end of a week he could walk two to three miles, and in three weeks' time was quite free from pain.

He is a firm believer in the efficacy of the baths, but whether the benefit is derived from the thermal or mechanical elements or from the radio-activity of the brine is unknown.

Dr. James Dunlop reported that the case of ulceration of the tongue shown at the eighth meeting (see p. 293) had turned out to be an inoperable carcinoma.

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**REVIEWS.**

*Construction, Equipment, and Management of a General Hospital.* By Donald J. Mackintosh, M.B., M.V.O., Medical Superintendent of the Western Infirmary, Glasgow. Edinburgh and Glasgow: William Hodge & Co. 1906.

We think that we may say without fear of contradiction that the bulk of the medical profession, including even those who hold appointments on the staff of a general hospital, know little of the subject of the present work. This statement is true also of architects and public bodies. And yet it is to all of these that the public looks for guidance when the question of erecting a hospital comes up.

That those concerned will derive help from Dr. Mackintosh's volume is beyond doubt. Many of us remember the late Sir William Gairdner's remark in the classroom, when he was drawing our attention to some monograph bearing on the subject of his lecture, "Gentlemen, this book was written by its author after he had acquired experience." We may repeat Sir William's words in the present instance, and express the opinion that, for this very reason, those interested in the subject will eagerly receive the volume which has just been published.

The author's thesis is that before an architect can successfully plan a hospital he must have a knowledge of the details of the work to be carried out by the hospital. The needs being known, he must then design the building so as to make for efficiency, and by efficiency we mean ease of working for the staff, combined with maximum benefit to the patient.
Next to efficient working comes economy. The arrangement of the building must be such that it can be properly staffed without any waste of public money. The question of accommodation for the resident medical officers and for the nursing staff is also an important one, and must receive due consideration. Further, if the hospital is to be part of a medical school, teaching facilities must be arranged for. So much for the architect.

The medical officers should be conversant with modern improvements, so that they can take the best out of their surroundings, and, if need be, suggest modifications connected with carrying out treatment of patients or bearing on teaching arrangements.

The question of cost is one which directly interests public bodies as the guardians of public funds. They wish to know the probable cost of buildings and of furnishings, and also of the management of the institution after it has been set agoing.

Information on all of the above points will be obtained in the work now before us. The admission of the patient, the arrangement of wards, their organisation, accommodation for special cases, the out-patient department, kitchen, laundry, heating, and nurses' quarters are all described in detail. Drafts of various printed forms connected with the administration of a hospital are given, and show at a glance how information as to the cost, number of inmates, quantities of provisions, dressing materials, &c., from day to day, is obtained.

The probable cost of the various parts of the building, and of equipment of wards, theatres, &c., is given in appendices; and in one of these will be found invaluable information on the conditions of nursing service in various hospitals.

The text is freely illustrated by reproductions of photographs of actual parts of a hospital, and numerous architects' plans are bound in at the end of the volume.

The book is the work of a master of his subject, and it will be consulted by all who are at present interested, or are likely to become so, in the construction, equipment, or management of a general hospital.

The Principles and Practice of Medicine, designed for the use of Practitioners and Students of Medicine. By William Osler, M.D., F.R.S., F.R.C.P. Seventh edition, thoroughly Revised. London: Appleton & Co. 1909.

The latest edition of this well-known and popular text-book is sure to receive, as it undoubtedly deserves, a hearty welcome
throughout the English-speaking world. If we set aside, as belonging to a different category, the great "systems" edited by Allbutt and Rolleston and by Osler and M'Crae, this is probably the best text-book on medicine in the English language; and, so far as we know, among works of its class it has no serious rival. Among the features of the book which impress a reader are the enormous accumulation of clinical and pathological facts which are brought together here, the remarkably rich personal experience of the author, and the very attractive manner in which the facts are submitted.

Numerous changes have been made in the present edition, in order to incorporate the important advances which have taken place in recent years in the science and art of medicine, and a considerable number of these are alluded to in the preface. Since the last edition was published three years ago, the work has been translated into French and German, and it is now in course of translation into Spanish and Chinese. Such a series of translations constitutes an eloquent tribute to the merit of the work, which must be very gratifying to the distinguished author, and on which we offer him our cordial congratulations.

This text-book ought to be as interesting to practitioners as it is popular with students; and no medical library, private or otherwise, is properly equipped without a copy.

The Open-Air Treatment of Pulmonary Tuberculosis. By F. W. Burton-Fanning, M.D.Cantab., F.R.C.P.Lond. Second Edition. (Modern Methods of Treatment Series.) London: Cassell & Co., Limited. 1909.

