

Reviews.

A TEXTBOOK OF PATHOLOGY.

PROFESSOR ADAMI'S bulky *General Pathology*, which forms the first volume of his *Principles of Pathology*,¹ distinguishes itself from many books bearing similar titles by its independence of thought and originality of treatment. There is a refreshing atmosphere of personality about it all. The author takes up the problems of pathology as they present themselves to his own mind, sets out the facts which he finds important or interesting, and then presents the conclusions which appear to him to be warrantable. He is more interested in the elucidation of general principles than in elaborate accumulations of data, and by displaying the workings of his own mind in his effort to unravel fundamental laws he provides an example of how pathological problems ought to be studied, which will be particularly helpful to the reader desirous of seriously devoting himself to the science.

To understand pathology it is necessary to commence with physiological principles, and therefore Professor Adami devotes the first section of his book to the morphology, chemistry, and biology of the cell. This method of approaching his subject is undoubtedly correct from the scientific standpoint, though it adds greatly to the bulk of the volume. It makes us realize that we cannot hope to advance in pathology until we have mastered not merely the elements of physiology but its latest and most intricate developments. The minute details of cytological research, the organic chemistry of the complex compounds which form the basis of living matter, and the laws of development and inheritance, constitute three wide fields of knowledge, to each of which a man may well devote the whole of his energies; but the pathologist is expected to be familiar with them all, as part of his preliminary equipment for the investigation of morbid processes. Professor Adami's account of these "Prolegomena" to pathology is very condensed, but it is much more than a mere epitome of other people's work; it bears the impress of conscientious study and a matured capacity for appreciating the essentials of permanent value amongst a perplexing and almost overwhelming mass of experimental data.

Professor Adami conceives it to be his mission to bring about a closer union between physiology and pathology, and, in particular, to reinterpret pathological data in the light of recent research upon the properties of normal tissue. He says:

Physiology and pathology have for the last seventy-five years, at least, been divorced to this extent, that they have undergone development under separate influences. Under the influence more particularly of Ludwig and his pupils physiological research has been directed to the study of organs and tissues. The organ as a whole has been taken into account. . . . It is under the influence of another great master (Virchow) that modern pathology has been developed. His teaching was based upon exact study of diseased organs and the correlation between gross and microscopic appearances. It was largely histological, and, as a result, mass effects were followed back to the disturbances in the individual cells composing the tissue. In place of an organ, or tissue pathology, there was developed a "cellular pathology."

But it is recognized that the methods pursued by Virchow are insufficient for the requirements of modern pathology. Microscopic examinations of morbid tissues must be supplemented by experimental methods, for the initiation of which we are mainly indebted to the physiologist; the rapid advances of bacteriological knowledge have to be reckoned with, and, most especially, there is the vast field of work on immunity which has to be brought into perspective and correlated with other branches of pathology. To bring into focus the many and diverse aspects which are presented by the science of disease, to systematize them, and to unravel the underlying principles, this is the task which Professor Adami has set himself. It has not been a light undertaking; but the twelve years which, he tells us, he has devoted to the work have been well spent, and have resulted in the production of a work conspicuous for its broad grasp of general principles and comparable, in many respects, to

¹Oxford Medical Publications. *The Principles of Pathology*. By J. George Adami, M.A., M.D., LL.D., F.R.S. Vol. I, *General Pathology*. London: Henry Frowde, and Hodder and Stoughton. 1909. (Roy. 8vo, pp. 948, 322 engravings and 16 plates. 30s.)

the pre-eminently philosophical treatise on physiology by the late Sir Michael Foster.

Commencing with the biology of the cell, this first volume goes on to consider the causes of disease, inflammation, the reactive processes associated with immunity, and the characteristics and classification of new growths and other tissue changes. In dealing with the causes of disease the author devotes much space, perhaps more than is necessary, to abnormalities of the fetus, and provides a very full collection of illustrations representing various types of monstrosities. His treatment of the subject of inflammation is excellent, but his opinions are too well known to require detailed discussion. His classification of new growths is very elaborate, and it may be doubted whether it will gain general acceptance; but it must at least be admitted that it is a serious attempt at scientific classification and in that respect preferable to the older, vaguer, and more familiar nomenclature. The various theories of neoplasia, including the author's "habit of growth" hypothesis, are impartially presented; and if the amount of new or important information to be elucidated from them is relatively small that is not the fault of the writer but is attributable to the obscurity in which the cancer problem is still involved.

APRAXIA.

