from one case that the disease was a substantive independent one; but he agreed with Dr. Smith that the name he gave the disease was a bad one, and he used it as given by the writer who first described it—namely, Duvergie.

REVIEWS AND NOTICES.

OUTLINES OF THE PATHOLOGY AND TREATMENT OF SYPHILIS AND ALLIED VENEREAL DISEASES. By HERMANN VON ZEISSL. Second Edition, revised by MAXIMILIAN VON ZEISSL. Translated, with Notes, by H. RAPHAEL, M.D., New York. Pp. 402. London: H. K. Lewis. 1887.

THE second edition of Professor ZEISSL's work, Dr. Raphael's translation of which is now before us, was published in Vienna in 1884, having been revised by the son of its distinguished author, with the addition of some portions of the well-known *Lehrbuch für Syphilis*, which first appeared many years ago.

The present work is divided into three parts, headed respectively Gonorrhœa, Soft Chancre or Chancroid, and Syphilis. The first of these, which occupies 107 pages, contains a good account of gonorrhœa and its complications, but nothing especially new or worthy of note. With regard to the "gonococcus" of Neisser, which has received so much attention of late years, it is remarked that "the hypothesis that an animal or vegetable parasite forms the basis of a gonorrhœal contagium has not yet been satisfactorily demonstrated." In the section on treatment we read that if gonorrhœal patients were to submit themselves to an appropriate diet "and remain strictly at rest, and in addition make daily applications of cold water for several hours to the genital organs and perineum, most cases of gonorrhœa would get well within four or six weeks without injections or internal medicine, or at the most with the aid of very little medicine." We quite agree with the author so far as diet and rest are concerned, but we think that a patient—supposing one could be found to do it—who made "daily applications of cold water for several hours" would run considerable risk of developing something worse than gonorrhœa before the four or six weeks had elapsed.

Syphilis, of course, takes up the largest portion of the work, and is for the most part excellently dealt with. The general description of the disease and of its various manifestations on the skin, mucous membrane, etc., is admirable, and the same may be said of the section on the larynx and trachea by Professor von Schrötter, and of that on the eye by Professor Mauthner, who, it may be mentioned, does not consider interstitial keratitis to be peculiar to syphilis. But some portions of the work which relate to acquired syphilitic disease of the viscera are decidedly disappointing. For example, in a book of this size, a space of little more than half a page can hardly be considered sufficient for the lungs and bronchi; nor can the syphilitic affections of the spleen be adequately discussed in ten lines, or those of the kidney in six lines, the space here allotted to these subjects respectively. We are also rather surprised to learn that "we have no positive evidence that syphilis exercises any influence in the production of joint-affections;" and again, with reference to the inherited form of the disease, that "As a sign of hereditary syphilis *manifesting itself in the earliest period of infancy*, Hutchinson mentions the peculiar curving of the upper incisor teeth" (our own italics).

Passing to the all-important subject of treatment—a subject on which, probably, no one in Europe had better opportunities for forming an opinion—we find Professor Zeissl's method briefly stated (p. 335) as follows: "In patients affected with an initial primary lesion, but who are still entirely free from specific phenomena, such as glandular enlargement or eruptions, the treatment is confined to the local lesion. If the first syphilitic phenomena appear on the common integument in the form of a macular or papular eruption, we prescribe no anti-specific remedies for the patient, even when suppurating papules are present in the mouth, on the lips, or on the tonsils, etc.....If the eruption has not entirely disappeared at the end of eight weeks, or if no improvement is perceptible, we then prescribe the preparations of iodine. If the symptoms of the disease have not entirely disappeared after the expiration of eight weeks more, the treatment with mercury may be resorted to without any fear concerning the future course of the disease." Again, we read: "In our opinion mercury should not be used till eight or ten weeks after the first eruption has appeared, unless the latter is too slow to disappear under expectant or iodine treatment, or *dangerous phenomena threatening some of the organs of sense, the viscera, or the central nervous system supervene.*" Now, from the latter portion of this quotation (which we have italicised), it would naturally be inferred that, if dangerous phenomena do supervene, mercury ought to be given at once. But on turning to the section on syphilis of the nervous system, we find (p. 280) that "the predisposing causes for the development of this form of syphilis, as for all the other grave forms, are: too *early* use of mercury," etc.