This is a concise and trustworthy guide to the open-air treatment of pulmonary tuberculosis, and can be confidently recommended to the medical practitioner wishing to make himself acquainted with the practical details of the system, whether to be carried out at home or in a sanatorium. The management of the febrile and of the convalescent patient—how to administer fresh air, when to rest and when to exercise, and how to diet—is minutely discussed. The etiology of pulmonary tuberculosis is also considered. The results of sanatorium treatment are critically reviewed, and the great need for subsequent care of the patient is emphasised, the author insisting "that the majority of the inmates of a sanatorium require life-long care and assistance if their recoveries are to be maintained."
Report on Plague in the Gold Coast in 1908. By W. J. Simpson, M.D., C.M.G. London: J. & A. Churchill. 1909.

The name of Professor Simpson is one to conjure with in matters relating to plague. His investigations of outbreaks in India, China, the Cape, and the Gold Coast have given him such a wide and varied acquaintance with the disease in question that whatever comes from his pen on the subject must command attention and respect. It is not necessary here to go into the details of the Gold Coast outbreak, but from Professor Simpson's statements we may gather many interesting and important facts which open our eyes to dangers which might be overlooked and, at the same time, indicate the means by which these dangers may be avoided. Professor Simpson is satisfied that plague existed in Accra for some time before it was recognised, thus giving another example of a well-known fact, namely, that, except in the pneumonic form of the disease, plague does not declare itself by an explosive outbreak. And we have here again the old story of mortality among rats preceding the outbreak among human beings; pigs and fowls also died.

Cases of swelling in the groin occurred; these were set down to guinea-worm. But Professor Simpson is of opinion that they were cases of bubonic plague. Several of the cases died, and in the same month six persons in one family died. "Later, other families were attacked, and in December quite a number of people died of the new disease, which was characterised by fever, swelling in the groin or armpit, and rapid death."

It is well known that the pneumonic form of plague is the most deadly.

In the Gold Coast outbreak the pneumonic type constituted over 50 per cent of the cases; the usual percentage is taken as 7. Speaking of the first outbreak, Professor Simpson says, "Most of the 168 cases in Accra were of the bubonic type." Speaking of the second, he says, "The disease thus established itself in Accra again, but this time purely in the pneumonic form."

The following is his summary:—"The notable facts connected with the epidemic of plague on the Gold Coast may be summarised as follows:

1. The occurrence of bubonic and pneumonic plague in Accra during the first outbreak with a plague epizootic among the rats.
"2. The extension and prevalence of the pneumonic form of the disease beyond Accra to the exclusion of the bubonic.

"3. The prevalence only of the pneumonic form in the second and third outbreaks in Accra.

"4. The spread of the pneumonic form both in Accra and in other localities without rat or flea infection.

"5. Numerous cases of the pneumonic form with ill-defined symptoms.

"These facts seem to indicate that the potentialities of plague to reproduce epidemics corresponding in their nature to those of the fourteenth century still exist under favourable conditions, that the spread of the disease may be readily facilitated by pneumonic cases with undefined symptoms, and that such epidemics do not require for this propagation or extension either rats or fleas, though they may be reinforced and maintained in a locality by rat infection."

This last paragraph is particularly worthy of thoughtful consideration. Dr. Garland, Deputy Principal Medical Officer, gives a "Short History of Outbreak," and some notes of cases and microscopic work. Dr. Graham gives a "Report on the Plague Laboratory at Accra, 1908," and deals with rats and parasites. Dr. Connal furnishes reports on intensification of the Danysz virus, post-mortem examinations, post-mortem on plague cases, inoculation of pigs and chickens, and results of detailed post-mortem examination of pneumonic cases of plague; and the volume concludes with "A Condensed Report on Attempt to Increase the Virulence of the Danysz Virus," by Dr. Arthur Pickels.

Dr. Graham's paper is illustrated by plates.

Report of the Board of Health on Plague in New South Wales, 1907. "On a Seventh Outbreak of Plague at Sydney, 1907." By J. Ashburton Thompson, M.D., D.P.H. "On an Outbreak of Plague at Kempsey, Macleay River, 1907." By R. J. Millard, M.B., Ch.M.Syd., D.P.H.Camb. Sydney: William Applegate Gullick. 1908.

Whatever may be the result of the investigations which are at present being carried on to ascertain the agencies by which the spread of plague is effected, the rat and flea theory as promulgated by Dr. Ashburton Thompson is one which must retain a foremost place. It may not be the only mode of infection—indeed, we have good reason for saying that it is not—for it does not apply in the case of pneumonic plague.
But, while refusing to accept it as the "only way," we cannot deny, with Dr. Ashburton Thompson's evidence before us, that it accounts for many, probably most, of the cases of the disease under consideration.

