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THE CANADA LANCET,

A MONTHLY JOURNAL OF

MEDICAL AND SURGICAL SCIENCE.

VOL. XI. TORONTO, NOV. 1st, 1878. No. 3.

Original Communications.

HYSTERICAL RHYTHMICAL CHOREA.

BY C. W. GOVERNION, M.D., M.R.C.S. ENG., TORONTO.

(A paper read before the Toronto Medical Society).

In *Le Progres Medica* for February there appears a clinical lecture by Professor Charcot on a very interesting case of chorea, that he designates as Hysterical Rhythmical Chorea, or Chorea Major sive Germanorum, in distinction from the Chorea Minor of Sydenham. A translation of the case, I am informed, has appeared in the London *Lancet*, but as probably many of the members of the Society may have failed to notice it, and several of the features are of unusual occurrence and interest, I propose translating portions from the journal above mentioned. Before doing so, it may be right to remind you that the profession in the present day do not universally recognize the propriety of the division—chorea major, and minor—as only grades of the development of the same disease. Ziemssen, in an excellent article on the subject in his "Cyclopædia," says, "it is my conviction that the group of symptoms called chorea major is not a disease *sui generis*, but is only the product of genuine psychoses and cerebral maladies on the one hand, and of hysteria and wilful simulation on the other, such as so often and so abundantly flourish in hysterical ground at the period of puberty." That proteus hysteria, which is described under the name of chorea magna, contains in reality but one characteristic mark, and that is the associated spasmodic movements which are often performed with a certain fitness, but usually have an extravagant and violent character. But we have the same right to count all the associated spasms of hysterical patients as chorea major; the spasms of single extremities as well as those of the whole body, those of the muscles of respiration, as well

as those of the larynx. By the same right, also, all those striking forms of associated spasm which are observed in insanity, epilepsy, cases of cerebral tumor, etc., must be added to the species chorea major. Ziemssen further remarks, that he does not consider it as justifiable, to select a single group of symptoms from diseases of such varied character, solely on account of its striking nature, and instances cases from his own practice in support of his views. I find also a case reported in the *Medico-Chirurgical Review* for 1846, by an Italian physician, Dr. Dubini, where the same muscles are always the seat of the convulsive movements which are generally also limited to one side of the body, and that the right side; the convulsions becoming more incessant as the derangement advanced, invading sometimes the other half of the body. In the Asylum for the Insane at Hamilton, there is a patient transferred there from either Toronto or London, I do not know which, who for years from early morn to night, rotates the head and body backwards and forwards like a pendulum; which case probably might with as much propriety be viewed as the result of insanity controlling the will of the patient, as of the psychical disorder named chorea magna. On referring to Trousseau's clinical lectures, I find that he agrees with Professor Charcot in recognizing a distinction between the minor and major forms of chorea, the latter having little in common with St. Vitus' dance, and therefore is in his judgment correctly named hysterical chorea. I translate one out of many cases that he adduces in support of his view. In vol. 2, p. 262, I find the last of the cases cited in illustration of the difference that he conceives to exist between the prodroma of the dance of St. Guy and hysterical chorea. Cases showing that, however powerless may be the will to prevent the disorderly contraction of the muscles, it still retains over these muscles consentaneous action and compels their execution with a certain amount of regularity and harmony. If the patient advances, it may be, it is true, by jumps, but she follows without deviation the course she has laid out. If she wishes to carry her hand in this or that direction, although her arm may be agitated by convulsive movements, she arrives without trouble and speedily, at the end that she wishes to attain. If she seeks to lay hold of an object, she succeeds at the first effort, without failure. Once the object is seized she does

not drop it, and can carry it, or place it here or there as may suit her inclination. The following is the last illustrative case:—"I was called in consultation by my colleague and friend, Dr. Horteloup, to a young lady nineteen years of age, belonging to a family of distinction. This young person, who had received a superior education, entertained sentiments of high morality and enlightened religious belief without affectation or pretence, possessed, in a word, of a well balanced mind; and these intellectual and moral endowments were such that with her it was impossible to suspect any kind of trickery, or pretence, by the aid of which hysterical patients, one does not know why, appear to wish to impose upon those surrounding them and upon physicians themselves, when they can. This young lady had lost, eight or ten months before, her sister, to whom she was united by the most ardent ties of affection. Her grief was the more profound, that independent of the blow she herself experienced, she felt deeply her mother's bereavement. From that time she had been seized with grotesque convulsive movements of the head, and superior limbs; nevertheless, when she came to Paris to consult Dr. Horteloup who had previously attended her, her melancholy appeared a little less gloomy, her natural vivacity in a measure resumed its wont, and she allowed herself to be diverted willingly from her painful thoughts. I found her with all the appearance of good health; but her entire left side was agitated by violent choreic movements, to such an extent that there was reason to fear that she would injure herself by falling against the furniture or the walls of the room. If an attempt was made to arrest these movements, for instance by taking her hand, not only they were not arrested, but increased, and occasioned her a painful sensation, a state of general *malaise* of the most painful kind. There was however one method of calming as if by enchantment this muscular agitation, it was to lead the young lady to the piano; she could there remain one or two hours playing as correctly and as regularly as possible without losing the measure or missing a single note. Before us she executed with marvellous facility a most difficult piece, and this fact alone, without considering others, gave me sufficient proof that this form of chorea had nothing in common with the dance of St. Vitus." You will readily admit, gentlemen, that this view

of the profound thinker and most careful discriminator, Trousseau, is not lightly to be considered, but may we not fairly group among the factors in this case morbid thought, emotional exaltation, and excitement of ganglionic nerve centres? The question however arises, is Professor Ziemssen strictly correct in associating wilful simulation with hysteria? That it is a frequent concomitant there can be no doubt, but is there not a little doubt that frequently it is a functional disturbance of the nervous system attended with hallucinations in the sensory, and convulsions in the motor tract, quite independent of all simulation? That it is, as described by Professor Jolly of Heidelberg, a general neurosis of the brain and spinal cord, and with much probability of the peripheral and sympathetic nervous system, having among its most important primary factors hereditary liability, a certain psychical constitution with a tendency to powerful and changeful emotions, and little strength of will, and primary anæmia. Chief among the secondary causes, is faulty education. Hysterical mothers transmit not only the seeds of disease to their children, but also favor its development by education and their own example; the whole mode of feeling and thought transferring itself from continued intercourse. As in children, so also sometimes in nurses who have for a long time attended hysterical patients, this so-called imitative infection is operative; or in other patients, who have been nursed beside such; and above all, in people who have been the accidental witnesses of an hysterical attack. This sort of infection, however, is only operative in such individuals as are already predisposed to hysteria. The older pathologists trace a close relationship in chorea to rheumatism and endocarditis, and but a small minority to traces of lesion of nervous system. English pathologists attach less importance to rheumatism than to endocarditis, and its sequelæ, *i. e.*, vegetations principally in mitral valve, occasionally in aortic. Drs. Ogle and Pye Smith give a number of cases illustrating these lesions. Kirkes considers that endocarditis is the cause of the chorea through the inflammatory products of the valves, which become mixed with the blood and disturb the functions of the nervous centres. Broadbent considers from numerous autopsies, that the corpus striatum and thalamus opticus are the locations of choreic irritation, particularly capillary embolism of these portions of the brain. Tuck-

