to exclude syphilis does not require to be extended beyond the customary three months.

The incubation period which elapses between the implantation of the spirochaete and the appearance of a visible lesion is generally under six weeks. An incubation period longer than two months, though described, should be regarded with suspicion. Until recently it has generally been the custom in this country to put cases of gonorrhoea on surveillance for three months. That this may not be long enough is suggested in the case described.

CASE REPORT

A male patient aged 29, who denied previous venereal infection, had reported elsewhere on Jan. 3, 1946, with a gonococcal urethritis. He admitted exposing himself to infection three days previously. Penicillin, 200,000 units given in 3-hourly doses of 25,000 units, guickly cured his gonorrhoea. While on surveillance all tests were negative until he reported to this hospital on April 10. He complained that he had had a sore on his penis for seven days, which was not healing. On examination he was found to have a typical indurated syphilitic sore on the shaft of the penis, with marked inguinal adenitis. Dark-ground examination of material from this sore showed large numbers of treponemata. A Wassermann test on a sample of blood taken at the same time was negative. This finding fits in with the story of the patient that the sore had been present only for seven days. On requestioning he stated that he had run no further risk since Jan. 1, 1946, and was able at the same time to name the prostitute with whom he had taken the risk. I believe his story to be true. On tracing the record card of the prostitute it was found that she had been treated for gonorrhoea in May, 1945; in the following September she had had salpingitis, but had defaulted since October. She reported again to the clinic on Feb. 25, 1946, with

On tracing the record card of the prostitute it was found that she had been treated for gonorrhoea in May, 1945; in the following September she had had salpingitis, but had defaulted since October. She reported again to the clinic on Feb. 25, 1946, with condylomata around the posterior fourchette, in specimens from which *Treponema pallidum* was easily recognized on dark-ground examination. Her blood Wassermann was strongly positive. Gonococci were not found in smear or culture from either urethra or cervix. It can, however, be presumed that she was doubly infectious on Jan. 1, 1946, and therefore the almost certain source of the infection in our male patient.

The case is interesting in suggesting that, as had already been tentatively postulated, the onset of primary syphilis may be considerably delayed after treatment with penicillin. It is to be expected that further cases similar to this will be described.

Cronin's article is useful in showing that a long delaying action is probably not at all common; however, if some cases can occur, three months is too short a period for surveillance of cases of gonorrhoea, since infection with syphilis may pass undetected. This is particularly important in women, when the chancre may not be obvious—e.g., when it is on the cervix. My thanks are due to Dr. G. L. M. McElligott, Director of the Department, for permission to publish this case.

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Silent Perforation of the Gut Wall

The recent report (*Journal*, March 2, p. 315) of a case of a foreign body piercing the gut wall and causing an "acute abdomen" has prompted me to place on record the following notes, which show that, apparently, silent perforation of the gut wall can occur.

The patient, an intelligent woman of 33, was admitted to this hospital with a typical history, signs, and symptoms of acute appendicitis. An early acutely inflamed appendix was removed, and when arranging the greater omentum to protect the operation site a hard mass was felt in the omentum. On inspection this proved to be a rubber ring embedded in the omentum about 1 in. (2.5 cm.) from the transverse colon. There was some discoloration of the surrounding fat but no evidence of ulceration through the bowel. Resection of a small wedge of omentum containing the ring was performed and the abdomen closed. The patient made an uneventful recovery.

Careful questioning of the patient afterwards failed to bring to light any explanation of the route which the ring must have followed. She had never had any previous stomach trouble such as one would expect when this foreign body was ulcerating through the gut wall. The only explanation which occurs to me is that the ring, presumably ingested, ulcerated through the greater curvature of the stomach between the anterior two layers of the greater omentum, and so was never free in the peritoneal cavity. In this way the absence of symptoms may be explained.

I wish to thank Mr. L. E. C. Norbury, under whose care the patient was admitted, for advice and encouragement in the reporting of this case.

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Reviews

THE COMPOSITION OF FOODS

The Chemical Composition of Foods. By R. A. McCance and E. M. Widdowson. Second edition. (Pp. 156. 6s.) M.R.C. Special Report Series No. 235. London: H.M.S.O. 1946.

Six years ago Prof. McCance and Miss Widdowson published their *Chemical Composition of Foods*, a compilation giving the most important organic and mineral constituents of the more common foodstuffs. The steady demand for this book over the last six years, and the fact that it was reprinted several times, were evidence of its value to workers in the field of nutrition.

The war and its associated nutritional problems created a demand for new analytical data. The composition of cooked dishes altered during the war, partly because of the introduction of 85% extraction flour, dried eggs, and dried skimmed milk, and also because rationing led to the adoption of plainer recipes. This did not necessarily lead to the consumption of less nutritious products. After minor modifications and additions in 1942 a new edition of Chemical Composition of Foods became necessary. There has been little change in the form of the volume. Information has been brought up to date and figures on new foodstuffs introduced during and after the war have been added. A special feature of the book is that it gives figures not only for uncooked food but also for the same food prepared by various methods. An interesting table is that on the phytic acid content of foodstuffs. The importance of phytic acid is twofold. Its calcium and magnesium salts being insoluble, they are precipitated in the gut if the food contains much phytic acid, and thus not only are calcium and magnesium salts lost to the body but also the phosphorus in the phytic acid.

