoriously failed to fulfil their contractual obligations, and have been the source

¹ *Dangerous Drugs: The World Fight against Illicit Traffic in Narcotics*. By Arthur Woods. New Haven: Yale University Press; London: Milford, Oxford University Press: 1931. (Pp. vi + 123. 9s. net.)

from which huge illicit consignments of narcotics have emanated. Mr. Woods is sanguine enough to hope that a more educated public opinion in regard to the social perils involved will so influence Governments as to secure effectively both the internal and international control of the trade in drugs of addiction.

MEDICAL STATISTICS

Statistics can become a dangerous instrument if carelessly used, in the fields of medicine as elsewhere, and as more and more of the care of the national health passes into the hands of organized services of one kind or another it becomes increasingly important to guard against the fallacies and pitfalls which may accompany their use. We therefore welcome *An Introduction to Medical Statistics*,² by HILDA M. WOODS and W. T. RUSSELL, which sets out in a concise and intelligible form the elementary principles and methods with which every aspirant to a diploma in public health should be familiar.

There are larger works which contain more than can be readily digested by the average medical man or woman who desires a working knowledge of the elements of medical statistics. From a perusal of one of these larger books the student will probably emerge with a rather confused idea of masses of figures relating to a great many diseases, but without any very clear notion that the study of vital statistics contains anything which cannot be safely left to the clerical staff of a public health department. Another excellent work may lead him to the opposite view, that this is clearly a business for experts with some *flair* for mathematics and a prolonged training in statistical methodology. In this latter view he will be justified if he is thinking of statistical research into medical problems, but as regards the preparation of his annual report when he becomes a medical officer to some public body or institution either point of view is unfortunate. These reports will perforce be full of statistical tables and summaries, and from them he will at least be expected to draw some clear-cut conclusions which may influence future policy in the control or treatment of disease.

Hence a course of training in State medicine should include as clear a presentment as it is possible to give, in the short time which can be devoted to this subject, of the principles involved, not only in the collection and analysis of statistical data, but in the drawing of legitimate conclusions from them. Having such a purpose in view, this small book undoubtedly fills a gap which has long been felt. That it does so adequately is guaranteed by the fact that the joint authors are colleagues of Professor Major Greenwood, who writes the preface. A study of the book justifies the confidence that such a recommendation inspires. It contains eleven chapters, of which six deal with the collection, representation, and standardization of vital statistics and construction of life tables, another four deal with frequency distributions, variability, correlation, and regression, and the last with the application of the theory of sampling to estimating the reliability of rates and averages. Such an attempt at condensation and simplification must necessarily carry with it certain dangers, in that the student may be left unaware of the limitations of some of the methods described. One feels, for example, that in the chapter on correlation a warning that the correlation coefficient can only be usefully employed when the regression is approximately linear might perhaps have been added.

The authors are to be congratulated on carrying out a difficult task in an admirable way.

² *An Introduction to Medical Statistics*. By Hilda M. Woods and William T. Russell. London: P. S. King and Son, Ltd. 1931. (Pp. x + 125. 7s. 6d.)

PHYSIOLOGY OF MUSCULAR EXERCISE

The study of *The Physiology of Muscular Exercise*³ is one of the most interesting applications of physiology to human affairs that have engaged the attention of investigators during the present century. It illustrates in the clearest manner the wonderful reserve powers of the body and the way in which various and complicated co-ordinating processes succeed in keeping the physico-chemical state of the blood and tissues almost unchanged in spite of the many disturbing tendencies which are brought into play during severe exertion. The present (third) edition of BAINBRIDGE'S book on the subject has been rewritten by two young American physiologists, and very ably rewritten too. The defeat of the Oxford and Cambridge (England) athletes by the clearly superior team from Harvard and Yale on July 18th is not without its significance for us. The Americans beat us at sport because they study the subject and organize their training on scientific lines. An event is won, "in the long run," as much by cerebral as by muscular effort.