well reports the autopsy of a girl aged thirteen in whom chorea developed after rheumatic fever, at which was found softening of the right middle cerebral lobe and to a less extent of the left, without demonstrable embolism. On the auricular surface of the mitral valve there were numerous fine warty vegetations; in the kidneys three arterial twigs, plugged with emboli. Dr. Gray reports a case of acute chorea with embolic thrombosis of basilar artery, both vertebrals, and both middle cerebrals, with softening of anterior and middle cerebral lobes, and dorsal part of the cord. Dr. Fox, in a case of acute chorea, reports microscopic embolism of corpus striatum and small vegetations on mitral valve. Ziemssen also cites a number of German authorities in favor of the cerebral nature of chorea. Of especial significance are the frequency with which choreic symptoms are unilateral, sometimes in association with anæsthesia of the skin, and the transition from hemichorea to hemiplegia, and the converse process of the development of hemichorea from unilateral palsy, as related by Charcot, Foote, Weir Mitchell, Hughlings Jackson and others. In hysteria, on the contrary, changes in the central nervous system have failed to be discovered. The cases of M. Charcot, in which after long continued hysterical contractions, sclerosis of the lateral columns of the spinal cord was found, are viewed by Jolly as accidental complications, rather than as causative elements. One of the most interesting features in the case lectured on by M. Charcot in his clinic, portions of which lecture I now propose translating, was the circumstance of the immediate arrest of the rhythmical movements of the trunk and limbs by firm pressure over the right ovarian region. In obscure cases of this kind may we not look to local affections of nerves as causative influences? Lobstein thought he had ascertained the existence of inflammation of the great sympathetic, and to this source he refers many obscure diseases, such as violent hysterical affections; and Abercromby in his classical work on diseases of the brain, remarks, "We must forbear to speculate where we have not facts before us, but it appears extremely probable that there are diseases of internal nerves which may be the source of important morbid phenomena." I am fully aware, Mr. President, that it is a very difficult problem to distinguish between the phenomena of purely reflex action and those resulting from incipient structural lesion;

and it is only to careful clinical observation that we can look for a discovery of the original seat of the irritation. In Charcot's case the right ovary was evidently the source of the choreic movements, certainly at least, a subsidiary factor, and the progress towards recovery at the time of the delivery of the lecture, had been expedited by alternate inhalations of ether and nitrite of amyl. In *Le Lyon Médical* for November, 1870, there is to be found another interesting case of reflex spinal irritation. The patient had been long treated for severe paroxysmal cough without success, the paroxysms ceasing only on lying down. An examination revealed an inverted and enlarged uterus. This organ was replaced, and kept *in situ* by a pessary, when the cough ceased at once. On removal of the pessary the cough returned, and continued until the pessary was re-applied. When we remember the intimate connection between the ganglionic and cerebro-spinal system of nerves; the third encephalic, with the ophthalmic ganglion; the fifth, with the sphenopalatine and otic; and the sixth, as also the eighth and ninth on their exit from the cranium, with the superior cervical ganglion; the fifth, sixth and seventh cervical nerves and first dorsal, with the inferior cervical ganglion; the thoracic portion of the sympathetic forming the greater and lesser splanchnic, the semi-lunar ganglion forming plexuses with the abdominal viscera, and in the ganglion *impar*, resulting in pelvic plexuses, nervous centres, to, and from which, nerves proceed; that in nearly every part, two kinds of fibres exist, the gelatinous and the tubular, the tubular derived from the cerebro-spinal centre, the gelatinous from the ganglion, need we be surprised in the face of such inter-penetration, and intimate co-relation, at the influence of the will, and of the passions of the mind, on the various involuntary functions; or that in chorea, hysteria and diseases where disordered nervous actions occur, reflex irritation may be viewed as a frequent factor of the trouble. The mind concentrated upon organs suffering from certain feelings of tension, and uneasiness, caused possibly by some changes of circulation, the strange anomalous symptoms result; the exact *quo modo*, I apprehend, we are no more likely to determine than the way in which the nerves act on the capillaries of the cheek, in the paleness of fear, or the blush of shame. Dr. Marshall Hall, in his work on the pathology of the

nervous system, recommends that in all investigations we should divide the enquiries into the cerebral, the true spinal, and the ganglionic. Enquire—What is the influence of disease of one of these systems, or the other two respectively? In what order is that influence manifested? What are the effects of irritation, counter-irritation, of pressure and of counter pressure in diseases within the cranium or spinal canal? Why with similar symptoms have we dissimilar morbid appearances? Dr. Marshall Hall treats these various subjects with his usual ability and ingenuity, but I think in the minds of a generality of his readers the question, after a perusal of his arguments, will still return: given any set of symptoms, what is the lesion? Take for example of ambiguity of symptoms, spinal irritation. There is hardly a single disease in the whole category of ailments which may not be more or less accurately simulated by it, and yet in a large proportion of cases the patient makes no complaint of uneasiness in the region of the spine. Dr. McCall Anderson, of the University of Glasgow, in his lectures on clinical medicine, gives cases of simulated diseases of the heart, of the liver, of spasmodic stricture of the œsophagus, of hysteria, of synchronous choreic movements somewhat analogous to Professor Charcot's case, all of which were relieved by treatment for spinal irritation. This protean form of disease, although occasionally met with in men, is principally a disease of women—debilitated, nervous subjects. According to Brown, the immediate cause is spasm of one or other of the muscles arranged along the spine, altering the position of the vertebræ, or otherwise compressing the nerves as they issue from the spinal marrow. Teale on the other hand attributes it to congestion, which by continuance and repetition may so far impair the tone of the capillaries as to produce a state of actual inflammation; while Radcliffe seems of the opinion that the opposite condition, viz., capillary contraction and bloodlessness, is nearer the truth. To this confusion in etiology the line of the Poet Laureate may be applied:

“Not like in like, but like in difference.”