In the report now before us, Dr. Ashburton Thompson follows up the rat and flea theory. After referring to the number of cases and the fatalities, the number affected by the different clinical forms of the disease, the character of the attack, the time relation between reaction in the gland and the onset of constitutional symptoms, cases reported for diagnosis which turned out not to be plague, the number and varieties of rats dealt with, the harbourage of rats under ill-conditioned wharves, and the different kinds of fleas, he remarks, "that it [the flea] is the channel of communication between the lower animals has been amply and conclusively demonstrated by the committee and by others; but they have not shown, and, in default of direct experiments which cannot be performed, they could not show, that it is the common carrier from animal to man," and winds up with a reiteration of his belief, "My own unhesitating opinion is that the flea is also the ordinary channel of communication between animal and man, and it is deduced from observations in the field which were first published in July, 1903, in the Report on the year 1902."

He then goes on to describe in detail seven groups of cases. These are worthy of careful study. One of them, "The Campbell Street group," is peculiar. It consisted of four persons—all Chinese. Two appear to have been of the pneumatic type, the third septicemic, and the fourth bubonic. The last had a maniacal seizure at the onset of his attack; the source of infection in his case was uncertain.

Dr. Millard furnishes "Further Experiments on the Destruction of Rats by 'Azoa' and 'Ratin,'" and Dr. Willis contributes an "Examination of a Virus for Destroying Rats, prepared by the Pasteur Vaccine Co., Paris." These reports are placed in the body of Dr. Ashburton Thompson's report.

Speaking of coastal steamers, Dr. Ashburton Thompson says it is reasonable to infer that they "have probably been an important means of maintaining plague in the Commonwealth from year to year."

Dr. Millard gives a "Report on an Outbreak of Epizoötic and Epidemic Plague at Kempsey, Macleay River, N.S.W., in 1907," which is of much interest. Four cases occurred at Kempsey. The first case was that of a man who "had symptoms of lobar pneumonia from the onset of his illness,
and developed multiple buboes five days later, a few hours before his death.” He was nursed by his sister. This sister and her daughter became ill, “the former with pneumonic, the latter with septicaemic plague.” These two cases were removed to the Kempsey Hospital, and died there. In the hospital they were attended to by the matron and two other nurses. The matron was attacked with pneumonic plague and died.

Regarding the first case, Dr. Millard says, “Though the pneumonia in this case is said to be lobar, and as such not of the type usually found in pneumonic plague, yet as the sputum was not bacteriologically examined, it cannot be positively stated that this was not a case of pneumonic plague with secondary buboes.”

There are seven appendices, which will be found worthy of careful attention. There is a spot map of Sydney, and one of Kempsey.

In conclusion, it only remains to congratulate Dr. Ashburton Thompson on his patient researches into the etiology of plague—researches which have placed him in the front rank of distinguished epidemiologists.

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**Mind and its Disorders.** By W. H. B. Stoddart, M.D., F.R.C.P. London: H. K. Lewis. 1908.

In his preface Dr. Stoddart informs us that his endeavour in writing his text-book has been to give the student and practitioner a succinct account of our existing knowledge of mental disease. After an enjoyable perusal of his volume, we must congratulate the author on the way he has fulfilled his purpose. His style is clear and concise, his exposition simple, and the transition from general medicine to mental diseases is so skilfully carried out as to mitigate the real difficulty which the student has in grasping the reality of the different forms of alienation.

The book is divided into three parts. In the first, a concise statement of the facts of normal psychology is given. Throughout there is a constant endeavour to make the study practical, and, where possible, an attempt is made to correlate mental processes with their physical substrata in the nervous system. The synopses are given an all-important part in the transmission of the nervous impulse, while the recent work on the neuro-fibrils, which threatens to remould so many of
the most cherished theories of mental physiology, is passed over in silence; but perhaps this can hardly be imputed as a sin in a volume of this nature. The treatment of space perception is fresh and suggestive.

The second part, which deals with the psychology of the insane, is in many respects the most valuable of the book. In it is demonstrated how among the insane the different mental states recognised by the psychologist may be found unduly active, unduly numb, or in varying degree perverted; and in such case these abnormal manifestations are, as far as possible, connected with some morbid process at work in the cerebral hemispheres. The student consequently gains a more discriminating insight into the symptomatology of mental disease than he can gather from other more common but less systematic methods of presenting its facts.

