

longation of life were nitre and blood letting. The nitre he employed probably contained a quantity of nitrates, and blood letting was a remedy which had fallen too much into disuse, and in cases of high tension might be employed again with advantage. He showed Von Basch's instrument as modified by Potain for estimating blood pressure and also a combination of this instrument with Riva-Rocci's armlet. Dr. HERBERT FRENCH reminded the Society that cases of very high blood pressure occurred even amongst those who were at the same time vegetarians, non-smokers, and lifelong abstainers. In his reply, Dr. OLIVER agreed that rest in bed would diminish the high blood pressure even in the worst cases, but this was owing to a diminished call at the cardiac end of the circulation. In those who were obliged to work, the ventricle factor could not be diminished, and such cases seldom reacted to drugs so long as they remained up and about. He thoroughly approved of the revival of venesection in such cases.

MIDLAND MEDICAL SOCIETY.—At a meeting on April 17th, Dr. EDWARD MALINS in the chair, the following were among the exhibits:—Dr. WALTER R. JORDAN: A father and two children (boy and girl) with a condition of *Congenital keratoderma* affecting the palms of the hands exclusively. The father's father had been similarly affected. A brother of the father and a third child of the father were entirely free from the condition. Mr. L. P. GAMGEE: A girl, aged 24, who for eight years had suffered from symptoms of *gastric ulcer*. She had had two attacks of haematemesis. The symptoms had been relieved by medical treatment, but there had been a relapse each time.

On July 25th, 1906, an anterior gastro-jejunostomy was performed by stitching. Within half an hour of the patient's return to the ward severe haematemesis set in, three pints of blood being vomited within the first twenty-four hours after operation. This ceased, and then at the end of ten days it became evident that a vicious circle had been formed, large quantities of bile-stained fluid being frequently vomited. On October 20th, 1906, a lateral anastomosis was made between the piece of jejunum passing up to and that passing down from the junction with the stomach. This resulted in cessation of the vomiting till February 13th, 1907, when vomiting recurred. On March 4th, 1907, the abdomen was reopened, and it was found that the jejunum, at a point just over the seat of the lateral anastomosis, and at another point 6 in. below this, was bound down by dense adhesions. These were divided, and the patient had been perfectly well ever since.

Dr. DOUGLAS STANLEY: A girl in her 13th year, who first came under observation when 10 years old on account of typical Raynaud's disease and rheumatoid arthritis. At that time the joint lesion was slight. The patient was deficient in weight and stature, and her mental condition was much under average. During the two and a half years the Raynaud's disease had improved, but the arthritic lesions had advanced, the hands especially showing typical characters of rheumatoid arthritis. The height and weight were now 3ft. 10½ in. and 30½ lb. There was no evidence of enlargement of the spleen or lymph glands. Dr. J. G. EMANUEL: A heart in which there was practically a *Single ventricle* (the right) into which the mitral and tricuspid valves opened and from which arose the aorta anteriorly and the pulmonary artery posteriorly. Close to the opening of the aorta was a foramen which led into a small potential cavity in the wall of the ventricle, and with this cavity the aorta communicated. This, therefore, represented a rudimentary and functionless left ventricle, and the foramen of communication between it and the right ventricle was the patent *pars membranacea septi*. The interauricular septum was complete. The aorta at its origin lay anterior to the pulmonary artery, and externally there was but an imperfect separation of the aorta from the pulmonary artery. This malposition of the great vessels was explained by an irregular descent of the septum, which should completely divide the primitive arterial bulb into aorta and pulmonary artery. All the valves were well formed; the foramen ovale was closed; the ductus arteriosus was obliterated. The specimen was from a male infant of 20 months who died from thrombosis of the right pulmonary artery with multiple infarcts in the corresponding lung. During life there was no cyanosis and no clubbing. The symptoms were sudden syncopal attacks. There was no thrill, but a loud systolic murmur was audible all over the precordium.

## REVIEWS.

### POISONS.

THE constantly-extending investigation of organic products from both the vegetable and animal kingdoms, as well as the introduction into medicine and the arts of large numbers of artificially prepared bodies, and the development and improvement of methods of detecting and estimating poisonous substances, alike make it necessary that a work on toxicology which is to be really useful should be brought up to date at somewhat short intervals. The fourth edition of the book on poisons by Dr. A. W. BLYTH and Mr. M. W. BLYTH<sup>1</sup> is described on the title-page as "thoroughly revised, enlarged, and rewritten," and in essaying a judgement of the book it is natural to look principally at the newer portions of the matter. The general scope of the work remains as before, and is of the same comprehensive nature that characterizes the volume on *Foods* by these authors.