Notwithstanding the widely divergent opinions on the *quo modo*, the fact is well established that certain diseases, as hydrocephalus, epilepsy, hysteria and chorea, not only induce augmented excitability,

but manifest their effects precisely upon the organs which are physiologically under the influence and dominion of the excito-motory power. Dr Budd, in a paper on the pathology of the nervous system, remarks that in many cases of violent reflex, and even convulsive actions, there is no sense of fatigue and little emaciation of the muscles, as fatigue is a cerebral state, and cannot be expected to occur in cases in which the reflex actions are most observed; and emaciation is most obvious in spinal paralysis in which the reflexed arcs being interrupted, the reflex actions are also precluded from taking place. With a brief notice, Mr. President, of Dr. Althaus' views of chorea, as expressed in a recent work, I will no longer monopolize time, that should be equally divided with members of our Society purposing to read papers. Dr. Althaus believes that the embolic theory of chorea is as yet unproven, and that it utterly fails to explain those cases in which the symptoms of the disease supervene after fright or other mental emotions. He does not even consider the presence of a murmur as a positive indication of the existence of endocarditis, as it may be due either to anæmia or to irregular action of cardiac muscles. That it is sometimes owing to hyperæmia of the region of the middle cerebral and of the corpora striata. I think, gentlemen, from the opinions quoted from the writings of the most eminent writers on the pathology of the nervous system, you will arrive at the conclusion that these painful nervous affections are much more frequently the result of functional derangement of cerebro-spinal and ganglionic system of nerves, than from particular structural lesions of either. That in the psychological, motor and sensory varieties of hysteria, and in the most aggravated forms of chorea, the danger to life is almost *nil*, and that in those cases where post mortem examinations reveal structural changes, it may fairly be frequently viewed as an open question whether these structural changes were strictly causative, or merely coincident.

EXPULSION OF AN INTRA-UTERINE FIBROID TUMOR.

BY H. BREDIN, M.D., MILFORD, ONT.

Mrs. McK. aged 47; mother of nine children, the youngest of which is now 8 years old, first noticed derangement and irregularity of menstrua-

tion, in the Autumn of 1873. A sanguineous discharge made its appearance every two or three weeks for a time, and then continued to increase in frequency, until the Fall of 1874, when hemorrhage came on every few days, and in spite of the usual treatment with tonics, stimulants, and astringents, accompanied by elevation of the hips, &c., the patient rapidly became worse. Fearing the existence of some exciting cause of the hemorrhage, I thoroughly explored the vagina with a bladed speculum, but made no discovery whatever, except that the parts exposed to view were healthy, and that there was no dilatation of the os uteri. I then resorted to the use of ergot, giving 8 drops of the fluid extract every 4 hours, during that day and night, hoping that the hemorrhage might thereby be arrested. Disappointment meeting me at every turn, I asked for a consultation. Dr. Morden arrived early in the morning. After making a digital examination *per vaginam*, he requested me to do the same. I did so and found the os largely dilated and some body having the feel and consistency of a tumor presenting. After a few moments' consultation we decided that the case was one of intra uterine fibroid tumor. We at once proceeded to pass a ligature about the tumor, but our most persistent efforts failed on account of the rigidity of the os, the powerful contractions of the uterus when manipulating, and the shape and attachment of the tumor itself—the neck being very large and attached to the fundus. Dr. Morden prescribed *cannabis indica*, which arrested the flow and caused the tumor to recede slightly. Matters remained in about the same condition until March of the present year, when hemorrhage came on again in a more violent form than ever before—completely blanching the patient. The tumor increased in dimensions very rapidly until June 13th, when Dr. Evans of Kingston, Dr. Morden and myself, met in consultation and adopted a line of treatment, consisting of tonics, and the application to the protruding portion of the tumor of a tampon, saturated with a solution of perchloride of iron—the tampon being introduced through a glass speculum. Our object was to arrest hemorrhage and produce atrophy. This treatment was faithfully carried out until the 23rd, when the flowing returned to an alarming extent. On my arrival at the house of the patient, I immediately prepared a solution of the perchloride of iron, and by the use of a female

catheter succeeded in injecting a portion between the tumor and the walls of the uterus. This arrested the flow at once; I then returned to the tampon and pursued the line of treatment already described, until the 28th, when the patient and her family became completely discouraged and gave up all treatment. Apparently in despair she asked me why we could not give the medicine which we used at first, "or that which forced the tumor so;" I replied that I would give it provided she and the family would assume the responsibility. They at once consented and I put her upon 20 minim doses of the fluid extract of ergot every four hours.

July 1st. But slight pain yet; tumor coming down; lips of the os very rigid; vomiting every hour.

July 2nd. Not much pain till afternoon; vomiting continues. Steady bearing down; not satisfied with dose, asked for more medicine. Treatment to be continued.

July 3rd. Made infusion of pulv. ergotæ $\bar{\text{v}}\text{iii}$, hot water $\bar{\text{v}}\text{iv}$, and administered a tablespoonful every hour, gradually increasing it to two tablespoonfuls. I then made an examination of the tumor and discovered that it was becoming dark in appearance.

July 4th. Vomiting, pain and bearing down all day.

July 5th. Pain and bearing down continues, os becoming soft and dilating.

July 6th. Tumor becoming fetid at anterior surface.

July 7th. Symptoms of peritonitis all day. Gave one grain of pulv. opii every 4 hours, and applied hot fomentations to the abdomen. Removed a portion of the anterior surface of the tumor with the thumb and finger and broke down the attachment above the posterior lip. I then passed my hand to the body and fundus where I found it adherent to the extent of about 3 inches to the posterior wall, but was afraid to separate the adhesion.

July 8th. Having prepared a solution of perchloride of iron and some brandy and ammonia, I placed the patient upon the table and introduced my hand into the vagina, and passing it up to the attachment of the tumor, proceeded to break down the adhesion with the finger. Finding a firm ropy adhesion, I seized it with the thumb and finger in search of an artery. Finding none I

broke it off. Being satisfied that all was separated, with the aid of a pair of bullet forceps, I succeeded in grasping it and bringing it away. The tumor was about the size of a child's head at 8 months. I then injected the perchloride and put the patient in bed. Heavy chills with oppression about the heart followed; ordered bottles of hot water to the feet; hot fomentations to the bowels; and gave some brandy and ammonia internally. After reaction came on, I gave a teaspoonful of infusion of ergot and repeated it in half an hour; also ordered a weak solution of carbolic acid as an injection twice a day. At Dr. Morden's suggestion, I subsequently used permanganate of potash as an injection with the most beneficial effects. She is now taking citrate of iron and quinine, and is doing well.

The above case shows the beneficial effects of the combined local application of perchloride of iron, and the internal administration of ergot in the removal of fibroid growths.

The continued administration of the ergot not only reduced the size of the tumor to some extent, but also brought it within the reach of manual interference, and the woman delivered from her perilous situation. The patient is now well and strong, without any symptoms of the return of the disease.

TRANSLATIONS FROM FOREIGN JOURNALS.

(From *Le Progres Medical.*)

BY C. W. COVERNTON, M.D., M.R.C.S., ENG. TORONTO.

PRESENCE OF LYMPHATIC GANGLIONS BETWEEN THE BLADDER AND RECTUM—TUBERCULOUS ENGORGEMENT OF THESE GANGLIONS.

