ments. This condition seems to have been more considered with reference to micro-organisms than to more highly organised beings, but its importance to the life and health of either is of course the same. The modifications in the chemical surroundings, the temperature, the mechanical pressure, etc., which different tissues in the same individual can bear with impunity, vary of course very greatly, but a limit for each does exist, and local irritation may be said to begin as soon as that limit has been exceeded.

The organismal class has been placed first so as to make it follow immediately on the class of sometimes allied disorders due to organismal growth in the blood. The evil effects of most locally acting organisms are probably due to chemical substances, but in some cases the injury seems mainly due to their mechanical presence and movements, and the term organismal will cover both.

Those that follow,—i.e., chemical, thermal, electrical, radiant, and mechanical,—I think hardly require any further explanation.

Before attempting to forestall some objections which seem likely to be raised to this system of classification, it will be useful for me to show how it works out when applied to the diseases of certain organs where a classification is required.

(To be continued.)

Part Second.

REVIEWS.

The Histopathology of the Diseases of the Skin. By Dr P. G. Unna. Translated from the German, with the assistance of the Author, by Norman Walker, M.D., F.R.C.P. Ed., Assistant Physician in Dermatology to the Royal Infirmary, Edinburgh. With double Coloured Plate, containing 19 Illustrations, and 42 additional Illustrations in the Text. Edinburgh: William F. Clay: 1896.

In the voluminous work before us we have the first serious attempt to construct a pathology of the skin on a microscopic basis. The alphabetically arranged Atlas of the microscopic anatomy of cutaneous diseases, by Leloir and Vidal, interrupted by the death of the second, was rather a series of plates, with accompanying text, than a systematic treatise. It is true, also, that many have recorded their observations on special diseases, but these have been scattered throughout the literature, and have either failed to explain the clinical appearances, or have been frequently irreconcilable with the statements made by other investigators. This volume, which forms a part of Orth's System of Pathology, will serve as a milestone on
the path of progress. Whatever may be the eventual fate of the novel views which Unna has herein propounded, they cannot fail to arrest attention, to elicit criticism, and to advance science. The first thing which strikes one in commencing its perusal is the classification adopted. While prepared for considerable modification of existing opinions, the manner in which some ailments are thrown together, while portions of what we have been accustomed to regard as the component parts of others are relegated to different categories, is, at the outset, surprising. Thus, though von Hebra placed scabies next to eczema, it has for a long time occupied a position among the disorders due to animal parasites; yet here it appears once more as the type of the vesicular catarrh of the skin, as an inflammation, beside pemphigus. Ichthyosis, again, comes immediately after lichen, as one of the infectious inflammations. Under the neurotic inflammations we find neuroleprides and neurosyphilides in juxtaposition to dermatitis herpetiformis and zoster; while leprosy and syphilis in general belong to the group of infectious inflammations. The determination of the invasion of the nerve trunks in leprosy by the characteristic bacillus has led to the recognition of various cutaneous manifestations which are due to disturbances of vascularity or nutrition as a consequence of this. These are very properly termed neuroleprides, in contradistinction to the tissue lesions or lepromata, directly occasioned by the presence of the bacilli in the skin. On the basis of analogy, though so far the evidence of a bacillus of syphilis is merely presumptive, Unna localises alongside these erythematous, erythematic pigmented, and primary pigmented neurosyphilides. This is certainly ingenious and interesting, but it leads to a rupture of continuity in description. We do not quite see either how lupus erythematosus, or ulerythema centrifugum, though from its microscopic anatomy very properly divorced from lupus vulgaris, should be found among the atrophies with scleroderma and alopecia areata. Inflammation of a kind may undoubtedly predispose to the one, and hypertrophy may precede the other, but neither are conspicuous, if existent, in the latter. At the same time, Unna can give a reason for the arrangement he has chosen, and has spared neither time nor trouble to arrive at conclusions. Throughout, one meets with various unfamiliar terms, which sound strange to those who may not have followed out their evolution in Unna's periodical. The key to some of these may be found in the selections from his writings published in a recent volume of the New Sydenham Society. It is perhaps to be regretted that a concise statement of an explanatory nature had not been furnished in an introductory chapter. Had this been done it would have made the book more widely intelligible. Thus, through all the class of inflammatory diseases there runs the thread of chemotaxis, which in its simplest form means an attractive influence exerted by micro-organisms on the elements of the tissues. This may be exercised on leucocytes so as to induce their emigration. But Unna has extended this conception, and speaks of a serotaxis,
a fibrinotaxis, and a sebotaxis, thus conferring an elective affinity on the germs which are present. The theory is a fascinating one, but it wants experimental confirmation. This adductive influence is still further extended when, under xeroderma pigmentosum, he calls in the chemotactic effects of light on the melanin pigment granules, causing them to approach the surface, and so to act as a protective veil to the congenitally over-sensitive skin. An impediment to progress in microscopic study has been that the staining agents employed have been to a large extent nuclear ones, while the cell protoplasm remained in obscurity. Unna set himself to discover protoplasmic stains, and their application in his hands has revealed features hitherto unsuspected, and has led to new explanations of pathological phenomena. Thus, in place of the indefinite "round" or embryonic cells which figured so constantly in historical descriptions, we find him differentiating quite a number of cellular bodies, the exact import of which, nay, even the derivation, cannot be regarded as at all precisely settled. In various chronic inflammatory disorders, but also in a whole series of other diseases, he has encountered Waldeyer's plasma cells. These he looks on as originating from the fixed cells of the connective tissue, or, as in lupus, from the perithelium of the bloodvessels. These in carcinomata form the main part of all the cellular infiltration. The changes which occur in these have been carefully studied, but the frequency with which they are met, and in such different circumstances, rather weakens their special significance. Other cells, the value of which it seems even more difficult to estimate, are Ehrlich's "mast cells," attention to which, if we remember rightly, was first drawn by Unna in investigating urticaria pigmentosa, a morbid condition to which they bear a specific relation.