Food research is not only technically exacting—some 20 constituents have been estimated for each food, and there are over 600 foodstuffs listed—but it is very laborious. Almost every substance analysed brings up fresh problems, and the solution of these may take weeks or even months. Many Ministry of Food recipes using wartime foodstuffs were prepared and submitted to analysis. The number of man hours that went into the making of McCance and Widdowson's book must be phenomenal. It is indispensable not only to the nutritionist but also to the physician, because a knowledge of the chemical composition of foods is the first essential in the dietetic treatment of disease as well as in research on problems of human nutrition.

INTRODUCTION TO HUMAN ANATOMY

An Introduction to Human Anatomy. By Clyde Marshall, M.D. Revised by Edgar L. Lazier, Ph.D. Third Edition. (Pp. 418; 303 illustrations, 13 in colour. 12s. 6d.) London: W. B. Saunders Company. 1946.

A third edition of Clyde Marshall's book has now been published, the new edition having been enlarged and revised by Prof. E. L. Lazier, of the University of California at Los Angeles, but without any substantial alteration in the general plan of the original work. Certain improvements and differences in the presentation of the subjects have, however, been made, more especially with regard to the description of the joints and ligaments in the chapter on the skeleton, and in the grouping of muscles according to their function rather than the order in which they are usually exposed in a dissection. The description of the circulatory system has also been rearranged on the basis of the principal functions of the system rather than the anatomical relations of the vessels to the surrounding parts. Some new diagrams and figures have been added, or introduced in place of less adequate older figures, more especially in the description of the muscular system and of the optic visual and reflex paths, and the chapter on the endocrine glands, in which recent work on the functions of these organs has been referred to in considerable detail.

The purpose of the book as an introduction to human anatomy, with special stress on the association of structure with function, is thus well fulfilled; a word of warning to medical students is, however, necessary, for although a knowledge of general principles may be quickly acquired by the study of an elementary textbook, a mastery of the details of human anatomy is essential for both medical and surgical practice; and, however good an introductory textbook may be, such books must be supplemented by the use of the best dissecting manuals, and the study of the classical works on descriptive anatomy and histology.

PATHOLOGY OF THE C.N.S.

Pathology of the Central Nervous System. A Study based upon a Survey of Lesions Found in a Series of Thirty Thousand Autopsies. By Cyril B. Courville, M.D. Second edition, revised and enlarged. (Pp. 450; 208 illustrations. 36s.) California: Pacific Press Publishing Association; London: H. K. Lewis and Co.

The first edition of Prof. Courville's Pathology of the Central Nervous System was unusual for three main reasons: it incorporated the results of observation of an enormous mass of pathological material in one centre, it depended to an unusual extent upon the author's own researches, and because of this it presented neuropathology as a living, and therefore progressing, process, the dynamics of which may be misunderstood in its final immobile stage. In the second edition the extension of the author's work on cellular pathology has been included, and the serial diagrams of cellular changes, which are a feature of the first chapter, lend meaning to the later and more orthodox illustrations. It is a pity in this respect that Prof. Courville's recent work on the cellular pathology of brain trauma appeared too late for inclusion in the present edition.

There is a very large chapter, of over 70 pages, on trauma, which is of topical importance. This, like other chapters, has numerous diagrams of the mechanism of the disorder, but some of the ciagrams of the mechanics of brain injury have been over-simplified for the sake of clarity. Recent experimental work has shown how very complicated may be the results of the most simple head injury.

This edition, like its predecessor, is really a textbook of applied neuropathology for the practising neurologist and neurosurgeon, rather than for the student of neuropathology. It is intended for general study rather than for casual reference. The additions which have been made to the second edition make it as welcome as the first. The material is attractively presented and the illustrations are excellent.

THE LAW OF PHARMACY

A Textbook of Forensic Pharmacy. By Thomas Dewar, Ph.D., B.Pharm., B.Sc., Ph.C., Barrister-at-Law. (Pp. 253. 10s. 6d.) London: Edward Arnold. 1946.