DR. DROMARD² has written an interesting and in places illuminating book, which is not confined to the physiognomy of the insane, but includes also gesture, attitude and other forms of self-expression. The author discards for this purpose all the anomalies of conformation, asymmetries and other morphological characters so frequently exhibited by the insane and other so-called degenerates, and restricts himself to departures from the normal in intellectual, affective and volitional expression in the insane. The author does not, however, consider as abnormal in function—and this is of first importance in his treatment of the subject—the various characteristic expressive phenomena met with in insane people, so long as they are in harmony with, or equivalent to, the mental states from which they spring; that is, in all of the cases—and this, naturally, includes a large proportion of the insane—in which the modifications of expression result directly and strictly from modifications of the emotional life, the function of expression is considered to be intact. This, of course, considerably narrows the field, though what remains is still sufficiently great and, as Dr. Dromard's work shows, worthy of the most careful study. Thus, after showing how disorders of expression may depend upon defective adaptation—that is, when the play of face or the gesture does not adequately express the corresponding idea or emotion—or upon disordered function, where the expression in itself shows a lack of harmony and homogeneity in its constituent parts, the author considers under the head of disorders of voluntary or ideative expression: apraxia; the hypermimia of substitution; mannerism and puerilism; neologism; stereotypy and echokinesis; and under disorders of involuntary or emotional expression: paramania; spasmodic expression, and dissociated expression. Taking apraxia (or the incapacity to perform a movement conformably to the end proposed, motility being preserved and presenting no obstruction to its proper performance) as paradigmatic of the author's exposition of his subject, this is considered under the heads of—

1. *Motor apraxia*, which may be brought about either (a) by the loss of kinaesthetic representation in the senso-motorium; or (b) by the rupture of connexions between the senso-motorium concerned with motor innervation and the parts of the cortex involved in elaboration of ideas of movement (transcortical apraxia.)
2. *Ideational apraxia* (ideo-motor apraxia), when the disorder resides in the superior psychic function, attention, memory, association, etc., and
3. *Sensory apraxia*, or false apraxia, corresponding to the symbolic of Wernicke and the agnosie of Freud, due either to the loss of memory images or rupture of the connexions between these and new sensory impressions.

Obviously, in this last group the motor result may be correct in itself, responding adequately to perceptions which exist, however faulty; hence the use of the term "false apraxia" by the author. The term "apraxia" has

²*La Mimique chez les Aliénés*. By Dr. G. Dromard. Paris: Félix Alcan. 1908. (Cr. 8vo, pp. 284. Fr. 4.)

thus for Dr. Dromard, a wide application. "Ideational apraxia," for instance, includes that due to failure of voluntary attention before the execution of any act, giving rise to many acts which have been variously ascribed to amnesic apraxia, "psychic blocking," "blocking of the will," etc., and also some forms of perseveration and flight of ideas. Another form of ideational apraxia is described by Dr. Dromard as due to interruption or to substitution during the course of execution of an act, and a third form as due to a faulty distribution of the representations of attention or the components of these representations. Ideational apraxia is thus entirely a disorder of intrapsychic processes whose diagnostic features it is important to recognize. The distinguishing features as given by Dr. Dromard are as follows: (a) Motor apraxia has a segmentary distribution, affecting particular motor levels and is rarely generalized; ideational apraxia, on the other hand, affects the movements of all parts of the body without distinction. (b) Motor apraxia is exhibited only in simple acts; ideational apraxia in movements somewhat complicated. (c) Motor apraxia appears generally in the imitation of movements; ideational apraxia in this form but rarely. (d) Amorphous movements and movements of substitution of a flagrant or a coarse character distinguish motor rather than ideational apraxia. Lastly, a detailed psychological examination of the patient, as a rule, reveals explanatory disorders in the case of the ideational apraxia but not in motor apraxia. The author's treatment of apraxia has been outlined here as an illustration of the method of psychological analysis sustained throughout the following chapters. The book is a valuable addition to the literature of expression in the insane. Its methodical classification furnishes many aids to diagnosis, helps to relate types of expression to corresponding structural cerebral disease according to the levels affected, and should undoubtedly facilitate the detection of the simulation and dissimulation of mental disease.

NEUROLOGY.