But it is time to turn to a consideration of the mode in which he regards individual diseases. One of those most closely connected with Unna's name is eczema, for his views have very greatly revolutionized our ideas with respect to its nature and causation. Though its catarrhal origin was accepted long since, it was a startling advance on this when Unna enunciated the view that it is in all cases a parasitic catarrh, a special organism—his morococci—being responsible for its production. At one time, in the early days of dermatology, the vesicle was regarded as the type lesion in eczema; but this erroneous idea was successfully exploded by von Hebra. According to Unna, an anomaly of cornification, known as parakeratosis, is the characteristic, from a clinical as well as from a pathological side. This he defines shortly as an oedema of the transitional epithelium, or more fully, as an abnormally simple cornification,—that is, in the absence of the many intermediate stages (separation of keratohyalin, breaking up of the nucleus, drying up of the internal protoplasm), which accompany normal cornification. This gives origin to the scale, consisting of hardened, improperly cornified horny layer. Persistence of the serous satura-
tion of the epidermis leads to the second histological change, viz., acanthosis. Every long-standing eczema leads to epithelial growth. This is manifest clinically in the papular elevations of the eczematosus parts. Microscopically this is evidenced by the increased amount of mitosis. Another histological feature of eczema is spongy transformation of the epithelium and vesicle formation. The commencement of this pathological change, which distinguishes all the moist forms of eczema, is seen in a general dilatation of the lymph spaces of the prickle layer, thus—in contrast to simple parakeratosis—in an interstitial oedema of the epidermis. On this basis vesicles may develop, apparently in two ways. One, and the more common, is nothing but a local excess of the spongy transformation of the prickle layer. The other is not merely an increased collection of serum, which dilates the uppermost spaces into vesicles, but is a local saturation with leucocytes. "It gives the impression as if all the leucocytes in the neighbourhood had run together at a sudden alarm, and, stopped at the horny layer, had made themselves a place, and thus, as in true impetigo, formed the sub-corneal vesicle." Besides these positive alterations, there are some affecting the connective tissue. This does not disappear, hence the firmness of the infiltrated parts. There is hardly any emigration of leucocytes, but the infiltration consists mostly of small multiform connective tissue-cells, poor in protoplasm, but closely set, and with a fairly well-stained nucleus. Having laid down the characters peculiar to eczema in general, Unna proceeds to analyze certain forms, as eczema rubrum, keratodes, and rimosum, as also the pruriginous and the psoriaticiform. A large part of the section devoted to eczema is occupied by an account of the seborrhoeic type. Much, if not all, which used to be described as seborrhoea is swallowed up by eczema, for he says that a great part of the seborrhoea described by the Vienna school as simply hypersecretions, especially the so-called seborrhoea sicca, are really eczema. Eczema is often distinguished by a richness of fat in its products, and a yellowish colour of the rest of the skin, also to be ascribed to fat. Curiously enough, the source of this fat is not, according to Unna, and notwithstanding the name attached, the sebaceous, but the coil or sweat-glands. This flow of fat is, according to him, a chemotactic phenomenon, though he is uncertain if the morococci are solely responsible for it. In the category of seborrhoeic eczemas he includes rosacea, pityriasis capitis, and the moist eczema of the head in infants. He is inclined to think that the pityriasis rosea of Gibert is an allied disease, though he, like others, has so far failed to discover any organism. As to the psorosperms alleged to have been present in Darier's disease, in molluscum contagiosum epitheliale, and in Paget's disease, Unna, as the result of carefully conducted investigations, unhesitatingly decides that they are nothing more than hyaline degeneration of epithelium.

