NEW BOOKS.

The Brain in Health and Disease. By J. S. Bolton, M.D., F.R.C.P. Pp. xiv. + 479. With 99 Illustrations. London: Ed. Arnold. 1914. Price 18s. net.

Dr. Shaw Bolton’s book undoubtedly marks an epoch in the study of mental disease. It is the first real attempt to place this subject on a satisfactory basis; in other words, to offer a pathological explanation.
of symptoms. Whether this attempt will be altogether successful can-
not at present be determined, because the investigations on which it
is based are so laborious, and are to some extent so dependent on
individual interpretation, that time will necessarily elapse before his
conclusions can be either verified or rejected. These conclusions are
so important and far-reaching that it is to be hoped further similar
investigations will soon be forthcoming.

The method of the researches which have led Dr. Bolton to his
weighty conclusions is a careful microscopical examination of the
cortex in various typical regions of the brain. The thicknesses of the
cortical layers in these regions are very carefully measured, and the
resultant averages compared. It is hardly necessary to point out that
this is a work which not only requires great care in fixing, cutting,
and staining the sections, but also involves an immense amount of
time in the mere process of enumeration. As the depth of the layers
is, to some extent, dependent on individual judgment, it is quite to
be expected that other observers may come to a different conclusion
to that reached by Dr. Bolton.

The book is based on work extending over the last 18 years. It
opens with a study of the general histology and development of the
cerebral cortex, and records the author's conclusions from an examina-
tion of 36 cases. These conclusions may be stated in his own words:
"The essential physical basis of mental disease consists, on the one
hand, in an imperfect development of the cell laminae of the cortex
which is of the nature of a true sub-involution, and on the other, in
degrees of decrease of the cell laminae which are of the nature of a true
involution or dissolution, since such decrease in depth takes place in
the converse order to that in which the cell laminae are developed in
the process of normal growth" (p. 37). This thesis is elaborated later
in the book and figures given to support it. From these it appears
that the second cortical lamina is the latest to evolve, that it is most
developed in the human brain, and that its superior development is
most marked in the prefrontal convolutions. Its function is chiefly
the associative and elaborative processes which constitute the highest
mental operations.

The classification of insanity adopted as a result of these investiga-
tions is very simple in its main outlines. From the quotation given
above it will be concluded that it has two divisions, that of sub-
volution or amentia, and that of involution or dementia. In the one
the development of the cortical laminae never reaches the normal; in
the other it does so, but undergoes pathological regression.

The book is written in a clear style, is very well illustrated, and,
in view of its important claims, is well worthy of the most careful
study.
The Occupational Diseases: Their Causation, Symptoms, Treatment, and Prevention. By W. Gilman Thompson, M.D., Professor of Medicine, Cornell University Medical College in New York City. Pp. xxvi. + 724. With 118 Illustrations. New York and London: D. Appleton & Co. 1914. Price 25s. net.

This work, the first of its kind published in America, treats of the subject in seven parts. Four appendices and an index complete the volume. The history of the subject, classification, and general pathology and etiology are dealt with in the first part. In it the institution of industrial museums of safety in fourteen of the larger continental cities of Europe is pointed out, and a short description with illustrations is given of the museums established in Berlin and in Vienna. A description and illustration are also given of the hospital and clinic at Milan specially devoted to occupational diseases. The value of the compulsory reporting of cases is illustrated by British experience in regard to lead poisoning. The extreme importance of accuracy in the reporting of occupational disease is insisted on by the author, who points out the need for inquiry not only into the working environment of the patient, but also into his home environment and habits. A copy of the author’s special history card for the investigation of cases of occupational disease is printed in the text.

In Part II. the subjects of prophylaxis and treatment are gone into. In Part III. diseases due to irritant substances are dealt with under six subdivisions, viz. diseases due to (1) toxic metals and their compounds; (2) toxic gases and fumes; (3) toxic fluids; (4) irritant dusts and fibres; (5) germs, including ankylostomiasis as well as diseases such as anthrax due to micro-organisms; (6) miscellaneous irritants such as linseed oil, rubber, etc. In Part IV. diseases due to harmful environment are discussed, e.g. caisson disease, etc. Part V. is devoted to a description of the effects of special occupational diseases on the blood, nerves, skin, etc.; and in Part VI. the influence of alcoholism and syphilis, and of the abuse of tobacco, are discussed in relation to occupational diseases. Miscellaneous occupational diseases not already dealt with are described in connection with various trade processes in Part VII.