DR. R. T. WILLIAMSON'S book on *Diseases of the Spinal Cord*,³ dedicated to the past and present students of the Manchester Medical School, is based on notes of lectures delivered at that school during the last fifteen years. The main adverse criticism that suggests itself is that the treatment of the subject is slight; considering, however, that the work is not intended, as the author states, to furnish an exhaustive account of spinal diseases, and considering the form and scope of its fellows in the series of Oxford Medical Publications, that criticism may be really rather praise than blame. The book, then, is a really good one. It is well balanced and sound in its teaching. On controverted points—on pathogenesis, for example—it gives a fair statement of the conflicting views of different schools, and then, in what may be considered a too modest way, gives its own judgement, and, as many well able to decide will think, generally on the right side. It is thoroughly up-to-date, including not only recent advances in the clinical facts of cases of nervous disease, but also such matters as the use of lumbar puncture in diagnosis and Frenkel's method of treating ataxia. It is practical, giving ample space to differential diagnosis and to such treatment as nervous diseases are susceptible to, including the contribution of orthopaedic surgery to the matter. It is well and helpfully illustrated with clinical photographs, anatomical and physiological diagrams, and pathological microphotographs. It is plainly and well written. The minor errors it contains suggest somewhat rapid production of the printed page; a lesion of a spinal posterior root, for example, is said to cause anaesthesia in the distribution of that root, a statement combated, on the evidence of Professor Sherrington, on a subsequent page; peripheral neuritis is said to be easily confused in diagnosis with anterior poliomyelitis, a statement only true if multiple and not terminal neuritis is meant; a diagram is given representing cerebral anaesthesia in the form of a deeply shaded gauntlet, but the area shown could not, from its shape, be subcortical in origin, and if cortical, as the text suggests, it would not be absolute, and should be differently shaded. There is a welcome appendix dealing with the methods for the patho-

logical examination of the spinal cord. There are, in short, many textbooks on the same subject dealing more systematically with the subject, but there are few likely to be more practically useful to the medical practitioner.

DR. ALFRED GORDON, whose name is known in association with the recognition of the paradoxical plantar reflex—an earlier sign, it is claimed, of interference with the pyramidal tracts than Babinski's phenomenon—has written a short and thoroughly sound textbook on *Diseases of the Nervous System*.⁴ As he says, to both general practitioner and medical student neurology has always appeared a difficult subject, and their continuous complaint has been that they could not find any book which would give them a plain and practical account of diseases of the nervous system. Whether this charge be true or not, Dr. Gordon has written a book which, to a large extent, refutes it, though there may be several others equally good in the English tongue published, either in America or in this country. The book is a good one, and it may safely be used by the tiro. On the other hand, it and its fellows are of very little use, except in regard to cases which may be called typical, or, at any rate, which are capable of being pigeon-holed. Neurology, above all other branches of medicine, is largely concerned with atypical cases, and hence the special value of the larger book. It is only fair to say, however, that this book contains chapters on the anatomy and physiology of the central nervous system and on the methods of examination for the diagnosis of nervous diseases, so that it is, in a sense, complete in itself. It is a trustworthy book, and the most unfavourable criticism that suggests itself is that it is too large for a primer of neurology and not large enough for final reference.

PAIN IN VISCERAL DISEASE.

THE value of pain as a guide to diagnosis is always difficult to assess. It is probable that every practitioner of medicine or surgery forms his own opinions on the subject, and acts upon them without much reference to the written law. But the manifestations of pain are so extraordinarily varied, that a systematic examination of them recently issued by Dr. RUDOLPH SCHMIDT of Vienna, and translated by Drs. VOGEL and ZINSSER of Columbia University,⁵ cannot fail to be of use as a work of reference, and as a reminder of the diagnostic importance of pain, even to those who might not in all cases agree with the opinions of the writer as to its causation.

The book deals with the interpretation of pain produced by internal diseases, and is prefaced by some useful reflections upon pain in general, followed by chapters on the various influences such as position, motion, pressure, food, etc., by which pain may be modified. The topography of pain, and its quality and times of occurrence, are also examined, and special attention is then directed to the pains which may accompany disorder of the various systems—nervous, digestive, urinary, etc.

The book presents a very full account of most of the aches and pains to which humanity is liable, and errs only in its lack of simplicity of expression, and in its tendency to repetition of detail. It would gain in practical value by closer compression, and by the omission of much that can only be matter of indefinite speculation, but it contains a great deal worthy of careful reconsideration, particularly in relation to the pains of colic from various causes. The final chapter is devoted to an illustrated exposition of Dr. Henry Head's observations on cutaneous tenderness in visceral disease.

ANIMAL PARASITES.