An interesting section is that devoted to acne. This he views, in a
restricted sense, as an affection of the skin, limited to the cheeks, nose, forehead, chin, and shoulders, and to the period of puberty. One must avoid describing as acne purulent folliculitides of other origin. It is characterized in the first stage by a superficial hyperkeratosis of the epidermis, which, extending to the follicle mouths, leads to the formation of comedones. Now in the comedo Unna finds at least three organisms. In the head and mantle of the comedo are the keratophilic, oat-shaped bottle or flask bacilli, and the diplococci of seborrhoeic eczema. But inside and in the lowest part of the comedo, he has invariably met with a special form of bacillus. These are irregularly arranged, like bundles of spelicans, some projecting on all sides. The secondary and non-essential suppuration in acne is, according to him, not induced by accidental contamination with pyococci, but by this special bacillus. There is formed a bacillogenic impetigo, and secondary to it a slight peri-comedonal suppuration, which extends more or less deeply. Sycosis, again, is a totally distinct process, and essentially depends on the penetration of pyococci. Cogent histological reasons are furnished why epilation can have no therapeutic value, a conclusion which from clinical observation we had long arrived at. It is, in fact, the frequent occurrence of valuable practical suggestions intercalated among elaborate pathological details, which prompts the reader to persevere in wading through the volume. The general impression which its study conveys is that the epidermis—and by this must be understood not merely the horny layer, but the entire structure down to the dermis—plays the most important part in the initiation of the majority of cutaneous diseases, the rôle of the corium being subsidiary, though considerable. This goes to support the chemotactic theory, and is of hopeful augury for the treatment of the future. We can anticipate beneficial effects if we have primarily to deal with epidermic deviations from the normal. Were the earliest lesions chiefly located in the corium, they could hardly be reached except in a roundabout manner through the bloodvessels, and we know how ineffective are constitutional remedies alone in comparison with local ones, in most dermatoses.

Though in this edition illustrations not to be found in the German original have been introduced, and are in themselves admirable, yet their number might with advantage have been multiplied manyfold. It is often difficult, if not impossible, by simply following the description of minute and complex changes, to call up the actual picture, which Unna in a wealth of word painting strives to delineate. The work is one which, to realize its real importance or to understand at all, must be read, with the attention closely fixed from end to end, more than once, and a debt of gratitude is owed by the medical world at large to the translator for having made it accessible to English readers. Every pains has been taken to make the rendering an accurate one, and if at times the idiom savours somewhat of the
Teutonic, this, when one compares the version with the tortuous, often involved, original phraseology, seems unavoidable. We commend this unique treatise to all thoughtful members of our profession as well worth their study.

A Handbook of Leprosy. By S. P. Impey, M.D., M.C., late Chief and Medical Superintendent, Robben Island Leper and Lunatic Asylum, Cape Colony, South Africa. London: J. & A. Churchill: 1896.

The interest evoked by the discovery that to a certain extent leprosy shows signs of recrudescence is proved by the number of books and reports dealing with the disease which have appeared within recent years, many of which have been reviewed in these pages. Dr Impey has had the opportunity of studying it in one of the largest leper settlements in the world, and, struck with the fact that many patients were sent to Robben Island as lepers who were not suffering from the disease, he has been led to publish a very fully illustrated handbook as a guide to its better recognition. These reproductions in black and white from photographs constitute, indeed, the chief feature of the volume, and are in most cases on sufficiently large a scale to bring out the points they are meant to emphasize. Since, however, leprosy exhibits the same characters wherever it is found, the natural duskiness or fairness of the race but slightly modifying its visible symptoms, and as no new discovery as to its nature has been made by the author, we find in the text not much more than a variation in verbiage. The clinical description is drawn from actual observation, thus is an accurate one. But Dr Impey allows himself to fall into speculative statements as to the behaviour of the bacillus in the body, and is not always in agreement with other reliable investigators as to its situation in the tissues. He speaks, too, of a syphilitic leprosy, meaning the co-existence in an active condition of syphilis and leprosy. No doubt this intensifies both, but the double name is misleading and superfluous. In treatment he lays great stress on the effects of an attack of erysipelas, not only in reducing the size of the tubercles, but also in diminishing their number. “I believe,” he says, “one attack of facial erysipelas would destroy all the bacilli in the tubercles on that part of a person who has not had the disease for more than three years; a second attack would destroy the bacilli in the extremities, if there were any located there; and thus, I think, by artificially producing two attacks of erysipelas in a recent case of tubercular leprosy, the disease could be cured.” There are various diseases on which erysipelas has a temporary influence for good, but we wish Dr Impey had had the courage of his opinions, and since “many patients have expressed their willingness to undergo the ordeal,” had tested himself a method in which he expresses such faith, and the value or the
reverse of which he might surely have proved on the ample material at his disposal. He speaks of danger; this hardly weighs for much in an irremediable ailment such as leprosy.