In the description of mental diseases, which forms the third part, the classification of Kraepelin is adopted with some slight modifications. This is wise, for although that classification appears to be somewhat confusing to students, yet Kraepelin's ideas are of too much value to be ignored. In the different forms of alienation the objective symptoms are duly emphasised, and so the reader is brought to think neurologically of mental processes. All mentation has its origin in sensation, and is followed by bodily activity of some sort, and in diseased mental states all degrees of anaesthesia and paresis are found. Much of the author's work on this subject is already well known through the medium of the Journal, and it is worthy of study by all who are engaged in the clinical investigation of insanity. We can, however, only admire the ingenuity of his views on the pathology of the periodic insanities; little is to be gained by speculating on such imperfect data as we are at present in possession of. There is a useful and interesting chapter on the physical stigmata of degeneration. The author draws attention to the simian character of the hands of patients suffering from dementia precox.

Psychasthenia, neurasthenia, and hysteria are treated with discrimination, and these chapters should be of great value to the practitioner in helping him to understand these borderland cases.

One feature of the book that must recommend it to the practitioner is the amount of attention bestowed on treatment. Dr. Stoddart is a firm believer in the efficacy of bed treatment for all forms of insanity, and is very distrustful of the distraction treatment.
The chapter on the examination of patients cannot but be of great help to the physician making a start in the speciality.

The medico-legal aspect of insanity has a chapter devoted to it, but the procedure and forms have only reference to English law.

In conclusion, we may point out what is, in our opinion, the one real defect of the volume—the scant attention given to the anatomy of the cerebral cortex. In the last resort, all sound clinical work is founded on anatomy, and the first essential in a text-book of insanity is that it should give the student an intimate insight into the organ which underlies mentation.

A System of Diet and Dietetics. Edited by G. A. Sutherland, M.D. London: Henry Frowde and Hodder & Stoughton. 1908.

The subject of dietetics in the treatment of diseases is one which is necessarily expounded in a somewhat general way, even in the larger text-books of medicine. Considerations of space prevent its discussion with any fulness of detail, and it is at most the principles of dietetics which are there laid down. For those, and they are many, who require further guidance in the elaboration of a dietary adapted to the varying requirements of different diseases and of different ages, the volume now under consideration is admirably suited. The editor may be congratulated upon having secured the co-operation of a body of contributors, each of them a recognised authority on the subject on which he writes. It is a feature of the book that although the various diets for different groups of diseases are indicated with great exactitude, mere dogmatic statements are not allowed to exclude the consideration of the views of other authorities, and all statements are throughout brought into correlation with the physiological principles of digestion and assimilation.

It is obviously impossible, where so many authors are concerned in the production of one volume, that there should not be room for occasional divergences of view; but these are comparatively infrequent, and, on the whole, the body of opinion presented, in a field where there are so many debatable points, is remarkably consistent.

After an introduction by Sir Lauder Brunton upon general principles, there follows a long and interesting account of the
evolution of man’s diet by Dr. Harry Campbell, who also contributes chapters on alcohol in health and disease, diet in arterio-sclerosis, and diet in old age. Dr. E. J. Spriggs deals with the physiology of digestion and absorption, and the results of experimental work on diet. Dr. Edmund Cautley discusses diet cures, proprietary foods, invalid’s diet, and obesity; and Dr. F. D. Boyd, artificial methods of alimentation. Dr. Claude B. Ker deals with fevers and acute infections, giving full details of the recent method of treating enteric fever by a more solid dietary, though obviously himself preferring the more usual feeding. To the editor falls the discussion of diet in the diseases of the lungs and in the diseases of children, and the feeding of infants and children in health. Sir Patrick Manson and Dr. Daniels contribute a section on diet in the diseases of hot climates. Drs. Bardswell and Chapman treat of diet in tuberculosis; Dr. A. P. Luff, of diet in gout, rheumatism, and allied diseases.

The other special subjects are allocated as follows:—To Dr. Rose Bradford, diseases of the kidney, and diabetes; to Dr. Herbert P. Hawkins, diseases of the stomach and intestines, in which section the very full discussion of the diet in gastric ulcer may be specially commended; to Dr. Hale White, diseases of the liver and pancreas; to Dr. W. J. Hadley, diseases of the heart; to Dr. John M. Cowan, diseases of the blood and blood-forming organs; to Dr. James Taylor, diseases of the nervous system; and to Dr. Colcott Fox, diseases of the skin. The list of subjects dealt with shows the exhaustive nature of the volume; the list of authors is a guarantee of the excellence of the treatment.

The book is one which may be heartily commended as forming a most valuable addition to the library of every practitioner. It may be added that the volume, though bulky, is easily held in the hand, owing to the use of a specially light paper. The type and general setting are everything that the publishers of the Oxford medical publications have taught us to expect.

The Causation of Sex. By E. Rumley Dawson, L.R.C.P., M.R.C.S. London: H. K. Lewis. 1909.