BRAUN, in collaboration with LÜHE, has compiled a volume intended to serve as a guide to the examination of the animal parasites of man and domestic animals⁶ for

³ *Diseases of the Nervous System*. By Alfred Gordon, A.M., M.D. Paris. London: H. K. Lewis. 1908. (Roy. 8vo, pp. 499, illustrations 136. 12s. 6d.)

⁴ *Pain*. By Dr. Rudolf Schmidt, Vienna. Translated and edited by Dr. Karl Vogel and Dr. Hans Zinsser, Columbia University. London: T. Fisher Unwin. 1908. (Demy 8vo, pp. 326. 12s. 6d.)

⁵ *Leitfaden zur Untersuchung der tierischen Parasiten des Menschen und der Haustiere, für Studierende, Aerzte und Tierärzte*. Von I. R. M. Braun, O. Ö. Professor der Zoologie und Vergl. Anatomie und Direktor des Zoolog.-Museums in Königsberg I. P.R., geh. Regierungsrat, und Dr. M. Lühe, Privatdozent und I. Assistent des Zoolog.-Museums in Königsberg I. P.R. Würzburg: Curt Kabitsch (A. Stuber's Verlag). 1909. (Sup. roy. 8vo, pp. 194. 100 Abbildungen im Text. M. 5.20.)

⁶ *Diseases of the Spinal Cord*. By R. T. Williamson, M.D., F.R.C.P. Oxford Medical Publications. London: Henry Frowde, and Hodder and Stoughton. 1908. (Roy. 8vo, pp. 444. 15s.)

students, doctors, and veterinary surgeons. A glance at the general style, printing, diagrams, and text of the work show at once that it is based upon, or might even be termed a synopsis of, Braun's well-known work on the animal parasites of man, with some additions. It is divided into three parts—(1) Protozoa, (2) Helminthes, (3) Arthropoda, Dr. Lühe being responsible for the first part and Professor Braun for the other two. It is apparently fashionable now to change or invent new classifications for different groups of the animal kingdom, and Dr. Lühe keeps up to date by introducing considerable changes into the old and time-honoured classification of the protozoa. The most important of these are that he makes the haemoflagellates and haemosporidia the third order (binucleata) of the class flagellata, that he obliterates the class sporozoa as such, its place being taken by the class neosporidia with—in addition to the micro-, myxo-, and sarco-sporidia—one new order—the actinomyxidia, and by the class telosporidia, containing the coccidia and gregarinida. These last changes are not so much to be quarrelled with, but how any one, protozoologist or other, can believe that the trypanosomes and malarial parasites are so near each other as to be properly comprehended in one order is past comprehension. Schaudinn's unconfirmed work on the haemoproteus (the old halteridium) is again no doubt responsible. It ought either to be verified once and for all or finally swept away. It has misled too many of the unwary already. The helminthological part of the book contains some useful information on the preservation of the different worms and their eggs, but many well-known and useful methods are omitted. Life-histories of the dog taenia, *T. marginata*, and others are valuable because good short accounts are in many instances very difficult to obtain. All things considered, however, the work, though interesting in many particulars, falls short of expectation; it is not full enough for advanced students of the subject, and as a mere narrative for non-helminthological and protozoological people it is too full and scientific. It is rather hard to understand the necessity for its publication, especially when it is remembered how fully the animal parasites of man have been dealt with by one of the authors. Still, as a guide or introduction to this larger work, it may prove of use.

TICKS.

THE subject of ticks had been little studied, at least by medical men, until it came to be established that these parasites might spread disease from animal to animal, or even to man. This fact having been proved, a book on these insects was clearly required, and Dr. NUTTALL, in conjunction with Messrs. WARBURTON, COOPER, and ROBINSON, has done well to provide *Ticks: A Monograph of the Ixodoidea*.⁷ At first the idea was to publish a full account of the ticks as a complete volume, but for various reasons the authors have decided to bring the work out in parts; these will be complete in themselves, but are designed to form a volume of about 500 pages, when all have been published, and it is hoped that they will be ready in about a year. Part I deals with the Argasidae, and is divided into two sections: (1) the classification of the Argasidae; (2) the general biology of the Argasidae, the effects of their bites, their relation to the spread of disease, etc. For those unacquainted with the subject it will be sufficient to state that the ticks are classified as follows: Superfamily Ixodoidea: Family I, Argasidae. Family II, Ixodidae. It is with the first of these, then, that the volume deals. Classification is always a tedious and difficult piece of work, and it seems uncertain yet how many genera the family Argasidae contains, but the usual plan of dividing it into Argas and Ornithodoros is maintained. Six well-established species, according to the authors, are found in the first,