M. Lannelongue, presented (Surgical Society Sept. 17th), a pathological preparation from a young child who had succumbed under treatment for tuberculization of the urinary passages. At the commencement the child manifested only acute pain in urinating. The exploration of the bladder made on two occasions, evidenced satisfactorily that there was no question of calculus. By the rectal touch, there was only to be recognized at the level of the prostate, a soft and fluctuating tumor, which was nothing else than a tuberculous

abscess surrounding the neck of the bladder. The child died with all the accompaniments of a purulent cystitis, and a consecutive nephritis. At the autopsy, there was found in the prostatic region of the urethra, an anfractuose cavity covered with tuberculous products, and in size, capable of admitting a small nut. The kidneys had been equally infiltrated with caseous deposits. But the most interesting lesson consisted in the presence of seven cores, or nodes, having each the volume of a shrivelled pea, and situated in the connective tissue, which separates the rectum from the base of the bladder. One of these cores corresponded exactly with the embouchure—or mouth of the ureter. Histological examination proved that these cores were veritable lymphatic ganglions, become caseous. M. Lannelongue has made other researches on this point of anatomy, and in the case of another child who had no lesion of the urinary passages, he found also six ganglions, situated between the bladder and the rectum. M. Lannelongue, considered the presence of these ganglions could easily explain the formation of certain abscesses in the superior pelvi-rectal space. An excoriation of the mucous membrane of the bladder, or a lesion of the urinary passages, would provoke adenitis in these ganglions; this would terminate in suppuration, extending to the cellular tissue of the neighborhood. M. Duplay, confirmed the anatomical ideas that M. Lannelongue had expressed. In his dissections he had often met ganglions situated in front of the anterior face of the rectum. M. Lucus Championniere remarked that the new facts communicated by M. Lannelongue, resembled those that he had observed in the arrangement of the uterine lymphatics, and of the ganglions of the broad ligaments. These ganglions only become apparent to the anatomist when the lymphatic plexus of the uterine mucous membrane is diseased. It is in these cases that pathology comes in as an aid to the study of Anatomy. M. Després, has observed daily an abscess of the superior pelvi-rectal space, in the case of a robust patient. After attentive observation he remains persuaded that this abscess had for its cause adenitis. The patient presented as the first symptom, retention of urine. M. Després, rather ridiculed the doctrine of Dolbeau, who taught at the Faculty that nine times in ten, abscesses are consecutive on lymphaginitis.

HYGIENE DAS ESCOLAS.

By JOSEPH WOEKMAN, M. D., TORONTO.

Under the above heading, (hygiene of schools,) the "*Gazeta Medica da Bahia*," has presented a series of very valuable articles, the whole of which we might very profitably to our own educationists and their pupils, reproduce did the due apportionment of our space permit.

We must confine our present notice to a few extracts from the final article which we find in the July number of the *Gazeta*, in which the subject of *Myopia*, as a very prevalent ophthalmic affection in the schools of Europe and the United States, is well illustrated by statistics furnished by various eminent authorities.

No person who has resided in our City for any lengthened period, can have failed to note the unpleasant fact, that it is hardly possible to walk a hundred yards, along any of our principal thoroughfares, without meeting one or more young persons, mounting either spectacles, or some other form of eye-helpers; and any one who can look back 40 or 50 years, must be struck with the contrast in this relation, between the present time, and the era when common and superior schools were few and far between. We translate the following extracts from the Portuguese:—

"In Germany, Austria, Switzerland, the United States, France, and even Russia, ophthalmologists have taken under serious consideration the study of the causes which contribute to the production of myopia in schools. Hermann Cohn, is one of the investigators, who has most distinguished himself in this difficult and patience-demanding study. In 1866 he examined at Breslau 7,568 children in the various schools, and he found among them 683 *myopes*, or 9 per cent. Comparing the number of *myopes* of different classes, he found that the proportion augmented from the lower to the higher classes of the scholars. Thus, in the elementary schools of the city, the proportion of the former to the latter was as 2 to 8 and 9 per cent. In 1865 he extended his investigations to 10,000 children, and found in the elementary schools in the city, 6 per cent of *myopes* among the males; in the intermediate schools 9.9 per cent.; and in the gynasiums and superior schools, 23 per cent. Erismann in 1871, wrote the history of the development of myopia in St. Petersburg,

based on an examination of 4,358 students of both sexes. Among these there were, in the male sex 31.1 per cent of *myopes*, and in the female sex 27.5 per cent. The inferior class presented 13.6 per cent, and to this succeeded 7 classes, in which the number of *myopes* augmented in ascending progression, reaching in the highest class 42.8 per cent.

Von Reus, at Vienna, in 1872 and 1873, examined 818 students of diverse schools, and verified the fact that the number of *myopes* augmented from the inferior to the superior classes, from 28 to 48 per cent. Hugo V. Hoffman, proceeded in Vienna, in 1873, in the same investigations, and found in the elementary schools, in 568 children, 67 *myopes*, or 12 per cent; in the superior schools, in 403 children, 83 *myopes*, or 20 per cent; in the gymnasium, in 256, he found 97, or 37.9 per cent.

In Friedreich's gymnasium, at Breslau, Cohn also found a progressive augmentation, in the number of *myopes*, from the inferior to the superior classes, from 12 up to 65 per cent; and always, the higher the class, the higher was the grade of the myopia. Ott and Ritzmann, in 1874, examined 122 students of the gymnasiums of Schaffhausen, and found the following results:—*Myopia fertis* (to 1^o), 5 per cent in the inferior classes; 27.5 in the median, and 67.5 in the superior. *Myopia moderata*, (from 1^o to 2^o) 29.4 per cent in the inferior classes; 58.8 in the median; 11.8 in the superior. Maklakoff, in Russia, found 24.4 per cent of *myopes* in the inferior class of schools, and 43.5 in the superior. Schultz, in the gymnasium of Upsala, in 431 students found 36.1 per cent of *myopes*. The proportion in the inferior class was 14 per cent, and it ascended to 54 per cent in the superior; the grade of myopia was most strong in the superior classes. Kruger, in the gymnasium of Frankfort, found that the proportion of *myopes* rose from 4 in the inferior, to 64.5 in the superior class; and the grade of myopia also augmented from the first to the highest class.

In the United States, the investigations have given results no less conclusive. In Cincinnati, New York, and Brooklyn, the eyes of 1,440 pupils were examined by Drs. Williams, West, Cheatham, Matthewson and Prout. In Cincinnati, in the primary, intermediate, normal and superior schools, 630 were examined. In the primary, in 209, 10

per cent were *myopes*; in the intermediate, in 210 there were 14 per cent; and in the superior, the proportion was 16 per cent. In the New York College, 29 per cent in the inferior, and in the superior, 53 per cent were *myopes*."

The writer then proceeds to state that in South America, the number of short-sighted children is also great, and he points out some defective arrangements, as to the quality and quantity of light afforded to scholars, the unsuitable construction of desks, and seats, inadequate ventilation, &c., &c.