The Structure of Man: An Index to his Past History. By Dr R. Widersheim, Professor in the University of Freiburg. Translated by H. and M. Bernard. The Translation Edited and Annotated, and a Preface written by G. B. Howes, F.L.S., Professor of Zoology, Royal College of Science, London. London: Macmillan & Co.: 1895.

It is curious how few medical men have been able to form anything like a wide conception of the process of evolution. Darwin's explanations have, in fact, been too passively accepted by the many, and their acceptation has prevented the consideration of the phenomena of evolution from occupying the attention it would otherwise doubtless have occupied.

In the study of human anatomy this is greatly to be regretted. As a mere collection of facts no study can be more dreary. Viewed as a series of problems in evolution, every part is of entrancing interest. It is in this aspect that Widersheim presents The Structure of Man. We are briefly taken over the whole bodily structure, and the evidences of progressive and retrogressive changes are lucidly pointed out. The student who cannot derive pleasure from such a study must be dull and unimaginative indeed.

It is needless here to analyze the work in detail. Every part is worthy of careful study. The work of the translators has been well done, and Professor Howes' annotations are of great value.

Physiological Papers. By H. Newall Martin, D.Sc., M.A., M.B., F.R.S., Professor of Biology, Johns Hopkins University, 1876 to 1894, and Professor of Physiology. Baltimore: The Johns Hopkins Press: 1895.

Physiological science, untrammelled by a too interfering legislature, is making rapid and steady progress in the United States, and many are the important discoveries to be credited to our transatlantic cousins. Among American workers—or rather workers in America—H. Newall Martin stands out as one of the ablest; and it is deeply to be regretted that ill-health should have brought to a close so brilliant a career.

His friends and pupils have now paid him the well-earned tribute of publishing his collected papers in a handsome volume, being the third collection of Memoirs from the Biological Laboratory of the Johns Hopkins University. In this collection they have included not only his contributions to experimental physiology, but also his various scientific addresses. They have acted wisely in doing so, for these addresses are all characteristic of the man and full of interest.
It is impossible, in bringing together such a complete collection, to prevent repetition. The same series of facts may have been communicated to two different societies, or to two different journals in somewhat different language. For instance, in these papers we find the author's method of studying the action of various agents on the heart described not only in the paper which stands first on the list, but in several others; while there are two papers dealing with the same investigations on the influence of arterial and venous pressure and of temperature upon the pulse. But such repetitions are of little moment, and are less irritating to the reader than any attempt at condensation would have been.

Martin was not a man who spent his time in merely devising apparatus; but having evolved his method, he applied it largely and diligently, and thus obtained results of very great value. His chief work is in connexion with the mammalian heart. He first shows that the older teaching in regard to the influence of vascular pressure on the heart-rate is erroneous, and that within wide limits there is no change in the rate of the pulse corresponding to the change in pressure. Temperature, on the other hand, has a direct action on the cardiac tissue. His method also enabled him to study the influence of alcohol on the heart, and to show that incompetent systole is one of the results of the action of this substance.

Among the papers which may be read with interest by the medical reader is one on the Suction Power of the Heart; another on the Action of the Internal Intercostal Muscles in Respiration; and yet another on the Physiological Effects of "Differential" Respiration.

The five Addresses on more general subjects have each an interest to all who understand, or wish to understand, the true relationship of biological investigation to practical medicine. Especially would we commend to the study of the so-called practical man, who inclines to sneer at scientific education, No. 21 of this series—"Some Thoughts about Laboratories." A careful consideration of this may perhaps help to open his blinded eyes, and to break through his miserable empiricism.

The Committee of Publication deserves the heartiest congratulations on the appearance of the volume.

The Physiology of some Animal and Vegetable Colouring Matters.
By C. A. MacMunn, M.A., M.D. The Birmingham Medical Review, April 1896.

Much pleasure and instruction is to be derived from a perusal of this admirable address by Dr MacMunn. No one is better fitted to discuss and elucidate this complex and important subject. Deservedly he is universally regarded as the authority on animal pigments. For a man engaged in active medical practice to have
attained such a reputation means a devotion to science and an
indomitable energy which all must admire, though few can emulate.
Because the functions of the pigments in plants and animals are
largely ignored by our teachers of physiology, we are apt to regard
them as of no significance. Dr MacMunn shows how fallacious
such a view is, and explains clearly and concisely the meaning of
the more widely distributed colouring matters. It is greatly to be
regretted that our ignorance of the chemical nature of these
pigments is so profound, and that the fallacious method of spectro-
scopic examination has to be so entirely depended upon in their
differentiation. Improved chemical methods of research can alone
throw the much-needed light on the nature of lipochromes and
their allies. But though their composition is unknown, their action
is in many cases clear, and it is upon this that Dr MacMunn
chiefly attempts to give information. Whether the medical reader
will be able to turn this information to any practical purpose is
neither here nor there. That the possession of such information
gives a larger and clearer view of the working of Nature should be
sufficient reward for the time spent in its acquirement.