Thus, it would appear that, if there are no dangerous symptoms, mercury, if administered at all, is not to be given till a certain time has elapsed; while, if dangerous symptoms do arise, we are to give the very drug which Professor Zeissl places first among the predisposing causes of all grave forms of the disease. This is a line of treatment somewhat difficult to understand, and it is not made less so by the following: "Iodine in proper quantities, in conjunction with a carefully-regulated regimen, is sufficient to *cause the symptoms of syphilis to disappear, or at least to be weakened, so that only a few mercurial inunctions will be necessary to complete the cure, without fear of a relapse occurring in the years to come.*"

From the foregoing extracts it will be seen that the author's views on the treatment of syphilis are not those which are most generally held at the present time. Few, we fancy, would share his confidence in the "expectant" form of treatment, or in the preparations of iodine as a permanent remedy; and it would be very interesting to know on what evidence he bases his statement that the early administration of mercury is a predisposing cause of all grave forms of the disease.

The English reader who does not know German, and who wishes to learn the views of the renowned Vienna syphilographer on a subject which he made a life-long study, will feel grateful to Dr. Raphael, not only for the translation, but for his own additions to the text, which are both useful and to the point.

DIE BEHANDLUNG DER WUTHKRANKHEIT, EINE EXPERIMENTELLE KRITIK DES PASTEURSCHEN VERFAHRENS (The Treatment of Rabies an Experimental Investigation of Pasteur's Method). Vienna: Seidel. 1887.

A FEW weeks ago we gave, in a leading article, the conclusions respecting Pasteur's method of preventive inoculations of Professor A. von Frisch, of Vienna, who made a special investigation into the subject in M. Pasteur's own laboratories. Those conclusions were adverse to that method, at least to its "intensive" modification, while at the same time several statements of Pasteur were confirmed, and the ascertained facts were marshalled with scientific precision. Since then Von Frisch has prosecuted his researches in Vienna, having had placed at his disposal two dogs infected with rabies in Paris, and having procured other dogs, the subjects of ordinary rabies in Vienna. His further conclusions have just been published in this small volume.

The chief point to be remembered is that a man is already infected, or supposed to be so, with rabies, before being subjected to the "preventive" treatment. Pasteur supposes that in the matter used for inoculation—namely, small portions of the spinal cord of an animal that has died of rabies dried for a certain time, varying in each case, and them emulsified in sterilised broth—there may exist, in the first place, the "microbe de la rage," and besides this a substance which renders the bodies of inoculated subjects an unfavourable abode for the development of that microbe. The drying process, according to the time expended, is supposed to gradually destroy the microbe, while leaving the other substance unaltered. It is evident that this theory can only be efficiently tested—that is, as to its assumed results—by subjecting animals which have been already infected to this treatment. This, according to Dr. von Frisch, has not yet been thoroughly done. Pasteur, it is true, subjected twenty dogs, which had all been bitten by rabid dogs, to his preventive treatment before applying the latter to human beings, but it is impossible to say how many of the bitten dogs were really infected, or, indeed, whether any of them were infected. The only certain method of producing rabies yet known is to introduce a portion of the spinal cord of an animal that has died of rabies beneath the dura mater of another dog, after trephining the skull; and the preventive inoculations should then be made after this subdural infection. Pasteur has made but very few experiments in this way—in fact, but four—and only claims a "succès partiel" in these, for two of the animals died, despite the preventive inoculations, on the fourteenth and twenty-ninth days respectively. Von Frisch, on the other hand, has not only made a large number of such experiments, but has modified them in various ways. His conclusions may be given in his own words:—