The first chapter is devoted to a general historical review of the subject and is of much general interest; definitions and methods of classification are next dealt with, and then follows a very useful summary of established knowledge on the relations between the chemical constitution of substances and their toxic action. The greater part of the book is occupied with a detailed consideration of the various poisonous substances ordinarily met with, which are dealt with in groups according to their nature and properties. Most of the poisons described are discussed very fully and in a manner to make the book extremely useful both to the physician and the practical chemist who has to detect poisons; pharmacological action and symptoms are described in detail, as well as methods of detection and separation. It must be admitted, however, that the references to new substances and to recent work are somewhat disappointing, and it is not quite easy to understand the principle on which matter has been selected for inclusion. For instance, a good deal of space is given to recent work on the aconite alkaloids, and the relatively non-poisonous benzoyl-aconine, which never occurs except in association with aconitine and is thus of no importance as a poison, is described, together with its gold compound and other derivatives; while strophanthin, the active principle of a drug that is in every pharmacy and dispensary, receives only eighteen lines altogether, and nothing is said about its chemical behaviour or methods of separating it. Antiarin, in the same group as strophanthin, is more fully described, and directions given for extracting it in cases of poisoning; but surely poisoning by strophanthin is far more likely to occur. Among the many synthetic remedies that may be classed as poisons, sulphonal and veronal and some of their homologues are referred to, but antifebrin, antipyrin, and other common and dangerous substances are omitted; sulphonal, by the way, is spoken of (p. 171) as dimethyl sulphone diethyl ethane, and all its homologues but one are referred to as derivatives of ethane, although the formula is given correctly representing it as diethylsulphone-dimethyl-methane. Eucaine receives a bare mention as a substitute for cocaine, while all the newer artificial local anaesthetics are not referred to at all. On the other hand, recent refinements in detecting and measuring very small amounts of arsenic receive adequate treatment; while cyanogenetic glucosides in plants, and epinephrin (adrenalin) from the animal kingdom are other recent matters that are dealt with.

### FAMILY DISEASES.

THE fall of the birth-rate, which began earlier in France than in other countries, has caused French pathologists as well as patriots to turn their attention to the etiology and prevention of hereditary maladies, and it has thus produced a large amount of valuable research during the last twenty years. Dr. APPERT has already published many papers on heredity and kindred subjects, which would lead us to expect a masterly summary of all that is known about the matter in his treatise on family and congenital diseases.<sup>2</sup>

<sup>1</sup> *Poisons: Their Effects and Detection.* by Alexander Wynter Blyth, M.R.C.S., F.I.C., F.C.S., etc., and Meredith Wynter Blyth, B.A. Cantab., B.Sc. London, F.I.C., F.C.S., etc. Fourth edition. London: Charles Griffin and Co., Limited (Pp. 772. 21s. net.)

<sup>2</sup> *Traité des Maladies Familiales et des Maladies Congénitales.* Par le Dr. E. Appert, Médecin des Hôpitaux de Paris. Préface de M. le Professeur Dieulafoy. Paris: J. B. Baillière et Fils. 1907. (Demy 8vo, pp. xi + 364; avec 95 figures dans le texte.)