The work is written in an attractive and interesting style by a physician of wide clinical experience in the special subject with which he deals; and suitable acknowledgment is made to British and Continental European authorities. The numerous illustrations form a special feature of the book and are of material assistance to the readers.

The work is one that can be recommended not only to the physician interested in occupational diseases, but also to the larger class of the general public engaged in industrial pursuits. The employer will find in it sound advice for the protection of his employees; and the workpeople are shown how much depends on
their intelligent co-operation to attain the desired result, viz. the prevention of much of the disease incidental to employment. The volume will also appeal to the non-medical official such as the factory inspector and the sanitary inspector, whose daily work brings them into intimate contact with the conditions under which work is carried on in the factory and workshop, and also in the home.

Tuberculosis of the Bones and Joints in Children. By John Fraser, Assistant-Surgeon, Royal Hospital for Sick Children, Edinburgh. Pp. 352. With 215 Illustrations. London: Adam & Charles Black. 1914.

Since König published his memoir on this subject about twenty-five years ago and established the tuberculous origin of the maladies formerly known as scrofulous caries and white swelling of joints, important advances have been made, and among those who have contributed to those advances the author of this volume specially deserves honourable mention. Fortunate in working under Mr. Stiles, and also in the possession of valuable pathological material derived from the operating theatre of the Royal Hospital for Sick Children, Mr. Fraser has made a reputation for himself as an able investigator and as an author of undoubted originality. He has made notable departures from the beaten track, and in all of these he furnishes evidence for his conclusions.

The subject-matter is so specialised as not to lend itself to a review in the ordinary sense of the term. Concerning the etiology of the tuberculous affections of bones and joints, the most important point raised is the relative sphere of the human and of the bovine tubercle bacillus. The author claims from his own observations that no less than 60 per cent. of his cases owed their origin to infections with the bovine bacillus, and he wishes to correlate this with two other facts, an infected milk supply, and a young age incidence of the lesions under consideration. The lymphatic glands, cervical and mesenteric, are infected in the first instance, and from this source the bones and joints are provided with an abundant supply of the infecting agent.

In urging the importance of the alimentary infection, the author lays stress on the feeble resistance offered by the mesenteric glands of a child compared to those of an adult, and thinks there can be no doubt that the blood-stream is the main, if not the only, route by which the infection is conveyed from these to the bones and joints, the latter, in the author's opinion, being more susceptible than the bones to infection by tuberculous disease. We agree that the influence of trauma is of much greater importance in the spread of the disease than upon its original development.

The volume is well furnished and profusely illustrated; it represents
a valuable addition to the "Edinburgh Medical Series," edited by Dr. Comrie and published by Adam & Charles Black.

The Bacteriological Examination of Food and Water. By William G. Savage, B.Sc., M.D., D.P.H. Pp. x. + 173. With 16 Illustrations. Cambridge Public Health Series. Cambridge: At the University Press. 1914. Price 7s. 6d. net.

The subject-matter of this book is excellent, and the aim of the author to treat of such subjects as the bacteriology of water, air, foods, etc., more adequately than is done in the ordinary text-books of bacteriology, is fully carried out. Only on one subject does there seem to be room for criticism. In the section on the examination of water no emphasis is laid on the importance of the inspection of the surroundings of the source of supply before giving an opinion on the safety of a water.

In view of Dr. Savage's other excellent works on the subjects treated in this book, this publication would seem to be unnecessary, except for filling up a gap in a series.

Gas Poisoning in Mining and other Industries. By John Glaister, M.D., F.R.S.E., Professor of Forensic Medicine and Public Health in Glasgow University; and David Dale Logan, M.D., Surgeon to the Coltness Iron Works, Newmains, etc. Pp. vi. + 471. With Plans, Coloured Plates, and 36 other Illustrations. Edinburgh: E. & S. Livingstone. 1914. Price 10s. 6d. net.

In their volume issued under the above title Professor Glaister and Dr. Logan present to the reader the views of many authors upon poisoning by carbon monoxide and other forms of poisoning arising in mining and other industries in which gases are used for power, etc. They have been able from their own extensive experience to emphasise points which are now being recognised as of great practical importance in the prevention of accidents.

In their chapter upon ventilation of mines emphasis is laid upon the need for greater attention to renewal of air at the working face. Chapter IV. deals with actual explosions in coal mines, and includes a tabular statement of the principal colliery explosions in Britain from 1877 to 1913. The important part coal-dust plays in explosions is duly emphasised.