A paper was read before the London Obstetrical Society in 1900 on "The Essential Factor in the Causation of Sex," but the criticism to which it was subjected did not discourage the author, as is evidenced by the publication of the present
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monograph, The Causation of Sex. "I claim to have discovered Nature's secret." Yet it would seem that Mr. Dawson fears he may be addressing an unbelieving medical public, as he has dedicated his book "to the memory of a medical martyr, the late Ignatius P. Semmelweis," who . . . . "was despised and ridiculed by his colleagues and teachers, finally dying insane, a victim to the relentless persecution and contemptuous opposition to which he was subjected."

Stated shortly, Mr. Dawson's theory is that the essential factor in the causation of sex is the ovary. The right ovary produces males only, and the left ovary females only. His hypothesis differs from that of Hippocrates and Galen, not to mention modern authorities, in so far that he gives a decided negative to the idea that the male parent in any way influences the sex of the future child. The father's only use is to fertilise the ovum, but he causes the future child to take after him provided the ovum absorbs sufficient hundreds or thousands of his spermatozoa. If the number absorbed be few, the child takes after the mother (vide Chap. XVIII).

Mr. Dawson apparently presents a strong case in support of his views, judging by the numerous facts he has collected from text-books and current literature, and which he has fitted "into the mosaic of the theory I claim to be my own," but he weakens it very greatly by taking too much for granted without proof and by fitting into his mosaic more than he is justified. Because Mrs. Y. had first a boy, followed by seven girls, he assumes that the right ovary became functionally useless, either from adhesions or disease in it or its tube. The reviewer had a case where, after the entire removal of the right ovary and tube, the patient bore two boys and one girl; but Mr. Dawson explains away such a contradiction of his theory by saying "that it is very difficult and often impossible to be sure that all ovarian tissue has been removed by the operation," and quotes cases in support of this contention. "The two or three cases brought forward to the contrary disprove not my theory, for in these few exceptional cases who shall say some true ovarian tissue had not been left behind, or that there was no accessory ovarian tissue?" This latter quotation shows the spirit in which Mr. Dawson treats opposition to his theory.

He considers it only reasonable to suppose that the association of the left ovary with the production of girls is due to the fact that the weaker sex should result from the weaker side of the body. He assumes that the ovaries discharge ova alternately—i.e., the right ovary one this month, and the left
one next month—yet accounts for the greater production of boys by the right ovary being larger, and by the larger right tube, in virtue of its lower position, favouring the entrance of semen (sic) into it, further aided by the woman when in bed most usually lying on her right side. He overlooks the fact that spermatozoa may remain active in both tubes for many days before an ovum is discharged from its follicle, and that ovulation is not necessarily confined to the period preceding an expected menses.

From Mr. Dawson's contention that ovulation occurs alternately from "the male or right ovary" and "the female or left ovary," he claims to have had 97 per cent of successes in predicting the sex of the coming child. The 3 per cent of failures was due to inability of the mother to correctly state when her confinement was expected.

By calculating from the ovulation month of the last child born, it is easy to reckon the months in which female and male ova are respectively discharged; thus, by medical advice, the parents may learn when to avoid the risk of fertilising a male or female ovum, as may be desired. Mr. Dawson, and not Professor Schenk, should have been consulted by the Czarina, for Chap. XXVI, on "The Determination or Production of Sex at Will," contains the following sentence:—"Why the Czarina did have four daughters consecutively and at last a son is because on four occasions a female ovulation was unfortunately fertilised; and on three of these occasions this could have been easily avoided by calculating, on my method, the sex of the ovulation month. The sex of the last three children was on each occasion foretold by me."

An evening devoted to this book will provide interesting reading and will not be time ill spent; but the probable verdict on Mr. Dawson's theory will be one of not proven, ably as he has sought to uphold it.

Recidivism, Habitual Criminality, and Habitual Petty Delinquency: A Problem in Sociology, Psycho-Pathology, and Criminology. By J. F. Sutherland, M.D. Edinburgh: William Green & Sons. 1908.

It is not to be expected that the complicated problems into which Dr. Sutherland dips in this monograph can secure anything like exhaustive or even adequate treatment; but, as the expression of opinion of one who has had almost
unique opportunities of forming a mature judgment, the book will be read with interest by all.

Dr. Sutherland is of opinion that the term “recidivism” should be restricted to cases in which there are persistent reiterated lapses on the part of the same individual, and that it should not be applied to recurring insanities.

The whole problem of the proper treatment of recidivism bristles with difficulties, and it is exceedingly doubtful if Dr. Sutherland’s monograph, excellent as it is, helps much in the solution.