"Rabbits and dogs which, after trepanation and subdural infection, were subjected to preventive inoculations, all fell ill subsequently, and

died of rabies. The same result followed attempts to abridge the period occupied by the inoculations (ten days) by leaving out some stages. Of the animals subjected to inoculations after subcutaneous injection with street-rabies, a part survived if the inoculations were commenced within twenty-four hours after infection, but if five days elapsed they all died of rabies. The intensified method of Pasteur (inoculations every two hours, the whole series of spinal cords being gone through in at most twenty-four hours, two or three repetitions of this procedure being made) was not only powerless to prevent rabies after subdural infection—all the animals died of rabies—but it was found that the spinal cords of the animals experimented on had acquired an increased virulence through the inoculations. Of dogs and rabbits subjected to the intensified method alone, without previous infection of any kind, by far the greater part died of rabies as a consequence of the (preventive !) inoculations. Dogs which survived the intensified method *per se* were not found to be perfectly resistant to subsequent infection, whether subdural or subcutaneous. The intensified method of preventive inoculation, practised on man by Pasteur after bites on the face, or several deep bites on other unprotected parts, was not only of no effect in the majority of animals after previous subcutaneous infection with street-rabies, but even hastened the appearance of rabies; moreover, the spinal cords of the animals after death showed an increased virulence when portions were inoculated into rabbits. It is highly probable, therefore, that this method may be very dangerous to human beings ('auch für die Menschen mit ernster Gefahr verbunden sein dürfte')."

After an exhaustive examination of the statistics published up to the present by Pasteur, Von Frisch concludes that they tell neither for nor against his method. This method has revealed facts of the highest interest scientifically, especially as regards the shortened period of incubation and the attainment of a "fixed virus," and the Vienna professor thinks it is hardly to be doubted that Pasteur's researches will pave the way to protect animals against rabies some day or other. "But the usual error has been made" (he goes on to say), "namely, that of bringing the scientific results of laboratory work into practice prematurely. Unfortunately, in these 'lyssa' inoculations the great distinction is this, that human beings and not animals are the object of doubtful scientific investigations. To begin with, it does not seem justifiable to me to make man the object of doubtful experiments."

It cannot be denied that in the face of the published facts regarding the method, any medical man who advises a resort to M. Pasteur after a bite by a supposed mad dog incurs a certain responsibility.

HUNTERIAN LECTURES: ON SOME INJURIES AND DISEASES OF THE NECK AND HEAD, THE GENITO-URINARY ORGANS AND THE RECTUM. By EDWARD LUND, F.R.C.S. London: J. and A. Churchill. 1886.

THESE are very practical remarks on a large variety of subjects, trivial as well as serious, which come under the notice of the surgeon in general practice, and will be read with interest. There is a charm in the honesty of the lecturer in the way he points out his own mistakes, and what he has learned by them, and it would be well if teachers recognised how much can be taught as well as learned by failures. But it is not many who feel strong enough to act upon this principle. The lectures are also full of valuable practical hints, and they represent the results of the experience of a surgeon whose bias is towards the mechanical and common sense. Many of these results have no doubt been arrived at by other practical surgeons, but it is useful to have them in some form such as this book affords for reference; and the reading is pleasant as well as instructive, all the more pleasant, perhaps, for the subjects being of a wide range and general interest, and the lectures not being devoted to an exhaustive study of any one subject, however important. In this these lectures differ from any other Hunterian lectures that we remember.

In the first lecture the author discusses certain injuries and diseases of the neck and face, and urges the importance of the careful suturing and careful cleansing of facial wounds, the relief given to pain in the jaws, and that not very uncommon lock-jaw which arises from periosteal inflammation by deeply incising over the root of an offending tooth, the best time and the best means of evacuating glandular abscesses, the simplest treatment of burns and scalds in children, lupus, and epithelioma, and nævus, and for the latter he adheres to the old-fashioned, and we think unsatisfactory, method of vaccination, though in the deeper form of disease he uses the actual cautery. Hare-lip and cleft-palate are just referred to, and a useful caution is given to young surgeons not to mistake the cornua of the hyoid for the projections of the plate of false teeth which are supposed to have been swallowed. When removal of the tongue is justifiable and his adherence to the method of operation suggested by Mr. Whitehead complete the first lecture.