We were fully prepared to learn that impaired eyesight is a very common trouble in Germany, and other countries in which books continue to be printed in the old barbarous gothic type. No one who has ever striven to become acquainted with the German language, and has been obliged to read it by gas or candle light, will question the fact, that it is very severe on the eyes. Some years ago, we were well acquainted with a very amiable and studious Lutheran clergyman, whose eyesight utterly failed him prematurely. He admitted that he read much after night; but he was too ardent a lover of fatherland, to lay the blame to the real cause of his affliction. It is truly marvellous that a people so strongly characterised by good sense and superior culture, should stupidly persist in the retention of an antiquated and hideous alphabet, which almost practically shuts them out, or rather shuts them in, from easy literary intercourse with other civilized nations. Perhaps, by the time that nine-tenths of them become short-sighted, they will begin to gather common sense, and permit their children to learn to read at less cost than the early ruin of their eyes.

CASES IN HOSPITAL PRACTICE.

By THEOPHILUS MACK, M.D., ST. CATHARINES.

(Reported by F. S. Greenwood, M.D., House Surgeon.)

At a meeting of the "Medical Society for Mutual Improvement," St. Catharines, held at the rooms of the Society, on September 3rd, the following cases were submitted:

Dr. Mack reported an instance of death from

URÆMIA,

which appeared to him of extreme interest.

A lady was placed under his care with this history. Eight years previously when residing in Western Virginia, under severe mental affliction, she suffered from puerperal convulsions and miscarried at the end of eight months; after recovery she remained some time pallid and anasarctous with urine albuminous. After a years treatment she recovered perfectly, but with a floating kidney of the right side. She afterwards occasionally suffered from hæmaturia, malarial neuralgia and uterine congestion. She was 40; had not menstruated for two years. Her physician Dr. Mayer of Wilkesbarre, had treated her case throughout with remarkable skill and judgment. Her complexion was of a deep bronze hue, hearts action feeble; œdema of face, palpitation and dyspnoea; veins varicose in lower extremities, complains of debility; tissues evidently wasting; vision impaired; discolored patches of skin; white adnata; but little doubt could exist of the case being one of morbus Addisonii. The right kidney could be easily felt detached as a circumscribed mass in the abdomen; slight disturbance of intellect from cerebral hyperæmia. She states that while travelling in Palestine some years before, she fell from a camel's back, and believes that she was much injured thereby; has resided chiefly in malarial regions. A few days afterward, I was summoned in haste to find her in epileptic convulsions; the first seizure in a few hours was followed by another, and so on until coma, and death closed the condition of the sufferer. A post mortem examination was made at her former residence with the following results, which were communicated to me by Dr. Mayer.

"As time was rather pressing, I did not examine the brain, convinced as I was that the brain symptoms were merely secondary and the result of uræmic poisoning; nor did I open the thorax, as I had every reason to believe its contents to be organically normal. The liver was not enlarged, not organically changed, but simply engorged. The gall bladder and its ducts, normal; the spleen of even less than the usual size, and unaltered in texture. The stomach and intestines presented no unusual appearance, and the uterus and ovaries were small and not diseased. The same may be said of the bladder, the coats of which were not even thickened. The right kidney—the so-called floating one, was firmly fixed in its abn...

position by peritoneal bands, the ureters and the blood vessels enlarged, and its whole structure with that of its supra-renal capsule, so altered as not to be recognisable. The mass was $8\frac{1}{2}$ inches long by 5 broad, and about $3\frac{1}{2}$ thick, weighed 2 lbs. and 2 ozs. avoirdupois, and looked like a huge bunch of California grapes, being covered in every direction by reddish or purple cysts. These contained a dirty albuminous liquid; some of them weighed two ounces, some a few drachms. Upon section, a slight rim of true cortical substance was found around a portion of the pelvis, half an inch in width, and the remaining structure of the mass consisted of cysts, similar to those seen externally. The connective and fibrous tissues seemed to be destroyed, and it was almost impossible to distinguish between the kidney and the capsule. There was no carcinoma, and no caseous deposit to be detected in this mass.

The left kidney, disease of which had not been suspected, until of late, was *in situ*,—was 8 in. long by $4\frac{1}{2}$, weighed 2 lbs. avoirdupois, and presented externally, and upon section, *precisely* the appearance of the other. It was impossible, owing to the condition of the adjoining parts, to trace the sympathetic nervous condition of the region, as the pressure of these huge masses had obliterated all such, or at least destroyed the evidence of their condition.

There did not seem to be enough remaining kidney structure in both of these organs, to have secreted or even to have permitted the drainage of an ounce of fluid daily, and yet our patient, the last time I examined her urine, about two weeks before she came to you, was secreting about two pints daily of straw colored urine, sp. gr., 1022, without albumen, and apparently with sufficient urea and water."

PERIOSTITIS WITH OSTITIS—DEATH FROM SEPTICÆMIA.

George Stevenson, æt. 32, unmarried, native of Scotland, laborer, was admitted on May 3rd, 1876. He had always been a healthy man. In 1868 he contracted syphilis in Scotland. He states that the primary symptoms appeared 12 months after exposure, and that he immediately sought the medical aid of Dr. Campbell of Glasgow, who gave him iodide of potassium and mercury. Six months after, secondary symptoms appeared, which were

also treated by Dr. Campbell. He continued the above treatment whenever any syphilitic symptoms would appear.

On the 5th of February, 1874, he was kicked by a horse just above the right patella, outer side. The part swelled so much that he was obliged to undergo treatment in Staunton, Virginia. Liniments were applied which reduced the swelling but left the leg rather stiff; two months after it swelled again for which he received iodide of potassium and wine of colchicum. This relieved him for a short time, but the swelling returned again in a few weeks and has been troubling him since. He applied fly blisters of his own accord, one over the middle of the thigh and one over each condyle of the femur; these gave him some relief. Nov. 19th, 1875, he applied tincture of iodine about two inches above the internal condyle every other day; the skin became very tender, suppuration took place, and pus escaped. The leg, by this time, was so troublesome, he became unable to work, and entered a hospital in Philadelphia where he remained two months, the improvement being very slight. He then entered the Presbyterian Hospital, New York, remained there three weeks, and was removed to a hospital on Ward's Island where he was treated by the injection of dilute carbolic acid as a spray into the opening of the thigh, two inches above outer condyle. He remained there until April 24th, 1876, when he left for St. Catharines to obtain work on the new canal, but when he arrived here he was obliged to enter the hospital on account of his trouble increasing. The symptoms on admission were pain in the thigh and a discharge of pus from sinns in front and behind.

May 4th.—Dr. Mack made 2 incisions; one an inch long on the inner side of the thigh, and the other one and a half inches long on the outer side. Into these, probes were introduced for the purpose of detecting diseased bone.

May 5th.—Searched for diseased bone with a vertebrated probe, but did not detect any. Bowels being constipated, two compound rhubarb pills were ordered.

May 6th.—General health good; appetite voracious. Diseased bone was again sought for but could not be detected. Inflammation of the periostium was diagnosed, and iodide of potassium and hydrarg. perchloridi ordered.

May 7th.—Not feeling as well to-day as usual,

due to surgical fever having set in; the following was ordered:

R Quiniae Sulph ʒss.
Ac. Mur. Dil. q. s.
Tinct. Card. Co. ʒj.
Spts. Eth. Nit. ʒss.
Tinct. Camph. Co. ʒij.
Aque ad ʒijj—M.