The statistics given in graphic form show how small a proportion of crime is associated with recidivism as we define it, and it will be interesting to note whether in the future the figures of the latter show a downward tendency, as it appears \textit{à priori} likely that by the law of the survival of the fittest the recidivist will in time die out altogether. However this may be, there is no doubt that at the present time there is much need for investigation into the causes with a view to prophylaxis, which, as Dr. Sutherland clearly shows, is the only method of treatment likely to have good results.

Owing to the differing bases on which the figures for England and Scotland are founded, the comparison is, as Dr. Sutherland admits, somewhat misleading.

While Dr. Sutherland’s figures show, as might be expected, that with regard to sex ratio males largely predominate, it is interesting to note (page 28) that as frequency of conviction advances, the female sex advances with it until ultimately it exceeds that of the male sex.

The influence of education and occupation is well brought out, and the results are in general those which might have been predicted. With regard to geographical distribution, it is not surprising to find that the large centres of population show by far the largest ratios.

In the chapter on criminal anthropology the classification of criminals adopted by Havelock Ellis and others is followed. Such points in anthropometry as stature, &c., show the general defective formation one almost instinctively looks for.

In Chapter V, dealing with the prevalence and significance of insanity among the authors of the different crimes, there is a specially interesting part dealing with the criminal law in relation to free will, responsibility, and punishment. Dr. Sutherland very properly emphasises the fact that punishment of some kind is necessary, even in dealing with the inmates of asylums. In this chapter, on page 57, is an excellent discussion on the vexed question of intoxication in
connection with the question of punishment for crime committed under such influence.

Chapter VII, dealing with the causation of recidivism, is of special interest and value. Briefly, Dr. Sutherland tabulates them as slumdom, intemperance, illiteracy, and idleness as the external influences, while inherently we have physical and mental degeneracy of the hereditary and acquired types.

Penal systems in relation to recidivism are dealt with exhaustively in Chapter VIII.

The chapter on prophylaxis is the one which will be read with most interest; but, on the whole, Dr. Sutherland's suggestions, grouped under ten heads, do not shed any new light on this part of the subject, although the suggestions themselves are unimpeachable.

The chapters on juridical and penal reform, jurisprudence, and penology terminate the monograph, but these subjects are perhaps rather shortly treated.

The whole monograph is well worthy of the most careful perusal, and there can be no question whatever that the whole subject may yet require resolute investigation and treatment.

There are an unusual number of typographical errors in the pages, but, as a whole, the book is well got up.

The Etiology and Nature of Cancerous and other Growths.
By W. T. Gibson, A.R.C.S. London: Bale, Sons & Danielsson. 1909.

It is clear that the author has attempted a task of no light order; and in the hundred odd pages there is little that is helpful, and much that is discursive if not actually misleading.

Any attempt at connecting the causation of tumours, simple and malignant alike, with occupation must be done most warily, as fallacies abound at every step, and these sources of error are not even indicated by the author.

It is stated in the preface that a number of reasons exist for the omission to give references to the sources of information. Such reasons may or may not exist, but it is certainly true that many cogent reasons exist for giving such information in as complete a manner as possible.

While the etiology of tumour formation receives some consideration, the nature of the neoplasms considered is neglected; and the histology, with the lessons derived therefrom, is entirely omitted. The author makes the remarkable
statement that malignancy is denied to a feltwork of elongated cells. This shows ignorance of the histological structure of many malignant growths.

A few extracts from the pages will indicate the manner in which this important subject is treated. On page 18 it is stated that “the higher incidence (of cancer) in Herefordshire has been ascribed to the abundance of orchards.” On page 19, “It was suggested by Mason that people over 40 are more subject to cancer, because they are more confined to the house.” From page 23—“Epidemics of goitre in schools, barracks, and other institutions may be due to the sudden onset of the potent substances.” A few pages further on the author states that, in whisky and beer, decomposition products formed by organisms closely related to the bacteria are potent in the causation of cancer. This is rather interesting when read in conjunction with the author’s statement, on page 29, that “the history of the cancer problem is practically a history of failure to accurately correlate cause and effect.”

Chapter XXIII, on the treatment of malignant disease (which includes the use of cinnamic acid and distilled water), is on a plane with the other pages, and is not worthy of detailed criticism.

_Diseases of the Breast, with Special Reference to Cancer._ By _William L. Rodman, M.D., LL.D._ With 69 Plates, of which 12 are printed in Colours, and 42 other Illustrations. London: Sidney Appleton. 1908.

There is in the domain of surgery no subject more important than that of diseases of the breast. While the majority of breast lesions may be considered as falling within the province of the surgeon, it has to be remembered that practically every case is seen in the first instance by the general practitioner, and it is on the latter that falls the responsibility of recommending or carrying out suitable treatment. It is for this reason that a book like the present, written as it is by a surgeon of Dr. Rodman’s experience, is of peculiar value.