It does not, however, pretend to be a complete presentation of the subject, for the author, as he says in his introduction, has limited the chapters devoted to congenital maladies to those diseases which have come under his particular notice, or which from their hereditary character most resemble family diseases, but the list is fairly exhaustive. Judging from the tone and the form of the chapters we presume that it is founded on a course of lectures delivered to students. Should this be the case, it would account for a certain dogmatism which characterizes its conclusions. The first three chapters are devoted to cardiac malformations, in the causation of which, when not associated with deformities of the chest wall, the author assigns a preponderant part to fetal endocarditis. When chest deformities are present the effect of intra-uterine pressure acting through the upper extremities is clearly shown. Dr. Appert quotes largely from the excellent papers of Le Damany of Rennes on congenital dislocation of the hip. He considers that the alleged greater size of the fetal pelvis in the female explains the greater frequency of the deformity in the female sex. We do not think, however, that it has yet been proved that there is such a difference in size as would account for the incidence of the deformity. Achondroplasia is classed among the family diseases, and, whether or no this classification be accepted, the chapters on this subject and on facial fissures, branchial fistulae, and anomalies of the ears and eyes, are worth reading. The occurrence of telegony is now generally discredited, but the case quoted by Dr. Appert is so striking that the only alternative explanation appears to be coincidence. Sudden death as a family malady must be so rare that it would have little general interest but for the fact that it very nearly led, only two years ago, to a miscarriage of justice. Madame Weber had the misfortune to be alone with four of her nephews and nieces, and also her own son, when they were attacked by spasm of the glottis, which in every case proved fatal. Committed to the assize court, she would certainly have been condemned but for the intervention of Professor Brouardel and other medical authorities. Besides this striking case, Dr. Appert quotes a good many others which are worthy of note by medical jurists. The various palsies and myopathies which are more or less family diseases are succinctly dealt with. Perhaps the most curious of these is that family disease known as periodic palsy, the victims of which suffer from occasional attacks of paralysis of all the voluntary muscles, except those of the face and the tongue, without loss of sensation or consciousness but with complete absence for the time being of electrical excitability of the muscles and nerves. Having described the family affections of the sensory organs, of the skin, the blood, and the viscera, the author goes on to discuss vulnerability to certain diseases as a family affection. This chapter and the two which follow, on the various kinds of heredity—direct, collateral, or sexual, etc.—and on temperaments and diathesis, contain much that is of interest. The book is well illustrated by drawings and photographs and a large number of genealogical trees. Its usefulness would have been enhanced by a fuller index and a bibliography. The references are scanty, and those that are given lack precision.

#### PATHOLOGY AND THE NEWER PHYSICAL CHEMISTRY.

DR. PAULI'S object in publishing his addresses on *Physical Chemistry*<sup>3</sup> in the service of medicine has been defined in his preface. He has wished to study "the extensive parallelism between the laws which govern the colloidal state *in vitro* and in the living organism," and has expressed his views in print, rather in the hope of stimulating his readers to undertake research on the questions he deals with than in the belief that his treatment of them will prove in any way adequate. The book suffers from the fault common to the majority of published addresses. What is an advantage in a lecture is often a drawback when seen in cold print. Thus, in the present work we read time and again of one man's "excellent investigations" (p. 116), of another's "fundamental work" (p. 107), of a "beautiful colloidal gold solution" (p. 107);

<sup>3</sup> *Physical Chemistry in the Service of Medicine*. By Dr. W. Pauli and Dr. M. H. Fischer. New York: J. Wiley and Sons; London: Chapman and Hall. 1906. (Cr. 8vo, pp. 156. 5s. 6d.)

these appeals to our emotions being supported by no reference to the original papers in which the phenomena were described. The author, moreover, has set out from the standpoint that the ionic theory in all its latest developments may be regarded as not less fundamental than the best established chemical hypotheses. When we remember that among the eminent men who have refused to accept the theory was the late Professor Mendeléef, and also when we consider the rash way in which the ion is only too often invoked to give an apparent explanation of what is at present inexplicable, we may well call in question the wisdom of assuming the doctrine of the ion to be established beyond all possibility of refutation. After making due allowance for these reservations, however, the work contains much that is of value. Special pleading, when as able as Dr. Pauli's, has the merit of giving a clear exposition of at least one side of the question.

After a short introduction on the influences to which the theory of medicine has successively been subjected, the first address deals with the inadequacy of the *energetische Weltanschauung*, or energetic conception of natural phenomena, of Ostwald to serve as a key to biological problems, and points out the intense significance of the ions of salts as opposed to the salts themselves or the solubility of protein solutions; it deals also with the methods employed to determine the work performed by the kidneys and the reasons why the behaviour of the blood apart from its white corpuscles may be looked on as determined by the ordinary laws which govern any solution. Numerous illustrations are given of the analogies between dead and living matter, such as the amoeboid movement discovered by Quincke in oil droplets, the formation of cases about testaceans as mimicked by Rhumbler with chloroform and finely-ground glass powder, and the like; the honeycomb structure of jellies described by Bütschli, and its relations to living material are fully discussed, the author preferring to explain the antagonistic action of cells not by divisions in the cell substance but rather as an analogy with reversible reactions in chemistry. The fourth address contains a most interesting and valuable account of a number of therapeutic experiments with the "sulphocyanate ion." The cases treated with the drug were neuroses and organic nervous diseases; the results were markedly beneficial, and contrasted very favourably with the similar effects of bromides and iodides. Equally successful was the treatment of a number of cases of increased blood pressure due to the most varied causes, small quantities of the sulphocyanate being, in accordance with theory, equivalent to much larger quantities of its possible substitutes. In another address, on the changes wrought in pathology through the growth of physical chemistry, the author lays especial stress on the success which has attended the application of the facts of colloidal chemistry to the investigation of toxins and antitoxins. His work concludes with a brief consideration of the electrical behaviour of protein. Dr. Pauli is fortunate in having secured in Dr. Fischer a translator whose work on similar lines has made him more than sympathetic. Though the German text has been closely followed it has also been rendered into readable English.