Sig.—ʒss. ter in die.

Two compound cathartic pills were ordered, at night, and two in the morning. One small piece of bone came away to-day.

May 8th.—Much better to-day. did not sleep well last night.

May 9th.—Openings in the thigh nearly closed; slight discharge. Complains of pain in the chest, cough and expectoration of blood, which undoubtedly came from the posterior nares. Several small pieces of bone came away to-day. Turpentine fomentations were ordered to be applied to the chest; pulv. Doveri grs. x. at bed time.

May 10th.—Slept well last night; suffering from severe headache and slight fever; bowels constipated for which an enema of warm water was ordered; discharge from leg, slight.

May 11th.—Much better to-day; rested well last night; enema operated well.

May 12th.—Suffering only from headache to-day; was ordered quinine and Dovers powder, one every four hours.

May 13th.—Severe salivation supposed to be induced by pil. cath. co. of May 7th; patient very much reduced in strength; stimulants were ordered. Temperature 101° F.; pulse 98; respirations 24½; tongue whitish and dry; face livid; skin dry; diarrhoea, and delirium. A gargle of chlorate of potash was ordered, and the patient put upon iron, quinine and strychnia.

May 14th.—Is very much better; diarrhoea is slight; salivation abated; leg looking better.

May 15th.—Salivation ceased; fever has abated; suffers from slight headache to-day. Pulv. ipecac co-ordered to be continued, but to alternate with the administration of McMunn's elixir of opium.

May 16th.—Was very delirious yesterday afternoon; complains of pain in the left shoulder to-day, which is the result of falling out of bed. Appetite improving; bowels open.

May 17th.—Free discharge from sinuses; violently delirious last night, required the application

of the straight jacket. Sinuses ordered to be injected with warm water.

May 18th.—Slept well last night; strength is much reduced; quinine mixture discontinued, and quinine and Dovers powder substituted.

May 19th.—Temperature 103° F.; pulse 115; very low; was very delirious last night.

May 20th.—Patient is failing every day; delirium continues. Will take very little nourishment of any sort; bowels constipated; an enema of castor oil and turpentine was ordered to be administered at once; chloral and bromide of potassium were ordered every four hours.

May 21st.—Became conscious at 11 A.M. and said he was going to die; he expired at 11.20 A.M.

Sectio Cadaveris. This was performed by Drs. Copeland and Greenwood eight hours after death. Brain normal, pia mater congested; lungs healthy; extensive pleuritic adhesions were present on the right side. The cavities of the heart were filled with dark fluid blood; no clots present; vessels of heart very much distended; no organic disease of heart. Abdominal viscera healthy. A portion of the femur six inches long was removed and examined. The periosteum was very much injected, thickened and easily separated from the surface of the bone. The whole shaft of the femur was diseased, the part most affected being from a few inches above the condyles, upwards for about four inches, its largest circumference being six inches. It presents only one sinus which does not enter the medullary canal, (sinus is as large as a crow quill.) The compact portion of bone is very much thickened, and measures one inch from the external surface of the bone to the medullary cavity encroaching so much on the cavity, as nearly to obliterate it.

ELEPHANTIASIS GRÆCORUM.

History.—Thomas D. Scott, æt. 38; confectioner, born in Quebec; was admitted into the Hospital on the 22nd of March, 1876. Up to January 1876, he had always enjoyed good health, only previous diseases being remittent and intermittent fevers. He was a man of good habits, and had worked in many of the principal cities of Canada and the United States; the farthest south he had been was Memphis, where he stayed three months, during which time he worked at his trade. While there, when chopping kindling

wood the axe slipped and cut his leg, and being careless, and wearing damp stockings and poor shoes, inflammation set in. By careful treatment he finally got well, but whenever he had cold or damp feet it seemed to affect his leg, which would occasionally ulcerate. After several such attacks it again broke out in January 1876, becoming so severe as to prevent him working. He began then to treat it himself, using patent remedies; seeing no improvement he sought medical aid in the National Institute, Indianapolis; after remaining there three or four weeks without deriving any benefit, he returned home, and sought admission into the St. Catharines General and Marine Hospital.

SYMPTOMS ON ADMISSION—General health poor; left leg (upper 2/3) and foot very much enlarged, the latter was studded with small round tumors the size of a pea, of a livid or purple hue; the lower third of the leg was encircled by an extensive sore.

March 25th.—Oleum morrhuae was administered; and ʒi of the syrup of iodide of iron and quinine in a little water three times a day also the following:

R. Acid Boracic ʒj
Adepis ʒj.

Misce fiat Unguentum.

General health improved up to April 22nd, when slight constipation was complained of, which was relieved by ol. ricini ʒss.

April 23rd.—Having been disturbed in his evening rest for a few nights by noise in the ward, produced by an unmanageable patient, and being informed of his only hope of recovering, viz., amputation, he became very restless, and began to fail in health, but by removing him to a separate room where he might enjoy perfect silence and good rest at night, he rapidly improved. In the meantime 3 grains of quinine were ordered three times a day, also 4 to 6 ozs. of sherry wine daily.

April 27th.—Feeling very well, pulse normal, etc. To-day being the day appointed for the operation, it was accordingly performed at 12.30 P.M.; the limb was amputated at the junction of the lower with the middle third of the thigh. The operation was performed by Dr. Mack, assisted by Drs. Comfort, Goodman and Copeland. During the operation the atomizer was in action, emitting a vapor of carbolic acid, which diffused itself through the atmosphere of the room. After

applying the necessary *sutures* and adhesive plaster, the stump was dressed with dry lint; placed next to this was lint and cotton soaked in a hot saturated solution of boracic acid and dried, and this covered with Lister's antiseptic gauze, and the whole covered with oil silk and bandaged. After the operation he was very restless for some time. Two hours after the operation he went to sleep, and slept for half an hour, after which in order to gain more rest and keep the patient quiet, tincture of opium was administered, which made him very excitable.

April 28th.—Pulse, respirations and temperature normal.

April 29th.—Dressings were removed, after being on 48 hours; they emitted not the slightest odor, and the stump looked very well; the dressing was repeated as before; being so very restless it was found necessary to administer 20 grains of chloral hydrate, and if required 10 grains in 2 hours. Evening, pulse 80; respirations 26; temperature 98 F.

April 30th.—Morning, dressings repeated; stump not looking so favorable; pulse 78; respirations 26; temperature 100°. Evening, pulse 78; respirations 26; temperature 101°.

May 1st.—Patient feels very well; stump looking better; dressings repeated, but instead of using ordinary dry lint next the stump, boracic acid lint dried was used, and next to it was placed lint saturated with a cold solution of boracic acid, then oiled silk, and antiseptic gauze over all and bandaged. Morning, pulse 70; respirations 23 1/2; temperature 98 F. Evening, pulse 80; respirations 26 2/3; temperature 96° F.