A Text-book upon the Pathogenic Bacteria, for Students of Medicine
and Physicians. By Joseph M'Farland, M.D. Philadelphia: W. B. Saunders: 1896.

It is perhaps a matter of regret that we live in an age of rush
and hurry. We have neither time for the protracted dinners
enjoyed by our grandfathers, nor for the literary feasts with which
they could regale their intellectual leisure. No doubt this is to be
regretted. But scientific authors, and especially compilers of
scientific text-books, must accept the fact, and must recognise that
their first duty is to be concise. Dr M'Farland is a compiler, and
his work would have been much improved had he kept this point
more constantly before him. His work would have gained much
by being freely pruned throughout. He has done well to confine
his attention to the pathogenic organisms, and the general arrange-
ment of the matter is good. After a somewhat tedious chapter
on the history of the development of bacteriology, an account of
the morphology and physiology of bacteria is given. Their
relationship to the human subject is next dealt with, and the
important questions of immunity and susceptibility are discussed.
A fairly good description of the methods of bacteriological
research concludes Part I. Part II. treats of the specific
diseases and their bacteria. Under "Phlogistic Diseases" the
author includes suppuration, tuberculosis, leprosy, glanders,
syphilis, actinomycosis, mycetoma, farcin du bœuf, and rhino-
scleroma. Under "Toxic Diseases" he considers diphtheria,
tetanus, rabies, symptomatic anthrax, typhoid, cholera, and pneu-
monia; while as "Septic Diseases" he classes relapsing
fever, influenza, malignant oedema, measles, bubonic plague, tetragenus, chicken cholera, mouse septicaemia, anthrax, and typhus murium.

Whatever may be thought of the classification adopted, it will be seen that the diseases which have been shown to depend on micro-organisms all receive consideration; and it may be said that a fairly adequate description of the present state of our knowledge in regard to the bacteriology of each is given. The figures, mostly from photographs, which illustrate the text are exceedingly good, though, of course, they can give only a very imperfect representation of the actual cultures.

The book will be found of considerable use by medical men who have not had a special bacteriological training, and who desire to understand this important branch of medical science.

The Principles of Bacteriology; a Practical Manual for Students and Physicians. By A. C. Abbott, M.D. Third Edition. London: H. K. Lewis: 1896.

The first edition of this work appeared in 1891. It has now reached the third edition, and the author has taken pains to bring it up to date.

It is a useful compilation of moderate size, and it treats of most of the important questions involved in modern medical bacteriology. The practitioner will find it a useful guide to the study of the general principles of the science.

The Elements of Pathological Histology. By Dr Anton Weichselbaum, Professor of Pathological Anatomy in the University of Vienna. Translated by W. R. Dawson, M.D. (Dub.). London: Longmans, Green, & Co.: 1895.

The English student will welcome this excellent translation of Weichselbaum's well-known Grundriss der Pathologischen Histologie. Dr Dawson, while closely following the original, has not hesitated, when necessary, to intercalate fresh material, and in minor details to improve upon the arrangement.

The work is divided into three parts. Part I., on General Methods of Investigation, deals not only with the usual histological method, but also with the method of bacteriological research. Part II. is devoted to "General Pathological Histology." The general pathological processes, both of retrograde and progressive character, are each shortly described, and two chapters are devoted to the consideration of "Parasites," including not only bacteria, but also the various other vegetable and animal parasites which are found in man.

Part III. deals with the Special Pathological Histology of the various Systems and Organs.
While high praise is due to the text, still higher must be awarded to the beautiful figures with which the whole work is illustrated. Such figures save an endless amount of description, and convey at a glance information which without them must have been wearily acquired by prolonged reading.

Quain's **Elements of Anatomy.** Vol. III. Part 4: Splanchnology, by Prof. E. A. Schäfer and Prof. J. Symington. London: Longmans, Green, & Co.: 1896.

This volume, which originally was intended to complete the work, is now to be supplemented by an Appendix. The portion of this volume dealing with the histology of the various organs is, as is usual with Prof. Schäfer's work, beyond all praise. The Plates by which it is illustrated leave nothing to be desired. In the portion devoted to topographical anatomy much new matter and many new and excellent figures have been added. In most respects it is exceedingly accurate and full in detail, but leaves somewhat to be desired in respect of composition. It seems a pity, however, that one author has not taken the trouble to compare his own work with that of his collaborators, for, as a consequence, we have more than one discrepancy of description, which, to say the least, will be exceedingly confusing to the student. Thus we have no fewer than three different descriptive definitions of "the pylorus." And in Part 2, vol. ii. p. 383, though the arch of the aorta is described (as is usual now) as extending from the second costal cartilage of the right side to the fourth dorsal vertebra, and is said to be in the superior mediastinum, on page 169 of the present volume the arch of the aorta is given as one of the contents of the middle mediastinum; and yet only a few lines above we read, "the whole of the arch of the aorta" is in the superior mediastinum. In spite, however, of these drawbacks, the work holds the foremost place amongst anatomical text-books.