#### CHROMOCYSTOSCOPY.

DR. FRITZ VOELCKER'S work on chromocystoscopy<sup>4</sup> is an interesting contribution to the investigation of renal function. The particular method of which it treats is the cystoscopic examination of the ureteral discharge after the subcutaneous injection of indigo-carmin. The coloration of the urine which follows this injection makes it possible to study with the cystoscope the alterations in renal efficiency and the contractions of the ureter which take place under varying conditions and in pathological states. In unilateral renal disease the method demonstrates differences in the discharge from the ureters and in the concentration of the indigo-carmin coloration and may enable the surgeon to dispense with the use of the separator and the ureteral catheter.

Dr. Voelcker does not claim that this method is superior to those in which these instruments are used, but has

<sup>4</sup> *Diagnose der chirurgischen Nierenkrankheiten unter Verwertung der Chromocystoskopie*. [The Diagnosis of Surgical Diseases of the Kidney by Chromocystoscopy.] Von Dr. Fritz Voelcker. 1906. Wiesbaden: J. F. Bergmann. (Pp. 187; 50 figures. 4s. 9d.)

applied himself simply to discover what value it possesses. He is able to show that information of the greatest value can thus be obtained, and that many obscure cases can be cleared up by it alone. Indigo-carmin appears to be superior to other colouring agents in the depth of colour which it imparts to the urine, the salt used by the author is the sodium compound of indigo-disulphonic acid. The examination is not attended by any particular difficulty if care is taken to obtain as concentrated a urine as possible. From a calculation of the percentage content of indigo-carmin in the urine and of the time of appearance of the colour after injection, an estimate is formed of the activity of the renal function. By the cystoscope it can be seen whether the colour comes from both sides simultaneously, whether it is equally excreted by both kidneys, whether the stream is stronger on one side than the other, and what amount of urine is being passed into the bladder with each ureteral contraction. It can thus be determined whether there is a difference between the functional capacity of the two kidneys and which kidney is doing the greater part of the work. Dr. Voelcker discusses the value of this method in the diagnosis and investigation of various renal diseases, and relates a large number of clinical cases illustrating its application. In renal tuberculosis, for example, most frequently a colourless urine is discharged from the diseased side; even when a kidney has only small foci the indigo-carmin reaction is markedly altered; such a kidney loses the power of concentration, and if a concentrated blue solution is obtained from a kidney, the organ is probably not tuberculous. Other conditions in which the author has tested the value of the method are calculus, stricture of the ureter, tumours, pyonephrosis, and movable kidney. It must be admitted that chromocystoscopy alone in a certain number of cases is able to afford sufficient evidence of the condition of a kidney to guide the surgeon in treatment. The information it affords is, however, less complete than that given by a study of the separated urines, and it appears extremely unlikely that it will displace the latter from clinical practice.

**THE HANDICRAFT OF MEDICINE AND SURGERY.** We are not acquainted with any book in the English language which exactly corresponds to Dr. JULIUS SCHWALBE'S *Therapeutische Technik*.<sup>5</sup> Books such as Pye's *Surgical Handicraft* most nearly approach to it, but they only cover a part of the ground occupied by the distinguished authors who have collaborated under the editorship of Dr. Schwalbe. In his preface the editor says that the object of the work is to enable the student and the practitioner to become acquainted with all the most up-to-date methods of treatment and so render them less dependent upon specialists. It differs, he says, from the other books on the subject in that it treats of the practically important technique of the whole of therapeutics. The present "half volume" includes articles on massage, gymnastics, and mechanical orthopaedics, by Professor Hoffa; on hydrotherapy and thermotherapy, by Professor Vierordt; on radiotherapy, by Dr. H. E. Schmidt; on the preparation and administration of medicines, including plasters, baths, etc., by Professor Kobert; on selected subjects from general surgery (anaesthesia, general, local, and spinal; antiseptics and asepsis, infusion and transfusion, Bier's treatment of joint diseases, bleeding, sutures, and fractures and dislocations), by Professor Hildebrand. The technique of the treatment of the eye is dealt with by Professor Eversbusch; that of other organs will no doubt be included in the second "half volume," which is to appear at an early date. The names of the writers of the different sections are enough to ensure that their contributions will be valuable; but although a high standard of excellence is reached there are some defects in the book. For instance, in the section on gymnastics, the latest electrical machines for passive motion are not described. The article on sutures is scarcely up to date, for only the three commonest methods are mentioned. In an up to date work the subcuticular method should at least have been mentioned. The massage treatment of fractures, advocated by Lucas-

Championnière and others, is well enough established to have merited description, even though Professor Hildebrand is not personally in favour of it. But these are minor defects, and the book should prove of great use to practitioners and students. It is well printed, and the illustrations are generally excellent, but some of the reproductions from photographs show very little beyond portraits of the operators and their assistants.