The second lecture is devoted to the bladder and genito-urinary organs. Here we find some interesting but not uncommon cases of over-distension, which are specially instructive to young practitioners, and he recommends the surgeon always to carry a portable form of catheter with him. Tapping the bladder above the pubes he advocates as neither difficult nor dangerous, and he uses a trochar, which makes a linear wound, the trochar, therefore, no longer bearing out its name.

A simple and practical truss for hernia in children he forms by adapting an ordinary skein of Berlin wool, which allows of frequent washing and changing, and he figures the rational treatment of umbilical hernia, which we should hardly have thought to be unknown, though certainly most text-books do not give it. The diagnosis of stone includes some remarks on the production of a metallic "click" on suddenly closing the end of a female, or straight catheter, and this has since been noticed by Dr. Freyer in his work on litholapaxy, but we think Mr. LUND'S explanation of it the most correct. Stricture of the urethra, its causes and treatment, forms naturally part of the substance of this lecture, and we find gradual dilatation preferred to any other kind of treatment. He mistrusts the results of internal urethrotomy, but does not refer to the combination of internal and external urethrotomy which Mr. Reginald Harrison has so strongly advocated.

In his third lecture, which treats mainly of diseases of the rectum, he urges the importance of a thorough examination in all cases, but we miss any reference to what we feel to be a very important means of examination in many cases, Manual exploration judiciously practised is, perhaps, the most valuable of all methods, and we cannot help regretting its omission from many modern standard works on diseases of these parts. It is attended with some difficulty and risk, but it will tell what no olivary bougie or any length of tube will discover. There is a suggestive remark that when the rectum is much dilated, some constriction may be suspected higher up; and another we notice that in suspected disease of the rectum, the appearance of the anus will often afford a clue to the character of the affection; if the anus is contracted and drawn up, the cause of the trouble is rather that of irritation as from fissure, etc.; if the anus is flat or bulging, there is relaxation of tissues and a tendency to prolapse. The author follows Mr. Whitehead in his views as to the cause and treatment of hæmorrhoids, and gives sound practical advice about the palliative as well as the remedial measures for their treatment. He details the operation which has been recently given fully by Mr. Whitehead himself in the pages of this JOURNAL (February 26th, page 449), and he has discarded other methods in favour of this.

The lectures are valuable as showing the opinions of an able practical surgeon on many ailments which come under the notice of practitioners, and they form a pleasant, readable book, which many will welcome from the pen of a teacher universally respected.

HEALTH AT SCHOOL CONSIDERED IN ITS MENTAL, MORAL, AND PHYSICAL ASPECTS. By CLEMENT DUKES, M.D.Lond. London: Cassell and Co., Limited.

THE publication of this volume is a proper sequel to the article on Health at School which the writer contributed to the *Book of Health*, and of which, indeed, it is an amplification. Dr. DUKES claims that medical thought should guide parents and schoolmasters in all questions relating to the management and education of children throughout their whole school career, and lays down the rules which should be observed in the construction and arrangement of the school-house, and in the use to which it is subsequently put. To medical men there is little in the book that can be regarded as open to criticism; the lessons taught by the author are simple and reasonable, and his views might well be accepted by parents as those which should guide them in the school requirements they have a proper right to insist upon in the interest of their children.

The author discusses his subject comprehensively, and shows that the conditions which are needed for the preservation of health are intimately related to the prevention of immorality, and he maintains this position whether discussing the method of construction of the school, the arrangement of the dormitory, the food and clothing, or the work and play of every boy, which should be arranged in accordance with medical rather than the clerical judgment that too often now alone exerts its influence.