May 2nd.—Slept well last night; appetite good; stump rather painful to-day; slight discharge. Repeated dressings same as yesterday. Morning, pulse 70; respirations 23 1/2; temperature 97 1/2 F. Evening, pulse 80; respirations 26 2/3; temperature 98 F. Slight constipation complained of for which two compound rhubarb pills were ordered to be administered.

May 3rd.—Did not rest well last night; feels better to-day; appetite good; pills operated nicely; stump not looking as well as usual; slight discharge of pus; dressings ordered to be repeated. Morning, pulse 78; respirations 26; temperature 99. Evening, pulse 75; respirations 25; temperature 98°.

May 4th.—Same as yesterday. Morning, pulse

92; respirations 30²/₃; temperature 100°. Evening, pulse 99; respirations 32; temperature 101.°

May 5th.—Stump looking better; repeated dressings; injected sinuses with carbolic lotion (1-40.) Ol. ricini was administered yesterday which operated.

May 6th.—On the evening of the fifth he became very restless; suddenly there was a change from restlessness to perfect stillness. The nurse becoming suspicious examined the stump and found it bleeding profusely. She tried to check the hæmorrhage and sent at once for Dr. Copeland but before he arrived the patient expired.

Secitio Cadaveris, 14 hours after death. The muscles of the thigh were undergoing "fatty degeneration." There was atheromatous degeneration of the arteries; the ligatures were found to be secure and as sound as they possibly could be; but the arteries were found to have ulcerated between the ligatures and Scarpa's triangle. Both profunda and femoral were found open. Viscera generally healthy; no other disease of the organs of circulation.

Selected Articles.

TWO NEW CHEMICAL PRODUCTS FROM A HYGIENIC POINT OF VIEW.

I have the honour to call the attention of the International Hygienic Congress to some new chemical preparations which will have, in all probability, a very considerable influence upon the amelioration of public health. Everyone is aware of the dangers inherent to the manufacture and to the use of colours having a basis of lead, that is, made with white lead. We all know that the health of the workmen is compromised to an enormous extent in this branch of chemical industry, and that the remedies adopted, such as the habitual use of dilute sulphuric acid for drinking, the frequent washing of the body, the use of gloves and "respirators," &c., are totally inadequate to arrest the evil. It would be easy—but it is useless here—to dilate upon this subject. For many years past, efforts have been made to discover some white substance which could effectually replace white lead in the painting of buildings, ships, wooden and metallic works of all kinds, &c., and I have myself devoted several months of hard work to this important subject, but with very little success. There has been found, it is true, in oxide of zinc, a white substance less poisonous than lead, and a substance that can very well be used for oil painting, but its production is very costly, and its

mechanical properties as an oil paint are not sufficiently prominent to enable it to cope advantageously with the commerce of white lead. It is very different, however, with an invention of Mr. Thomas Griffiths, of Liverpool, who has succeeded in obtaining a very interesting product, to which I desire to call the attention of the Congress in a few words. This new preparation, which is already manufactured on a tolerably large scale, has for its basis a sulphide of zinc, or any oxy-sulphide of that metal, the properties of which, as an oil paint, are most remarkable, as I have had several times the opportunity of testing. It is prepared by precipitating a salt of zinc, by means of a soluble sulphide, washing and drying the precipitate. This is next calcined at a red heat, with certain precautions, and as it leaves the furnace it falls, whilst quite hot, into cold water. There it is submitted to levigation, collected, and afterwards dried. The result is a white colour of great fineness, and of exquisite beauty. From a hygienic point of view, this new zinc white of Mr. Griffiths is infinitely superior to white lead, as it is, moreover, in a practical sense. It possesses no noxious quality, neither its manufacture nor its use affects the health of the workmen; the price at which it can be obtained is comparatively very moderate; its durability, in the most variable of climates, is, so to say, indefinite; and it is in no way affected by gaseous emanations of any kind, nor by damp. This is a product which deserves, most assuredly, the attention of all those who have at heart the health of the working classes. What is most remarkable is that the new white covers much better than white lead, while it is more resisting as regards the attacks of the weather; so that its use is not only without any kind of danger to the health, but it is more economical than the latter. The second preparation, of which I desire to say a few words here, is a new kind of paint called enamel paint, which is already largely used in England and in the English colonies. It is a product which, of late years has become a special branch of manufacture on the part of the Silicate Paint Company, of London, thus named because the oil paints manufactured by this Company have for their basis a very pure silica, obtained from a natural deposit discovered a few years ago in the west of England. This deposit which is very extensive, consists of hydrated silica, containing about 15 per cent. of water, and after being calcined it supplies a very white substance, containing about 99 per cent. of pure silica. The natural product, after levigation and calcination, thus yields a very white and very fine substance, which assimilates perfectly with other colours, and with oils, &c. By means of this perfectly inert and harmless substance, and certain resinous preparations, there have been produced enamel paints which are impermeable to water, and which are applied easily

by means of a brush like ordinary oil paints. These enamel paints dry very quickly on the various objects of wood, stone, or metal, to which they are applied, yielding a hard, smooth, brilliant and impervious surface, which resembles either, porcelain or marble, and is endowed with great cleanliness. As this application is quite insoluble in water, it can easily be washed, when desirable, with soap and water, and its durability is indefinite. For the walls of hospitals and barracks, for preventing the entrance of damp into apartments, and for a host of other hygienic purposes, as well as for purposes of decoration, and the preservation of metallic surfaces, &c., this ingenious enamel paint will certainly be found of very great value. I do not hesitate to take the risk of abusing the time at the disposal of the Congress in calling the attention to these new chemical products, for I am perfectly convinced that they must be ranked among the most ingenious and useful inventions that have been made in our day. —*Dr. Phipson, Herapath's Journal.*

MR. SPENCER WELLS ON OVARIOTOMY.

It is not an easy task to criticise such lectures as the six just delivered by Mr. Spencer Wells at the Royal College of Surgeons.

Mr. Wells begins by carefully defining his task. "All that I can do," he says, "is to bring before you, in the plainest manner, the results of twenty years' exceptionally large observation and practice . . . and . . . to tell what I have learned about the diagnosis and surgical treatment of abdominal tumors; how I have learned it; the lessons I have been taught by mistakes and failures; the satisfaction which has attended increasing success." These sentences accurately describe the scope of the lectures; beyond the programme thus sketched out they do not go.

The first lecture contains an account of the mode of examining patients with abdominal tumours, and recording their cases. This part is interesting, and fertile in useful hints; but we fancy that every surgeon of large experience soon falls into a method of note-taking suited to his own purpose, and is not likely to bind himself down to the system of anyone else, however eminent. Mr. Wells then runs over the different kinds of abdominal tumors which have been, and therefore may be, mistaken for ovarian growths, noting the chief diagnostic marks of each. The brevity doubtless imposed upon him by his limited time makes this section, also, suggestive rather than exhaustive. We find some remarks, not so clear as we could wish, upon the chemical and microscopical characters of the liquids drawn from ovarian cysts. "A chemical and microscopical examination of the fluid that is removed," says the lecturer,

"will settle any doubt as to whether it is free peritoneal or ovarian fluid, or fluid of some other cyst." Subsequently, however, he mentions observations which appear that to diagnostic rules based on this mode of investigation there are exceptions. We should have been glad of some more definite statement of the amount of weight to be attached to these facts. Do, or do not, the chemical and microscopical characters of the fluids in question with certainty reveal their origin? To this question we should like to have heard the answer of Mr. Wells.