**Journal of Anatomy and Physiology.** Vol. XXX., Part 3, April 1896.

In this number the anatomical contributions of special value are those by Dr Robinson and by Prof. J. Symington. The former treats of the formation and structure of the optic nerve, the relation of its fibres to the optic stalk, and the relations of the optic nerve and of the retina to the brain; the latter, which bears evidence of the author's usual careful work, places before us the homology of the dumb-bell-shaped bone of the ornithorhynchus. Dr Carlier's paper on the Pancreas of the Hedgehog during Hibernation makes us wish that physiology bulked more largely in this journal than it usually does. A notable paper on Hereditary Polydactylism is contributed by Mr Gregg Wilson, and Prof. Windle gives an able report on recent Teratological Literature, a subject endless but all
absorbing. A paper on some Structures in the Elbow-joint, by Mr G. M. Corner, and another by Dr E. B. Smith, on the Astra-galo-Calcaneo-Scaphoid Joint, conclude this number.

Elementary Anatomy and Surgery for Nurses: A Series of Lectures delivered to the Nursing Staff of the West London Hospital. By W. M'Adam Eccles, M.S. Lond., F.R.C.S. Eng., etc. London: The Scientific Press, Limited: 1896.

The evolution of the trained nurse is producing a literature of its own, and notes, handbooks, and text-books of all kinds flood the press, and seem to obtain a ready sale. This little volume aims at giving the substance of a course of lectures on elementary anatomy, with special reference to elementary surgery. It makes no attempt to deal with the actual nursing of surgical patients. What is told in it is told in clear and precise language, and the simple woodcuts are diagrammatic enough to be instructive. But the arrangement is very peculiar. After a chapter on the Osseous System, another on the Process of Inflammation is sandwiched up before the one on the Principal Joints of the Body. Then comes Fractures, followed by the Digestive System, while Burns and Scalds intervene between the Special Senses and the final chapter on Bandaging and Instruments, which chapter is loaded with illustrations of the commonest instruments, which any ward sister could teach the stupidest probationer to recognise in five minutes from the instrument tray.

The Medical Annual and Practitioners' Index, 1896. Bristol: John Wright & Co.

This wonderful book of reference contains useful information for the practitioner on a vast number of subjects, from the most recent pharmacological novelty to the cost of life insurance in different offices in Great Britain. Amongst the original articles is an interesting one on remedial cycling, by an enthusiastic votary of the "bike," Dr Oscar Jennings. Under new treatment we get a summary of the work in practical medicine and surgery during the past year; and to keep the volume up to date, is an article on Röntgen's photography. The volume is most complete, and replete with useful information. It would be difficult to supply its place.

Anna Kingsford: Her Life, Letters, Diary, and Work. By her Collaborator, Edward Maitland. Two Vols. London: George Redway: 1895.

This book should be noticed in the pages of the Journal for several reasons. The beautiful and gifted colleague who has passed beyond the veil was a unique personality, well worth some study.
The book itself—a product of the end of the nineteenth century—recalls Swedenborg’s writings, as well as those of the Hermetic school. The literature of the East, the traditions of ancient Egypt, India, and China, are not more interesting reading than the contents of this work, which seeks, and with success, to unshroud the authoress of *The Woman Clothed with the Sun* and *The Perfect Way*, the friend of the Duchesse de Pomar, of Madame Blavatzky, and of Laurence Oliphant, the successful medical student, the convinced vegetarian, the rabid anti-vivisectionist, the self-accused executioner of Paul Bert and Claude Bernard,—a woman who claimed to be a seer, a reincarnation of Anne Boleyn, who was a reincarnation of Jean d’Arc, who was a reincarnation of Faustine, who was a reincarnation of Mary Magdalene. The author of the book, Edward Maitland, tells us, and we have no reason to doubt his *bona fides*, that he is a reincarnation of the great Apostle St John!

Having read thus far, the reader may pause and throw down the review with disgust, and think that it is waste of time to read more.

"O, that way madness lies; let me shun that."

Not so, we think. "Though this be madness, yet there's method in it." As Dryden said,—

"Great wits are sure to madness near allied
And thin partitions do their bounds divide.