An excellent chapter on "Illness" describes the details of the

arrangement of sanitoria and the regulations which should be made and enforced for the prevention of the introduction of infectious disease into schools. No material, however, is given upon which an estimate can be formed of the amount of isolation accommodation which is required. This is, indeed, much needed, and Dr. Dukes would add to the value of his work if, in a subsequent edition, he would give at length the results of his experience on this point.

A reasonable protest is made by the author against the unwise interference of parents with the management of their boys' school life. This can obviously be best considered by those to whom the life is most thoroughly known, but every opportunity should of course be given for parents, or, better still, their own medical adviser to communicate freely with the school medical officer. We believe this book will commend itself both to masters and parents, and that it will lead to the increased influence of medical thought in the education of the young.

NOTES ON BOOKS.

Carlsbad: Its Thermal Springs and Baths. By J. KRAUS, M.D. Third edition. 12mo.; pp. 138. (London: Trübner and Co. 1887.)—Dr. Kraus has, we think, succeeded in his object of giving a complete account within small compass of the Carlsbad mineral waters and baths. His remarks are founded on long experience in the employment of the waters, and are essentially practical. They supply much information of a useful kind, and of almost every description, for visitors, and also for medical men at a distance. Carlsbad waters and their salts are so well known that it is needless to mention in detail the diseases that are treated with them; but some of the chief affections for which patients are sent to Carlsbad may be considered to be chronic gastric catarrh, congestion of the liver, chole-lithiasis, gravel, and catarrhal affections of the kidneys and bladder, gout, and diabetes. The agent that operates successfully on them is a warm water containing carbonate of soda, sulphate of soda, and common salt. One might suppose that such a remedy used at home would be as effectual as when used at a spa; but such is not the case. Dr. Kraus's work is entirely practical. He does not indulge in much that is theoretical or novel. We shall, therefore, only allude to some of his observations made for the benefit of his patients. "Continuous and exciting conversation during the time of drinking is to be avoided"—a precept not very easily carried out, but which is facilitated by the pleasant outdoor life of Carlsbad, and the abundance of excellent open-air concerts. The alleged frequency of diabetes in the Semitic race is ascribed to their "constant activity and increased mental irritability." Of the disobedience of patients he says: "Is it not natural that now and then one of them should occasionally pay for it with his life? The sad thing is that in such cases it is not the disobedient patient that is blamed, but the Carlsbad water?" The pity reserved for the waters and denied to the patient is an amusing examplification of sympathetic enthusiasm, which has at least two aspects. Dr. Kraus further remarks: "The rigorous diet of old times would be unjustifiable now. We have a large and quite different class of guests to deal with, and I think I am not going too far when I maintain that constitutions have also become weaker and less capable of resistance, and for this reason need a more generous nourishment." In conclusion, while considering Dr. Kraus's a most useful book, we think that he had better have his English—creditable though it is to him—revised by a friendly hand. Such phrases as the following might be improved: "The preparation of the products of our mineral springs is reducible to his initiation"; "It was found impossible hitherto to find"; "causing in most cases not a disagreeable eructation." The circumflex over spâ is a novelty to us.

Ueber Wirkung therapeutischen Werth und Gebrauch des neuen Karlsbader Quellsaltzes. Von Dr. W. JAWORSKI. Folio, pp. 33. (Wien. 1886.)—This is an elaborate scientific inquiry into the action of the new pulverised Carlsbad spring salt, and of its relation to the Carlsbad water. Whether future experience will confirm the results of Dr. Jaworski remains to be seen, but meantime he deserves thanks for his laborious undertaking. We shall here merely note a few of the results he has obtained. He draws a strong distinction between the action of the remedies on the chemistry of the stomach and on that of the intestines. The new spring salt is very superior to the old Sprudel one, and contains a far greater range of the constituents of the parent water. The spring salt comes nearer to the constituents of the parent water than any artificial preparation. At the same time it is impossible to make any solution of the new salt in water, that is identical in composition with the parent water. While the quantity of the chloride of sodium is nearly the same in the water and in the solution of the salt, there is a deficiency of about one-third of carbonate of soda in the solution. The mother water operates more on the chemistry of the stomach; the new salt on the intestinal canal. The old Sprudel salt acts most on the latter, and is, in fact, chiefly a purgative. The natural water acts more rapidly than the warm solution of the salt on the chemical processes of the stomach. The exercise usually prescribed during the drinking of the water has no effect on the action either of the natural water or of the salt on the stomach, but it aids the action of the intestinal canal. These are only a few of the more practical conclusions at which he arrives.