In the chapter on the anatomy and physiology of the breast prominence is given to the recent work of Piet on the blood-supply of the organ, and the author refers to the practical application of Piet’s findings in the procedure of plastic resection. The even more important lymphatic arrangements are next considered, and an interesting account is given of the changes in the breast at puberty and during lactation. In
the description of the changes during involution the author touches on the relationship of abnormal involution to tumour-formation.

Having disposed of these preliminary considerations, the diseases of the breast are systematically taken up. Inflammatory conditions and cysts are described at some length, and the accounts of them and of tuberculosis and syphilis are good.

In the section dealing with tumours there is a long and careful account of "fibro-epithelial" growths; the rarer growths, such as lipoma, angioma, &c., are briefly described. There is a good chapter on sarcoma, in which disease the author recommends removal of the breast and clearing out the axilla. His argument for this procedure is, we think, sound.

The interesting subject of carcinoma occupies more than half of the volume. The author writes at length on the question of dissemination, and discusses the various ways in which it may occur. While supporting the view of dissemination by the lymphatics as being the commoner pathway, he does not dismiss the possibility of dissemination occurring by the blood-stream. The frequency of secondary involvement of bones and viscera is also considered, but the author thinks that statistics on this point have, so far, been based on insufficient numbers of cases. His account of the symptoms is good, and he justly lays stress on the apparently insignificant early signs of carcinoma. The method of examining the patient is fully described, as is also the differential diagnosis. The important subject of prognosis is gone into at some length. The author considers Volkmann's three-year limit too short, but declares it to be a "fair working rule," inasmuch as 80 to 85 per cent of all who pass this limit remain free from subsequent trouble. His views on treatment are sound, and he advocates an operation which gives the tumour a wide berth. He insists particularly on the removal of skin, and he gives a detailed description of the method which he employs.

The volume closes with a chapter on Paget's disease of the nipple, which ailment Dr. Rodman believes to be a comparatively benign form of cutaneous carcinoma.

The book is freely illustrated, but many of the coloured plates are of questionable merit, and some of the illustrations in the text are of little value.

The author is not one of those whose idea of a book is a title-page, followed by a collection of condensed extracts from
other men’s writings. Dr. Rodman writes from personal experience; he states his own opinions, and the personal note in the book makes it all the more worth reading.

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A Text-Book of General Bacteriology. By E. O. Jordan, Ph.D. London: W. Saunders Company. 1908.

As a thorough up-to-date exposition of the subject of general bacteriology this work is one of the best of recent times. While in no sense intended as a practical text-book on the subject, much practical information will be found in its pages. This is specially noticeable in connection with the methods of demonstrating the treponema pallidum (spirochæta pallida), the organism now accepted as the causal agent in syphilis. With so many excellent text-books already in existence the author has wisely resisted the temptation to repetition of illustrations, but those actually present are of unusual merit, although almost all are copied from other works.

An inset facing page 50 deserves not only special mention, but some little detailed description. It consists of a double sheet which embodies the recognised methods of description and classification of organisms endorsed by the Society of American Bacteriologists. This chart also contains a glossary of terms used in bacteriology, with a clear definition attached to each. Strict adherence to a chart of this kind will be found of great value, as at the present time in this country each bacteriologist appears to have a special dictionary of his own, and employs terms which have different meanings when used by different observers. In the same chart is a numerical system of recording the salient characters of an organism, which is evidently based on the “code” system employed for cablegrams. Thus, the description of bacillus coli communis reads as follows:—B. 222111102.

The chapter on the methods of studying bacteria is complete and lucid. The part of this chapter on thermal death-point and the connection of the latter with the principles of disinfection is succinctly treated.

Chapter V, on the effects produced by bacterial growth, is one of the best in the book, and the formation of toxins, antitoxins, &c., is clearly put.

Following a chapter on immunity, in which the very latest researches are embodied, comes a description of the more important groups of organisms. Dealing with the bacillus
of tubercle, the author notices the value of Dorset’s egg medium for cultivation, but no reference to the special advantage of this medium in the case of the diphtheria bacillus is made.

In the chapter dealing with Asiatic cholera, the classic instance of the epidemic of that disease in Hamburg in 1892, and the escape of the adjoining city of Altona, is given in full, and an explanatory map renders the reasoning clear.

The bacteriology of milk and milk products will be found of very great interest, and this part is fully treated. The same remarks apply to the section on "bacteria and the nitrogen cycle."

Chapter XXXIII, dealing with bacteria in the arts and industries, is very short, and it is certain that ere very long this department of bacteriology must receive much more attention on the part of bacteriologists.

The bacterial diseases of plants is given a prominence which is fully justified, and this section must also very soon get a larger share of attention.