We are living in a wonderful age,—in an age where nervous strain is greater than ever before in the world's history. The strides of science are fast causing a revolution in modern life. Ancient guesses or prophecies are being fulfilled, the discovery or rediscovery of the X rays of Röntgen, the Argon of Ramsay and Lord Rayleigh, and the process of the development of the brain by Flechsig, all show that the old theories of the *Tatwas* taught in India were not wild speculations, but that, could they be comprehended by the modern scientist, much progress would be made in many directions. "There is nothing new under the sun;" and if such wonders as these were known beforehand to the wise, why may not the predictions with regard to psychical development foretold for the end of this century or in the early years of the next be also true?

That this development may be evil, most evil, no sane man would deny; but it seems to us that the high pressure of life, the craving for something new, the unsettled religious views now held, the publication of such books as the *Ascent of Man* and *The Foundation of Belief*, all point to the way the wind is blowing. Again, when we find well-nigh two hundred spiritualistic organisations in Great Britain, and a Theosophical Society, which, all attacks notwithstanding, has branches all over the world, and many
thousands of members, it does not do to shut our eyes and rest satisfied that all is well. An undercurrent of unrest, of mental and moral instability, is, we think, making itself felt, and it is our professional duty to take knowledge of it, and to be ready to aid its victims even now coming to our hands. These people will not be put off with platitudes, nor can one laugh at them; it requires knowledge of the causes of their maladies in order to treat them, and it is to the physician, and not to the priest or minister, that they turn in their bitter woe.

We need not believe in astral bodies—in the *doppelgänger*, in obsession, hypnotism, *et hoc genus omne*—but many do, and if we are ignorant of or ignore the presence of these ideas in modern life, we fail in our duty to our profession and our clients. It is for these reasons, then, apart from all considerations of mere interest or even amusement, that we advise more than a cynical glance at Anna Kingsford's life.

A biography usually begins at birth; not so this; we are told here of previous lives. A biography usually ends as the sod closes over the coffin, but here we have it continued from that misty region which the eye would, but cannot pierce. Ordinary criticism seems barred at the outset when we read,—"The judgments pronounced no merely human opinion. They were imparted from the spheres where all things mundane are fully known and infallibly estimated." Mrs Kingsford claims to have interviewed Pallas Athene, Hermes and Swedenborg, and in one of her trances she says she visited heaven. We forbear to quote what she saw there, but a few lines from the account of her flight through the stellar universe will give an idea of the style of her experiences:

"Oh, I see masses, masses of stars! It makes me giddy to look at them. Oh, my God, what masses! Millions and millions! Wheels of planets! Oh, my God, my God, why didst Thou create? It was by Will, all Will, that Thou didst it. Oh, what might, what might of Will. Oh, what gulsf, what gulsf. Millions and millions of miles broad and deep! Hold me!—hold me up! I shall sink— I shall sink into the gulfs. I am sick and giddy as on a billowy sea. I am on a sea, an ocean—the ocean of infinite space. Oh, what depths! what depths! I sink—I fall! I cannot, cannot bear it!"

Stratford in Essex saw the birth of Annie Bonus (Mrs Kingsford) on the 16th of September 1846. One of her ancestors was a student of alchemy, another a cardinal; her father was a merchant. She seems to have been a poetess almost from the cradle; at thirteen she published a book of poems and a story, but at nine even a poem of hers appeared in a magazine. She was fond of hunting, but gave it up for conscience' sake.

She married at about twenty a gentleman who soon after became a clergyman, but she had made an antenuptial bargain that marriage should not interfere with her living "her own life."
This was fortunate, for her health gave way the day after her marriage; she could only live for a few days at her husband's home without attacks of asthma, and after the birth of her only child, a daughter, she never enjoyed good health. In her case, as in so many others, mind conquered body, and her suffering, apart from in all probability influencing her physical development, did not interfere with her work.

Her husband was sincerely devoted to her, although their lives were mostly lived apart. She said of herself: "You see I am not allowed to be as other women. I am compelled practically to be a wife without a husband, and a mother without a child, and to have a home in which I cannot dwell."

From the time of her marriage she devoted her life to set to work to champion the cause of women's rights,—the superiority of the weaker sex. She was an ardent vegetarian and rabid anti-vivisectionist. She edited the Ladies' Own Paper, and was fully occupied in literary work.

In commencing a medical student's career she did not take her beauty into consideration. "The women resented my looks, and the men openly declared that if I came among them as a student they would make love to me." We are sorry to note that the women both in London and Paris were jealous of her. One student in Paris was attacked by brain fever after he learnt that she was married. The Frenchmen seem to have been more kind to her than members of her own sex.

One of the professors at the Charité would not at first take her on as a student, saying that she was "neither man nor woman." He relented, however, on finding that she had given a child a bunch of violets. "She is a woman after all; only a woman would have thought of doing such a thing as that; not one of you, messieurs, would have brought flowers to a sick child in the ward," said he. A libel on the men, we think; at anyrate we have known male students do such things, and we are not quite sure that medical study renders a woman either more womanly or more sympathetic. In Dr Anna Kingsford's case, clever student and woman as she was, she seems to have learnt how to hate, how to see only one side of a question, and although very womanly in one aspect of her character she was not so in another.