The treatment of the subject, as with the original edition, centres round the means by which the tendency to alteration in the properties of the blood during exercise are counteracted, partly by the peculiar properties of the blood itself, partly by alterations of a compensatory nature in the action of the circulatory and respiratory systems. It is evident that the physico-chemical properties of the blood are of fundamental significance to the whole question; hence the importance of the discussion of these properties from the standpoint of the remarkable investigations which have been so ably conducted at Harvard by L. J. Henderson, and in which the present authors have participated. It is not too much to say that these studies not only form the most conspicuous feature of the changes in this volume, but that they represent one of the most brilliant scientific contributions of the present century. It is abundantly clear that our friends across the Atlantic know how to organize teams, whether for work or for play; and if we claim that they are rather apt to work at their play, we must also admit that they work at their work. In the language which they are alleged to use, we "hand it to them." The question of exercise at high altitudes, including that of acclimatization to those altitudes, is also dealt with, and is another illustration from which we see that the centre of gravity has apparently left the Oxford and Cambridge controversy—so long an entertainment for the cultured—and crossed to America.

The book has undergone thorough and competent revision, on which the authors deserve warm congratulations. The bibliography is considerably extended, particularly as regards recent American work, and the book as a whole is a well-balanced presentation of the prevailing opinions on this closely interwoven fabric of exact data. No better book could be read by anyone who wishes to know how physiological methods can be applied, or whether physiology has any real value in human affairs.

POST-TRAUMATIC CAUSALGIAS

In his Lyon thesis Dr. PAUL BLANCHET gives an account of the post-traumatic causalgiias described by Weir-Mitchell,⁴ and their prognosis, by abstracting thirty-five cases previously recorded, by describing in considerable detail a case dating from a gunshot wound in 1914, and by a critical analysis. In a bibliography of 200 items, twelve

³ *The Physiology of Muscular Exercise*. By the late F. A. Bainbridge, M.D., D.Sc., F.R.C.P., F.R.S. Third edition, rewritten by A. V. Bock, M.D., Ph.D., and D. B. Dill, Ph.D. London and New York: Longmans, Green and Co. 1931. (Pp. viii + 272; 46 figures. 15s. net.)

⁴ *Les Causalgies post-traumatiques de Weir-Mitchell et leur Devenir*. Par Dr. Paul Blanchet. Paris: E. Le François. 1930. (Pp. 257.)

bear a date before the European war, no fewer than 145 appeared during the war, and the remainder (of various dates) bear less directly on the subject. Causalgia is ascribed by the author to hypersensitiveness of the sympathetic, and he quotes the dictum of his teacher, Professor Froment, that it is "the cry of the sympathetic." Causalgia, or burning pain in the cutaneous area supplied by an irritated nerve and showing the well-known glossy skin, is divided into two forms—the hyperaemic and the ischaemic. These are characterized respectively by redness and heat, and by pallor and a depressed temperature, and are due to stimulation and to degeneration of the vaso-dilator nerves. The form with hyperaemia as its predominant manifestation is the more frequent, and fortunately the more susceptible of cure, most of the patients recovering spontaneously in the course of some months, whereas the rarer ischaemic form is much more obstinate and runs a course of years. The psychological manifestations are secondary, not primary. The surgical measures for the relief of causalgia are numerous; amputation should be avoided when possible, as it often aggravates the pain and extends its area; peri-arterial sympathectomy is the most successful procedure; but ramicotomy, provided that all the branches supplying the painful area are divided, has given good results. This is an example of a thesis useful to the compiler.

CLINICAL RECORDS BY MEANS OF X RAYS

The book on this subject,⁵ by Privatdozent VICTOR HOFFMANN of Cologne, with its English and German texts, is useful and unique. In the preface its object is stated to be "to demonstrate the most important bone and joint diseases and their subsequent course. X-ray photographs have been used because by them it is possible to show the various stages and general course of this disease group, and because, after histological representation, they leave the most profound impression." This is quite true when, as in this case, the radiographs are of first-rate quality and well reproduced. The author says that the pictures are intended to take precedence over the text, and he properly insists on the lesson they teach of the healing power of nature. Such a series as that of four pictures showing the course, ending in regrowth of a vertebra, and cure of a case of osteomyelitis of the spine on pages 14 and 15 is of extraordinary interest, and most attractive. Indeed, we may say as much for all the cases which have been selected after many years' hard work. We cordially endorse the author's wish that the publication of the book in English and German may "be beneficial to mutual scientific work between the different nations." It includes 156 series of radiographs; each consists of a number of radiographs, the total number being nearly six hundred.