An appendix deals with infectious diseases of unknown origin, including smallpox (how long is the origin of this to remain unknown?), rabies, yellow fever, whooping-cough, scarlet fever, measles, and mumps.

Nothing but praise can be awarded this volume, which must become one of the standard works on the subject of general bacteriology.

General Surgery: A Presentation of the Scientific Principles upon which the Practice of Modern Surgery is Based. By Ehrich Lexer, M.D. Edited by Arthur Dean Bevan, M.D. An Authorised Translation of the Second German Edition by Dean Lewis, M.D. With 449 Illustrations in the Text, partly in colour, and 2 Coloured Plates. London: Appleton & Co. 1908.

We agree with Dr. Bevan that general surgery should be studied before regional or special surgery is taken up; and this translation has been prepared to help students who do not read German to acquire a knowledge of the present-day science of surgery. The matter is divided into seven parts, dealing with wounds, technique, anaesthesia, and general principles of plastic operations, wound infections, surgical infectious diseases, injuries and diseases of various systems, tumours, and cysts.
The work is to a considerable extent a compilation, but the bibliographies appended to the various chapters show that Professor Lexer himself has contributed not a little to the literature of the subject. The articles are not of undue length; at the same time they contain a great deal of information as regards both pathology and clinical manifestations. The technique of local anaesthesia is carefully described. A considerable space is given to the subject of cocaine-injection, although towards the end of the article the author merely mentions the less toxic novocain. The latter might have received more attention, as there is no doubt as to its anaesthetic properties being quite equal to those of the former substance.

In the article on tuberculosis we have a very good description of the various types of lesion which the clinician meets in everyday practice. We cannot, however, agree with the author that tuberculous lymphangitis in the extremities is rare; we should rather say that it is not very common. Tuberculosis of lymph-nodes is well described, and the appearances of affected glands are well shown in Figs. 163 and 164, while in Fig. 165 we have the typical appearances of "scrofula." We could wish for more detail in the paragraphs on the union of fractures. Otherwise this section is good.

Perhaps one of the best parts of the book is that on tumours. The text is good, and the very numerous illustrations are of great value. In the section on the etiology of tumours there are some interesting paragraphs on the relationship of inflammation and trauma to tumour formation, and on this point the author's scepticism is sound.

The translator has done his work well, and, taken all over, the book is one that will prove of great use to anyone who studies it. We feel sure that it will not be long before it establishes its position in the libraries of those who wish to be abreast of the times in so far as general surgery is concerned.

Quain's Elements of Anatomy. Editors—E. A. Schäfer, J. Symington, and T. H. Bryce. In Four Volumes. Vol. III: Neurology. By E. A. Schäfer and J. Symington. Part I. Eleventh Edition. London: Longmans, Green & Co. 1908.

This part of volume iii describes the general structure and mode of development of the elements of the nervous system.
and the special structure of the brain and spinal cord. There is, to begin with, a very good general description of the cerebro-spinal and sympathetic or autonomic systems, which is followed by a consideration of the development of the various structures. The next section deals with the structural elements of the nervous system. The details of structure of nerve-cells and fibres are fully set forth. The neurone theory is well expounded. The subject of nerve regeneration is perhaps rather briefly considered, but bibliographical footnotes guide the reader to a wide field of study. The authors express themselves in favour of the view that "the actual regeneration, so far as the axis cylinder is concerned, is entirely produced by the sprout from the central stump." The interesting subject of "crossed regeneration" next receives attention, and is also supplied with bibliographical references. The various methods of termination of nerve-fibres, motor and sensory, are fully described, and are well illustrated by numerous figures. The methods of tracing nerve-fibres are concisely given. This is valuable to the student, as it will help him to an understanding of the physiology of the parts.

The special structure of the brain and cord forms the third section of the book. Beginning with the general relations of the cord, the minute anatomy is very fully gone into, and is followed by an account of degenerations resulting from lesions. Here we have descriptions of changes in the cord following section of dorsal roots, lesions of parts of the brain, and lesions of the cord itself. The study of these changes is important not only in itself, but because of the relationship which the changes bear to the anatomical facts which have been given in the immediately preceding pages. Not only is the information fuller than in the previous edition, but the use of italics renders its details more accessible to the reader.

The various parts of the brain, from the medulla to the hemispheres, are considered in their order. Micro- and macroscopic details are fully presented, and there is also a very good account of the meninges and blood-supply of brain and cord. Cranio-cerebral topography receives a brief but instructive consideration.

Throughout the volume are evidences of the advances made since the publication of the last edition. These, together with the very numerous new illustrations, are such as to largely constitute a new work. We rise from its perusal with the feeling that in it we have an authoritative and easily read description of this department of anatomy.