We think women students may take warning from her life not to think that on graduation they possess the concentrated knowledge of the ages; that they are capable of setting all wrongs right; or, as in a case noticed in a contemporary recently, without consultation settle a question of life or death, and then rush into print and ask for professional whitewashing.

Anna Kingsford passed a brilliant final, and would undoubtedly have made a mark in her profession had not her mystical studies claimed her too exclusively. To these studies we cannot now refer.
Above we have said that she was the self-accused executioner of two “arch fiends,”—in other words, vivisectors. She held that it was in the power of the will of one person to influence another for good or ill. She hated vivisectors with an intense hatred. “And seeing in Claude Bernard the foremost living representative and instrument of the fell conspiracy, at once against the human and the divine, to destroy whom would be to rid the earth of one of its worst monsters, she no sooner found herself alone than she rose to her feet, and with passionate energy invoked the wrath of God upon him, at the same moment hurling her whole spiritual being at him with all her might, as if with intent then and there to smite him with destruction. And so completely, it seemed to her, had she gone out of herself in the effort, that her physical system instantly collapsed, and she fell back powerless on her sofa, where she lay a while utterly exhausted and unable to move.”

At the time of this curse Claude Bernard was taken ill and died. When the news of his death came she nearly fainted. “For you it may have been only a coincidence. But we know enough to believe such things possible, and I shall not rest until I have found out, and if it prove that I really possess such a glorious power, woe be to the torturers. God willing! what a murrain there will be among them. Oh! I will make it dangerous, nay, deadly to be a vivisector. It is the only argument that will affect them. Meanwhile, thank God the head of the gang is dead. If so be that I have been the instrument, I thank God all the more for that! I shall not have come into this hell of a world in vain!”

Subsequently she tried her hand, or rather her will, upon Pasteur and Paul Bert. The former she thinks she caused a serious illness, and “compelled his retreat from his laboratory to the Riviera,” and with regard to the latter we quote as follows:—

“Paris, November 12.—Mort de M. Paul Bert,—La nouvelle de sa mort, arrivée à jeudi soir quatre heures, n’a surprise personne. Yesterday, November 11, at eleven at night, I knew that my will had smitten another vivisector! Ah! but this man has cost me more toil than his master, the fiend Claude Bernard. For months I have been working to compass the death of Paul Bert, and have but just succeeded. But I have succeeded; the demonstration of the power is complete. The will can and does kill, but not always with the same rapidity. . . . Courage; it is a magnificent power to have, and one that transcends all vulgar methods of dealing out justice to tyrants.”

She thought the Bible quite justified her endeavours. To the book itself we must refer any reader who may wish for information regarding spirits, angels, devils, gods, genii, etc. We cannot deal with that part of the book here; still we have said enough to show the weird nature of the volumes, and we hope to incite
interest in a remarkable, even if misguided, woman. Mr Maitland has performed his task well; he was a faithful co-worker, and is a most sympathetic biographer.

Part Third.

MEETINGS OF SOCIETIES.

MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH.

SESSION LXXV.—MEETING VIII.

Wednesday, May 6, 1896.—Dr Argyll Robertson, President, in the Chair.

I. Election of Members.

Sir John Simon, K.C.B., was elected an Honorary Member, and Prof. MacEwan was elected a Corresponding Member of the Society.

II. Exhibition of Patients.

1. Mr Alexis Thomson showed (a.) for Prof. Annandale—A man on whose face a plastic operation had been performed. The nose had been destroyed by a rodent ulcer of fourteen years' duration. The condition was shown in the photograph which was handed round. The cheek was not available, having been used previously. Mr Annandale accordingly liberated a central piece from the forehead, and slid it down, then separated the central piece of the upper lip from its posterior attachments and lifted it up to fill in the gap; when the central portion of the lip had soundly healed, the edges of the lateral portions of the lip were brought together in the middle line.

(b.) Two cases of perforating ulcer of the foot. Curiously enough, he had had an opportunity of observing four cases within the last twelve months. The first case had had for three and a half years a perforating ulcer on the sole, one on the terminal phalanx of the great toe, another over the head of the third metatarsal. For this he stretched the posterior tibial nerve at the ankle, and at the same time scraped the ulcer. It was a case of tabes dorsalis, with very severe gastric crises and lightning pains in the extremities, locomotor ataxy not being fully developed yet. The second case had an ulcer on the plantar surface of the great toe, extending into the interphalangeal joint, and there was complete anaesthesia and analgesia in the area of the ulcer. There was absence of ordinary sensibility as high as the ankle on both sides, exaggerated knee-jerks, and ankle clonus. Both cases were instances of perforating ulcer depending on nerve lesions,—one spinal, the other peripheral.