Much space is devoted to the symptomatology of carbon monoxide poisoning, and there is some redundancy in several of the chapters dealing with this part of the subject. Stress is laid upon after-effects of CO poisoning, and the importance of the subject as it affects the Workmen's Compensation Act is indicated.
A chapter is devoted to a description of the methods of detecting carbon monoxide in the body and in the air or gases. The chapter dealing with apparatus for rescue work in mines is full, and the figures illustrating the apparatus and their use are lucid.

In the Appendix is given a description of the explosion in 1909 at West Stanley Colliery, Durham. Two plans of the workings are incorporated. There is a full bibliography and index.

While recommending the book especially to medical practitioners in the large industrial centres, and to those who are interested in the welfare of coal miners and such as may be subjected at work to poisonous gases, we think that future editions would benefit from a rearrangement and condensation of certain portions.

*Arteriosclerosis: A Consideration of the Prolongation of Life and Efficiency after Forty.* By Louis Faugeres Bishop, A.M., M.D. Pp. x. + 383. With 12 Plates and 25 Figures. London: Henry Frowde and Hodder & Stoughton. 1914. Price 10s. 6d. net.

The author's thesis is that arteriosclerosis is a disease which results from a special sensitisation of the sufferer to one or more of the proteins which are found in his dietary. The obvious deduction is that the diet should contain as few proteins as possible, in order that the chance of the patient's ingesting the one to which he is sensitive should be minimised, and the form of proteid which is chiefly commended is cheese. The hypothesis is unsupported by any cogent evidence, and more than one-third of the book consists of quotations which, whilst they swell the size of the volume, contribute little or nothing to the theory which it aims at setting forth.

*The Principles of Pathologic Histology.* By Frank B. Mallory, M.D. Pp. 677. With 683 Illustrations. Philadelphia and London: W. B. Saunders Co. 1914. Price 24s. net.

The title expresses the general scheme of this book. It is the principles underlying the different histological appearances that the author lays stress upon when considering these appearances themselves. The book is a mine of information, and throughout it the originality of the author is evident, and the information conveyed has been gathered first hand from the actual tissues.

The arrangement of the subject-matter follows the usual practice. Part I. deals with general pathological histology, including inflammation, retrograde processes, special injurious agents and the lesions they produce, and tumours. Part II. is devoted to special pathological histology, and includes the changes seen in the different systems. This arrangement unavoidably leads to repetition in order to connect the general changes to the special tissues.

The classification of the tumours according to a relatively small
number of cell types is simple and practical, and might with advantage be more generally adopted. It is to be noticed with interest that under lymphoblastoma the author puts lymphoma, lymphosarcoma, pseudoleukemia, lymphatic leukæmia, and Hodgkin's disease, the last being described as a scirrhous variety. Such a grouping will not at present meet with universal agreement. At p. 61 and throughout the book the author says that if the parenchymatous cells of a tissue or organ are destroyed they are not replaced by fibrous tissue unless there has also been damage to the fibroblasts of the part. While this may be true up to a point, it is a difficult thesis to maintain, and it is evident that the author finds this difficulty in several places. In caseation in tuberculosis, vascular thrombosis from endothelial accumulation is said to explain the whole process, a view which seems hardly capable of explaining all the appearances. It would have been of advantage if rather more information had been given on arteriosclerosis, which is dismissed rather briefly. The processes concerned in sclerosis (cirrhosis) of the liver are rationally discussed and well summed up on p. 513, and the old-time division of "coarse" and "fine" cirrhosis, etc., criticised and very properly dismissed.

Although in the preface the author rightly states that "in pathology the lesions themselves are the original sources of information," it would have been useful, to those at least wishing to obtain other men's ideas, if a bibliography of the more important papers had been appended. The illustrations are an excellent feature of the book.

This work is to be warmly recommended to all those working at or interested in pathology, for, as well as the store of information it contains, it is pregnant with original and sound ideas.

Diseases of the Stomach. By Charles G. Stockman, M.D. Pp. xxxvi. + 774. With 65 Illustrations. New York and London: D. Appleton & Co. 1914.

This book contains a lucid, systematic, and up-to-date description of diseased conditions of the stomach. The author deals with his subject from a broad basis and writes from very considerable experience. Throughout the book he shows very clearly how stomach symptoms may only be indications of diseased processes in other organs of the body.