⁷ *Ticks: A Monograph of the Ixodoidea*. By George H. F. Nuttall, M.A., M.D., Ph.D., Sc.D., F.R.S., Fellow of Magdalene College, Quick Professor of Biology in the University of Cambridge; Cecil Warburton, M.A., F.Z.S., Christ's College, Zoologist to the Royal Agricultural Society; W. F. Cooper, B.A., F.Z.S., F.L.S.; and L. E. Robinson, A.R.C.Sc.Lond. Part I, Argasidae: October, 1908. Cambridge: At the University Press; London: Cambridge University Press Warehouse, and H. K. Lewis; New York: G. P. Putnam's Sons; Leipzig: Brockhaus; Berlin: A. Asher and Co. Bombay and Calcutta: Macmillan and Co., Ltd. (Imp. 8vo, pp. 150, figs. 116, pl. 3. 5s.)

eleven in the second. How long this will last no one can say, as it is probable that in the course of time, as attention is directed to the subject, many more ticks will be discovered either specifically or generically distinct. Still it is to be hoped that the classification will never fall into the chaotic condition reached in the case of the mosquitos. The part of Section II which deals with the relation of the ticks to the spread of disease is interesting; but again, the subject is largely in its infancy, and the same is true with regard to many points in the life-history. It is not quite clear when or where in the book the anatomy of these parasites is to be discussed, a note at the foot of page 8 simply stating that the internal anatomy will be considered in the general introduction to the completed volume. It might, perhaps, have been better to have taken up the anatomy, external and internal, first, then to have dealt with classification, and lastly with biological points, and the relation of the insects to disease, etc. When the work is complete, these matters will no doubt smooth themselves out, and too much praise cannot be given to Dr. Nuttall and his collaborators for taking up this difficult and somewhat thankless task.

DERMATOLOGY.

WORKS on diseases of the skin follow one another with such rapidity and have such a family likeness that it is difficult to deal with them in a critical as opposed to an expository manner. One of the latest books is by Dr. SCHAMBERG, of Philadelphia;⁸ but in this case, following the example of the old Vienna school, the eruptive fevers are included, and their morbid cutaneous manifestations thoroughly discussed. Although the specific fevers are part and parcel of general medicine, yet it cannot be overlooked that a comparison of their rashes with skin diseases proper is of importance in practice. The first part of the book is devoted to diseases of the skin, the various conditions being dealt with in a very succinct, and, from the point of view of dermatology, in all too brief a manner. In the case of pemphigus acutus, the author does not allude to the severe febrile bullous eruption in butchers, which should have found a place in a work such as this, one which includes eruptive fevers in its title. The term "tubercular" as applied to certain syphilides and to a clinical form of leprosy is not so appropriate as "nodular." The second part, dealing with the eruptive fevers, is well done, and the discussion of differential diagnosis can be recommended, for not only are the specific rashes carefully described, but the aberrant forms and the various prodromal and intercurrent eruptions are also dealt with. The book is profusely and well illustrated, and reflects credit on the publishers.

Professor Dr. S. RÓNA, in a short work on dermatological propaedeutics,⁹ has attempted to give a preliminary outline of the processes at work in the production of diseases of the skin. The book consists of the substance of a course of lectures, and contains seven chapters. The first chapter, dealing with the various agencies causing damage to the skin, is clear and concise, but needs no special analysis. The chief interest and value of the book lies in the second, third, and fourth chapters, which deal with constitutional peculiarities and acute and chronic inflammation. Considering the difficulty of giving anything like a complete review of such a complicated subject within a small space, the author has certainly achieved a marked success. The principles of general pathology are well explained, and the opinions of such authors as Marchand and Maximow discussed. The last three chapters are devoted to the application of the knowledge acquired from the first four to the special domain of cutaneous medicine, and a careful perusal of the whole book would repay not only those commencing the study of dermatology, but also those whose early training was undergone before pathology had attained its present importance in medicine.

⁸ *Diseases of the Skin and the Eruptive Fevers*. By Jay Frank Schamberg, A.B., M.D. Philadelphia and London: W. B. Saunders Company, 1908. (Med. 8vo, pp. 534, 204 illustrations. 13s.)

⁹ *Dermatologische Propädeutik*. Von Professor Dr. S. Róna. Berlin: Julius Springer, 1909. (Demy 8vo, pp. 151.)