#### GENITO-URINARY DISEASES.

*A Textbook of Genito-Urinary Diseases*,<sup>6</sup> by Professor LEOPOLD CASPER, is a translation by Dr. BONNEY of Philadelphia of the *Lehrbuch der Urologie* which was reviewed and commended in the BRITISH MEDICAL JOURNAL of July 16th, 1904. The translation, however, is considerably larger than the original work, owing partly to additions to the text by Dr. Bonney, and partly to the insertion of new illustrations in the text, as well as a number of full-page plates. The translation also differs from the original in that the section on radical operations for hypertrophy of the prostate has been rewritten conjointly by the author and the translator. The conclusions arrived at are: that when catheterization fails, or has to be frequently repeated owing to smallness of the bladder produced by thickening of its walls, when severe cystitis is present, or frequent attacks of retention occur, and when a case is not suitable for the Bottini operation, then a radical operation is to be considered. As regards prostatectomy, the weight of evidence is held to be in favour of the suprapubic operation for the majority of cases, but when the gland is hard and fibrous, and does not project far upwards into the bladder, the perineal operation is probably better. Dr. Casper has performed Bottini's operation thirty times with four deaths, and is in favour of it in selected cases, though he recognizes its dangers and realizes that its results are altogether uncertain. From the foregoing remarks it may be gathered that the present volume is made up of a mixture of German and American views and pictures. The book, no doubt, will appeal to a certain number of readers, and these may be assured that good and trustworthy information about diseases of the genito-urinary system may be gained from it. One slight drawback, however, is that as the translator's additions are not distinguished by a different type, and not always even by separate paragraphs, the reader who is not on the look-out for not very conspicuous brackets may at times be uncertain whether he is reading author or translator. Those who wish to possess Professor Casper's work only and who can read German may save their pocket considerably by buying the original work, which costs little more than half as much as the translation. The latter, moreover, would be all the better for careful revision, for a pretty lengthy list of errata might easily be compiled from it as it stands. This notice may fitly end with the following quotation from the author's preface: "An English surgeon first led me into the realm of genito-urinary diseases, and it is with a feeling of satisfaction and gratitude that I think of him, my honoured teacher, Sir Henry Thompson, of London."

M. PILLET'S clinical guide to the principal diseases of the urinary organs<sup>7</sup> has a preface by Professor Guyon, who points out that the book is intended, not for the specialist, but to help the general practitioner in the management of cases of urinary disease which come before him in his daily work. Thus, while the examination of the patient, symptoms, diagnosis, and the indications for or against operation are duly dealt with, the surgical treatment described relates mainly to catheterism, exploration of the urethra and bladder, and other manipulations in minor surgery. The major operations are not described, and cystoscopy and catheterism of the ureters are also omitted, for the reason that, in M. Pilet's opinion, such delicate methods of examination ought to be relegated to the specialist. The book is tersely written and well illustrated, and seems to be in every way well adapted to the purpose for which it has been produced.

<sup>5</sup> *Therapeutische Technik für die ärztliche Praxis. Ein Handbuch für Ärzte und Studierende.* [Therapeutic Technique for Medical Practitioners and Students. By various Authors.] Herausgegeben von Dr. Julius Schwalbe. Erster Halbband. Mit 290 Abbildungen. 1906. Leipzig: Verlag von Georg Thieme. (M. 8.30.)

<sup>6</sup> *A Textbook of Genito-Urinary Diseases, including Functional Sexual Disorders in Men.* By Dr. Leopold Casper. Translated and edited, with additions, by Charles W. Bonney, B.L., M.D. London: Reban Ltd., 1906. (Royal 8vo, pp. 618; 213 illustrations and 23 plates. 26s.)  
<sup>7</sup> *Guide Clinique des Praticiens pour les Principales Maladies des Véses Urinaires.* Par Emile Pilet. Paris: A. Maloine. 1906. (Cr. 8vo, pp. 270; 51 illustrations. Fr. 4.)