The first part of the book deals with anatomy, physiology, methods of examination, etc., and includes excellent descriptions of gastric analysis and radiographic investigations. Probably the best chapter in the book is that dealing with the difficult subject of dyspepsia. Here the author gives valuable advice on how to regard gastric symptoms in relation to disturbances in other organs. A very full account of peptic ulcer is given, and the depressing subject of gastric carcinoma is exhaustively described. The various special tests
for cancer of the stomach are detailed, but the author, with due caution refrains from expressing any opinion as to the diagnostic value of any of them alone. In a short account of cyclic vomiting the various theories as to the causation of the condition are reviewed, the author's opinion being that the condition is probably neurotic in origin. The treatment of this difficult condition is only briefly described.

We have formed a most favourable impression of this book, and consider it specially useful to all general practitioners who have so constantly to deal with patients presenting gastric symptoms.

*A Treatise on Clinical Medicine.* By William Hanna Thomson, M.D., LL.D. Pp. 668. Philadelphia and London: W. B. Saunders Co. 1914. Price 21s. net.

This work scarcely justifies its title. It might equally well be described as a systematic text-book written in a somewhat slipshod manner. The absence of illustrations detracts much from its value as a clinical guide. The discussion of treatment, while revealing a wide practical experience, is rather dogmatic in tone, and one is inclined to envy the writer's faith in many of the drugs recommended. Many of the effects ascribed to the action of certain drugs, such as camphor and digitalis, are at least very doubtful. There is a great deal of loose construction in the writing, rendering some sentences misleading and others quite unintelligible. While the practising physician may acquire some useful hints from the writer's experience, the book is not suitable for students.

*A Practical Handbook of the Tropical Diseases of Asia and Africa.* By H. C. Lambart, M.D. Pp. 324. With 88 Illustrations. London: Charles Griffin & Co. 1914. Price 8s. 6d. net.

In this work the author embodies the wide experience he has gained by prolonged residence in various parts of the tropics. Though it cannot be regarded as a book of reference or as a standard text-book, it contains much practical information, and will be found useful by medical men proceeding to the tropics.

A striking feature is the adoption of an alphabetical arrangement by which it is claimed that the diagnosis and treatment of the various diseases is shown at a glance. This arrangement is not altogether a happy one. For example, the information regarding the diagnosis of different diseases furnished under the alphabetical arrangement is generally meagre, and it is more or less by accident that fuller, and generally exact, methods are to be found under the headings of "Aids to Diagnosis," "Bacteriological Methods," or "Protozoology." The result is annoying and confusing.

In the Therapeutic Index are described methods of treatment
which the author has found satisfactory. A notable defect is that many well-known and valuable methods of treatment, including hypertonic infusion in cholera and the use of emetine in threatened liver abscess and chronic dysentery, are not mentioned.

The coloured illustrations are good. Without usurping the functions of an art critic, it is perhaps allowable to point out that the figure illustrations (drawn by the author) cannot be classed as successful "studies"; it might even be suggested that more serviceable results would have been attained by the use of a hand-camera.

*Surgery: Its Principles and Practice, for Students and Practitioners.* By Astley Paston Cooper Ashhurst, A.B., M.D., F.R.C.S. Pp. ix. + 1141. With 1039 Illustrations. London: Henry Kimpton. 1914. Price, cloth, 28s. net; ¼ Persian gilt top, 32s. net.

The author has written this text-book mainly to provide the student with a fundamental education in the principles and practice of surgery. The style is attractive, and important points are emphasised. The more common ailments are discussed in detail, and the rarer conditions briefly mentioned. The illustrations are copious and interesting, though the value of many of them is diminished by their reproduction on too small a scale.

It is noteworthy that the author recommends the treatment of fractures by fixation rather than by massage and movement; but, though one is inclined to hold different opinions on points such as this, it must be granted that the author presents his own views in a concise, practical, and readable form.

**NEW EDITIONS.**

*Psychanalysis: Its Theories and Practical Application.* By A. A. Brill, Ph.B., M.D. Second Edition. Philadelphia and London: W. B. Saunders Co. 1914. Price 13s. net.

Dr. Brill’s book is a summary of Freud’s psychology, and it should prove a valuable introduction to those who wish to study this extremely difficult subject. That no one of our innumerable thoughts need ever pass into nothingness, but that each and every of them may affect our feelings and our conduct after perhaps many years, necessarily makes the determination of the thought or thoughts causal for symptoms we may now possess a hard task. This task is one not to be undertaken lightly, and if the methods which Freud has devised are to be investigated in such a way that a real opinion can be formed about them, it is to be hoped that the author’s advice will be taken, that no one should attempt to employ these methods who has not had