This is a concise but comprehensive textbook of the law relating to the practice of pharmacy. Much of its information is contained in standard textbooks of medical jurisprudence, but not nearly so fully nor systematically. The author's aim has been to present in a single volume all the forensic pharmacy which is ordinarily taught to candidates seeking qualification as pharmacists, and his book is the first we have seen which fulfils this object. Its first part deals with pharmacy, poisons, and dangerous drugs; its second with medicines; and its third with the law governing retail business. It gives in appendices the text of the Poisons List, the schedules to the Poisons Rules, a list of the poisons the subject of monographs in the British Pharmacopoeia, a list of the drugs and preparations exempted from the Dangerous Drugs Regulations, the relevant schedules to the National Health Insurance regulations, and a number of examination questions arranged in order of the chapters of the book. Mr. Dewar does not confine himself to examinations, but covers the subject fairly and fully. His first chapter is a complete account of the constitution and functions of the Pharmaceutical Society of Great Britain and its statutory com-The test of examination requirements has, however, mittee. ensured so far as is practicable that nothing important shall have been omitted, and indeed this book should prove a valuable day-to-day guide to every practising pharmacist. It is good value at half a guinea, but the reader may feel moved to ask whether, in a formal didactic reference book, the Shakespearean quotations at the head of each chapter are really necessary.

Notes on Books

REVIEWS

A Laboratory Manual of Anatomy and Physiology, by Nellie D. MILLARD and MARY JANE C. SHOWERS, of the Michael Reese Hospital School of Nursing, Chicago, and the Christ Hospital School of Nursing, Cincinnati, indicates a departure from the extent and character of the physiological training which has hitherto been customary in the teaching of nurses. The manual consists of a series of drawings, with directions for 30 practical classes in anatomy and physiology, and each is accompanied by a summary in which quarticipant are acted representing the day's lesson. The in which questions are asked respecting the day's lesson. The drawings, mostly in outline, are intended to help the students in making a record of the demonstrations. These include the study of the human skeleton and dissection of various animals, such as the frog, cat, guinea-pig, or rabbit, or of parts of animals, such as a veal or sheep heart, or a pork kidney. The students work singly, or in pairs, and in the physiological section are expected to "pith" or anaesthetize frogs and, after identifying particular organs and nerves to study the effects of division or stimulation of nerves. and nerves, to study the effects of division or stimulation of nerves, or direct stimulation of limb-muscles or parts of the heart; also the effect of drugs, and observations on segmentation and peristalsis of the intestine. Instructions are given on the estimation of haemoglobin and the coagulation time of blood, and there is also an excellent diagram of a haemocytometer, with directions for making bloodcell counts. The nurse's training in Chicago and Cincinnati thus includes much practical work which has hitherto come only within the scope of advanced medical study and in this country has very properly been considered outside the nursing curriculum. The book is published by W. B. Saunders Company at 5s.

A second edition of *Hydrotherapy*, by RUTH M. LE QUESNE and MARY GRANVILLE (Cassel and Co; 7s. 6d.), is welcome. Primarily intended for students working for the diploma of the Chartered Society of Physiotherapy (formerly the C.S.M.M.G.), it would certainly be advantageous to medical students to remind them of what they see in the somewhat cursory official visit to the neighbouring spa or hydrotherapeutic clinic. After preliminary chapters on the history of the subject, on the physical principles involved and a few physiological implications, short descriptions of the usual methods of hydrological treatment are given. A short chapter on " treatment of some common conditions" may be useful, but has the inevitable defects of such very brief summaries of a complicated subject. Finally there is a not too accurate list of the facilities at British spas. For example, it is stated that several of the springs of Bath are rich in radium emanations, and its waters are chiefly used externally. Actually there is no variation in the water of Bath, so that it is all radioactive, for what that is worth, and it is extensively used internally.

Flying Visit (London: Church Missionary Society; 2s. 6d.) is the record, in the form of a diary, of a remarkable wartime journey through West and East Africa and the Middle East by Dr. H. G. ANDERSON, who travelled 26,000 miles in twenty-four weeks to visit missionary establishments in Nigeria, Kenya, Uganda, Sudan, Egypt, Palestine, and Iran. His observations, necessarily fleeting, are full of interest, especially to those in sympathy with missionary work. The book is illustrated by some excellent photographs, and it includes nine relevant maps.

Preparations and Appliances

A SIMPLE DRIP-FEED TYPE OF ANAESTHETIC APPARATUS

Dr. RALPH BIBBINGS writes from Princess Elizabeth Orthopaedic Hospital, Exeter:

The need for a simple anaesthetic unit, suitable for a wide variety of surgical procedures, is one that arises frequently. The following account describes a simple machine that has been devised at this hospital. Already it has been used in some 250 instances, and the results have been most successful.

Description of the Machine

The apparatus has been so designed that it may be easily constructed on the premises of the average hospital from standard parts. The vaporizer consists essentially of a metal canister with a removable lid. I have found that a small "Kodak" developing tank (about 5 in. long) suits the purpose admirably. The bottom and the lid of the canister are each perforated by a single central hole of about 3/4 in. diameter. Into the aperture in the bottom of the canister is soldered a short length (2 in.) of metal tubing over which one end of a length of "concertina" tubing is fitted. The hole in the lid has, arranged on its inner side, a flap of rubber which occludes it. This flap is attached to the periphery of the lid, being