A SURGEON'S MUSINGS

The tenth edition of Dr. JOHN CHALMERS DACOSTA'S *Modern Surgery* has recently appeared, but in the meanwhile he has written widely, often with a reminiscent flavour and always with an interesting touch, as is shown in the twenty-one *Selections from the Papers and Speeches*.⁶ As Samuel D. Gross Professor of Surgery at the Jefferson College, Philadelphia, he writes with admiring affection of his predecessors in that chair—the elder Gross, "the emperor of American surgery"; the

⁵ *Verlauf der wichtigsten Knochen- und Gelenkerkrankungen im Röntgenbilde*. Von Privatdozent Dr. med. Victor Hoffmann. Berlin: J. Springer. 1931. (Pp. x + 264; 584 figures. R.M.68.)

⁶ *Selections from the Papers and Speeches of John Chalmers DaCosta, M.D., LL.D.* Philadelphia and London: W. B. Saunders Company. 1931. (Pp. vii + 440; 13 illustrations. 36s.)

latter's son, S. W. Gross, who "said what he meant, and meant what he said"; and Professor W. W. Keen, the veteran surgeon of North America's two great wars, who is happily still with us. In his account of the foundation and the founder (George McClellan) in 1825, in the "last surgical clinic in the old amphitheatre" in 1922, and in the history of the old wooden operating table, of Jefferson Medical College Hospital, he has constituted himself its historian. Like Professor Harvey Cushing, to whom this collection of essays is gracefully dedicated, the author has travelled far in biographical studies—for example, in "Medical Paris during the reign of Louis Philippe," his sketch of Baron Larrey, and "The personal side of Pepys." In "Then and Now," his oration at the jubilee of the Philadelphia County Medical Society in 1899, the history of the city of brotherly love when appendicitis was practically unknown, is another footnote to medical history. Admittedly "subject to the luxury of musing," Dr. DaCosta writes "behind the office doors" about medical authors, and the doctors in Dickens's novels.

NOTES ON BOOKS

The fact that Colonel L. W. HARRISON has found it necessary to bring out a fourth edition of his *Diagnosis and Treatment of Venereal Diseases in General Practice*⁷ indicates that this book has established a reputation in medical literature. Room has been found for a considerable amount of new matter by excising information which appears in standard textbooks on medicine and surgery, and is superfluous in a work devoted to venereal disease. The chapter which bears the chief marks of alteration and re-editing is that devoted to the treatment of syphilis. The author has always felt strongly that, in spite of repeated warnings, under-treatment of syphilis is still a common fault, and he again brings out the importance of prolonged and intensive treatment, even in cases where the disease is diagnosed at an early stage. An analysis of his results at St. Thomas's Hospital has led him to the conclusion that the programme of treatment which he laid down in his first edition is barely adequate, although at the time of publication it was thought by many to be longer and more intensive than necessary. Consequently, in the present edition he has still further extended the courses required for the treatment of primary disease. Additional matter now appearing for the first time is a description of that somewhat rare and puzzling condition, granuloma venereum, and climatic bubo. The practitioner will undoubtedly find in this book everything he requires in the way of guidance in the diagnosis and treatment of venereal troubles. He can also rely on it to furnish him with precise information about the correct procedure in practically all the circumstances which he is likely to encounter.

In reviewing the American translation of Dr. CEMACH's book on Surgical Diagnosis⁸ in the early part of 1929 we endorsed the translator's dictum that the author had furnished an exceptional amount of information in an easily accessible form. The fifth, improved, and enlarged edition of the original German work deserves similar approbation. In some respects it is better than the American translation, for it is less cumbersome, yet it contains more plates and tables, and, notwithstanding the drawbacks to this form of handbook, which we pointed out two years ago, it gives at a glance useful information on surgical diseases of wonderful amount in small compass. Some of the illustrations are adequately coloured in order to illustrate such lesions as erysipelas, lymphangitis, and others. This edition is a useful picture-book of surgical

diseases and injuries, but its value would be much enhanced by the provision of a far more copious index. With its 589 illustrations it is not dear at 18 marks, unbound.