Cardiac Affections of Rheumatic Origin treated at Aix les Bains. By LEON BLANC, M.D. 8vo, pp. 48. (London: J. and A. Churchill. 1887.)—If Dr. Blanc adds one more to the numerous *brochures* on Aix les Bains, he has at least a good excuse, as he brings forward a new point in the treatment of disease at that place. We all know that Aix waters are efficient remedies in gout and rheumatism: why should they not be used against the cardiac affections induced by them? Hitherto they have not been so employed, owing to the general dread that has very justly prevailed of using hot baths indiscreetly in disorders of the circulation. Dr. Blanc endeavours to show, and we think successfully, that Aix waters have been and may be employed with success in mischief produced by rheumatism, in pericarditis and endocarditis. In the great majority of such cases Dr. Blanc finds mitral regurgitation to be present. Cases of it undoubtedly improve under the use of the Aix waters, particularly in the form of douche. Dr. Blanc adduces many cases of this kind that have been treated by himself, and we observe that other modern writers on the Aix waters entertain similar sentiments. For the origin of the idea Dr. Blanc does not go further back than Dr. Vidal in his reports on Aix in 1867; but before that time the waters of Vichy, Plombières, and other warm sources had occasionally been used in that way; nay, even the cold sulphur waters of Enghien. Beneke, too, a long time ago wrote at length on the use of the warm salt waters of Nauheim in the treatment of such cases. Nevertheless Dr. Blanc's carefully-written *brochure* is worth study.

The Water-Supply of Ancient Roman Cities. By Professor W. H. CORFIELD.—This address, published by the Sanitary Institute (74A, Margaret Street), before whom it was delivered, deals especially with the old Roman water-supply of Lyons (Lugdinum). According to Mr. James Parker, the great authority on the subject, the water-supply of ancient Rome was equivalent to about 332 gallons per head per day, assuming the population of Rome to have been about a million. In London we get only 30 gallons a head daily, and in many other of our cities less. It was delivered in a stream 20 feet wide by 6 feet deep constantly pouring into the city at a fall six times as rapid as that of the River Thames. Lugdinum was difficult to supply; it was situated upon a hill and was of great size. The waterworks constructed there by the ancient Romans, and especially by the Emperor Claudius, are the most remarkable of the Roman waterworks extant. They have been carefully studied and are here described and figured by Dr. Corfield. The supply was brought from the hills of Mont d'Or and from the sources of the Grer, at a point over 50 miles from the city, crossing ten or twelve valleys, one being over 300 feet deep and about two-thirds of a mile in width. Recourse was evidently had to the system of inverted siphons, of which it had been alleged that the Romans were ignorant. Professor Corfield gives a very interesting study of the remains of these extensive aqueducts, and shows that the engineers of the Emperor Claudius were practically well acquainted with the principles of hydraulics. He comments on the labour and expense wisely incurred in obtaining drinking water from unimpeachable sources.

Brady and Martin's Illustrated Catalogue of Surgical Instruments, Medical Appliances, etc., with Notes on New Remedies. (Newcastle-on-Tyne.)—This work, the present edition of which is considerably enlarged, and has undergone careful revision, gives within the limits of its 240 pages, a very full and descriptive list of instruments in use in every department of medical and surgical practice, the value of which is much enhanced by the numerous excellent illustrations. In many instances not only is the instrument itself shown, but the mode of its application, and in all cases the price is stated. The alphabetical arrangement adopted, together with an exhaustive index, will facilitate reference to its columns—throat and mouth, ear and nose, tooth, uterine and midwifery, etc., instruments, being grouped