Professor CURTIS M. HILLIARD's attractively written book on *The Prevention of Disease in the Community*⁹ resembles those in the Boston Health Lecture Series in being intended for non-professional readers, and especially to provide college students with the rudiments of preventive medicine and hygiene in addition to the elements of personal hygiene, which are more generally taught in American schools and colleges. The instruction is conveyed with suitable examples: thus, "the typhoid mother-in-law" was a kindly woman who visited her six married daughters, and with the best intentions assisted in their kitchens, thus infecting at least thirteen persons, though, curiously enough, her own daughters and sons escaped any recognized infection.

The continued popularity of the injection treatment of varicose veins is shown by the appearance of another handbook on this subject, entitled *The Rational Treatment of Varicose Veins and Varicocele*.¹⁰ The author, Mr. W. TURNER WARWICK, has endeavoured to supply answers to the many questions of detail as regards the actual procedure and its sequels, and the various kinds of emergencies which may occur. The subject-matter is more thoughtfully conceived than in some similar publications, and the bibliographical references throughout are numerous. Mr. Warwick gives reasons for the various practical suggestions that are made, and his little book can be recommended to the attention of our readers.

A new edition has been published of the Register¹¹ of members of the Chartered Society of Massage and Medical Gymnastics, corrected up to April, 1931. A valuable feature of this reference book is the fact that it contains an index of those practising massage classified under postal districts, as well as information about the qualifications in each case.

⁹ *The Prevention of Disease in the Community*. By Curtis M. Hilliard. London: McGraw-Hill Publishing Company, Ltd. 1931. (Pp. viii + 193; 25 figures. 8s. 9d. net.)

¹⁰ *The Rational Treatment of Varicose Veins and Varicocele*. By W. Turner Warwick, M.B., F.R.C.S. London: Faber and Faber, Ltd. 1931. (Pp. 188; 12 figures. 5s. net.)

¹¹ *The Chartered Society of Massage and Medical Gymnastics: Register of Masseuses and Masseurs*, July, 1920-May, 1931. London: Tavistock House (North), Tavistock Square, W.C.1. 1931. (4s.)

PREPARATIONS AND APPLIANCES

VITAMIN CONCENTRATE OF COD-LIVER OIL

McKesson's vitamin concentrate of cod-liver oil is a fluid preparation which contains both vitamins A and D in eleven times the concentration at which they occur in a potent sample of cod-liver oil. This preparation has been accepted by the Council of Pharmacy and Chemistry of the American Medical Association (*Journ. Amer. Med. Assoc.*, 1930, xcv, 1347). The makers state that their preparation has been subjected to careful tests as regards stability. The preparation is free from the well-known odour and taste of cod-liver oil, and the dose recommended is three to six drops three times a day.

LACARNOL

Lacarnol is an extract of certain mammalian organs. It has a selective dilator action on the coronary arteries, but does not influence the general blood pressure. The preparation contains nucleosides, and the evidence available suggests that the active principle is adenosin. This preparation has been subjected to numerous laboratory and clinical tests in Germany. Fahrenkamp (*Munch. med. Woch.*, 1930, No. 44, p. 1914) has reported favourably on its action in angina pectoris. He states that the preparation produces benefit even after oral administration. (Supplied by Bayer Products Ltd.)

"TABLOID" CAROTENE

"Tabloid" carotene is a new preparation put forth by Messrs. Burroughs Wellcome and Co. Carotene is a pigment found in various vegetable and animal foods, and is an unsaturated hydrocarbon with an empirical formula $C_{40}H_{56}$. It is believed to be converted in the animal body into vitamin A which is colourless. Each tabloid of this preparation contains 0.002 gram of carotene, and two tabloids are approximately equivalent to the vitamin A content of one teaspoonful of an average cod-liver oil.

⁷ *The Diagnosis and Treatment of Venereal Diseases in General Practice*. By L. W. Harrison, D.S.O., M.B., Ch.B., F.R.C.P. Ed. With a chapter on the Medico-Legal Aspects, etc., by F. G. Crookshank, M.D., F.R.C.P. Fourth edition. London: Milford, Oxford University Press. 1931. (Pp. xv + 567; 79 figures, 19 plates. 25s. net.)

⁸ *Chirurgische Diagnostik*. Von Dr. med. A. J. Cemach. Fünfte, verbesserte und vermehrte Auflage. München: J. F. Lehmann. 1931. (Pp. xi + 7; 105 tabular forms, 589 figures on 131 plates. Paper cover, R.M. 18; bound, R.M. 20.50.)