In the third lecture, we enter upon the lecturer's own special province. He first describes tapping; its history, methods, and the limits of its utility. Here he expresses a decided opinion, and his dictum ought to be, and no doubt will be, recognised as an authoritative rule. "I think," he says, "I have seen quite enough now to warrant me to endeavour to impress upon surgeons that, if the cyst be a single cyst, before they do anything else, they should see what can be gained by one tapping." Then he comes to ovariectomy. The rules which he lays down as to the circumstances under which the operation should be performed are eminently judicious. So long as no great inconvenience is caused by the tumour, the surgeon should hold his hand; but he should not delay operation till the patient's health is so undermined as to compromise success. The mere size of the tumour, and the difficulties met with in the operation, do not so much affect the result as the patient's constitutional condition. The operation should not be associated with a sudden change, from activity and excitement to the monotony and restraint of the sick-room. Almost the only positive contra-indication to an operation is the fact that the patient has some other fatal disease. Even the probability that a tumour is cancerous does not absolutely forbid its removal.

As to the details of the operation, comment is not needed. Mr. Well's success is the proof of the correctness of his method. We may note, however, that as an anæsthetic he prefers the bichloride of methylene, which he thinks safer than chloroform. In the management of the pedicle his experience is greatly in favour of the clamp. The result to the patient is, he rightly says, the great thing to be considered, the thing with which nothing else can be compared in importance; and tried by this test, the clamp comes out best. The justification of the ligature is, that the use of the clamp is not practicable in every case. The cautery treatment, Mr. Wells has found troublesome and uncertain. The necessity for carefully counting forceps, sponges, etc., was impressed upon the listeners by anecdotes narrated at length in a dramatic form.

In the part of his lectures which deals with the treatment of the abdominal wound, Mr. Wells

refers to a few valuable experiments which he has made upon living animals. We must say we remark with much regret the apologetic tone in which he thinks it necessary to refer to them. He speaks of his having been accused of cruelty, and protests that the number of experiments he has made is but small. But we think that a man in his position should guide public opinion, and not bend to it. If he do allow himself to be influenced by the prejudices of others, it should be by the opinion of the educated public, the leaders of the scientific world, and not by the excited feelings of amiable, well-meaning, but misinformed persons. Those who, like Mr. Wells, are in the proud position of not only understanding what science is, and how scientific problems are to be worked out, but of possessing the confidence of the public, should use their opportunities to lead people to appreciate science, and should help them to discriminate between those whose knowledge and work make them worthy of being heard, and those obscure seekers after notoriety whose only hope of getting it, lies in appealing to the feelings of persons unaccustomed to think. Comparing this passage with one in the sixth lecture, in which Mr. Wells implies that his adoption of the antiseptic method was retarded by the want of some experiments on animals which he would have liked to have made, we think that if he apologises for anything, it should be for having so little availed himself of this means of interrogating nature.

A topic upon which the lecturer's remarks are very interesting, is that of the antiseptic system. Hearing and seeing the great results which had attended this method, Mr. Wells thought it his duty to try it; but accidental circumstances prevented his doing so at the time he had intended, and, going on in his old way, his results became even more brilliant than had attended the antiseptic system elsewhere, and were not subsequently outdone by the new system in Mr. Wells' own hands. This forms an instructive commentary upon the doctrine of *contagium vivum*, as expounded by Dr. Roberts at Manchester. To generate disease, there are not only needed morbid germs, but a soil in which those germs may live and propagate. Listerism (as it is called abroad) aims at, and succeeds in, destroying the germs. But if, by scrupulous cleanliness, these germs can be deprived of any soil in which they can thrive, Listerism is superfluous. This view is borne out, not only by Mr. Wells' experience, but by Mr. Callender's statistics of amputations. Those hospitals in which Listerism has worked the greatest change, have been those in which, prior to its introduction, the principles of surgical hygiene have been the least attended to. Safety from wound-poisoning lies in either plan, the greatest security being obviously in the combination of both. We should like to call attention, but have not space to

do more, to Mr. Wells' most judicious remarks upon the administration of stimulants after operation. We should also like much to have Mr. Wells' opinion of Battey's operation; for the sake of this, we could even have spared Lord Selborne's calculations, which we fancy we have heard before.

And with respect to uterine tumours, Mr. Wells omits to answer what seems to us the vital question with regard to them; what are the circumstances which render the abdominal removal of a uterine fibroid justifiable? There is one vast difference between these growths and ovarian cysts. Ovarian tumours tend to death; uterine tumours, as a rule, do not. Hence the rule of practice must greatly differ. We should like much to have heard what Mr. Wells thinks on this point.—*Med. Times and Gazette*, Aug 3, '78.

FALLOPIAN PREGNANCY.

NEW YORK ACADEMY OF MEDICINE.

Dr. Laurence Johnson reported (New York Academy of Medicine) a case of Fallopian pregnancy occurring in a woman at twenty-nine years, married, and the mother of two children, aged respectively four and a half, and two and a half years. She had always been healthy. Her last menstruation commenced on the 11th of February, 1878, and continued the usual length of time—three or four days. There was no evidence of pregnancy except the non-appearance of the menses on March 11th. On March 23rd, at about noon, she suddenly began to suffer from pain referable to the pelvic region, became faint, and was put to bed. Small quantities of brandy were given at intervals, and she partially regained her strength, but in the evening there was a return of the faintness. She vomited once or twice and had no evacuation from the bowels. The doctor saw her for the first time soon after the attack of fainting in the evening; found her very pale, with a feeble pulse, 140, but there was no discharge of blood from the vagina.

March 24th—Patient appeared somewhat brighter, pulse somewhat stronger, but rapid. Urination without pain; abdomen somewhat tympanitic; tenderness all around the uterus, but especially upon the right side. Pain was not a prominent symptom at any time during the entire history of the case, although at no time was she markedly under the influence of narcotics.

March 25th—Patient sank rapidly, and was thought to be dying. She rallied, however, so that on March 26th she was comparatively bright. On the night of the 26th she sank and died, *four days* from her first attack of faintness.

Autopsy twenty-four hours after death.—Pelvic cavity filled with blood. Ruptured cyst in the

right Fallopian tube, close to the uterus, and probably not larger than a hickory nut. Right ovary contained a recent corpus luteum. Uterine decidua very apparent. Little or no evidence of peritonitis.

Dr. Johnson raised the following important question: *Would not an operation, with the view of securing blood vessels, have been feasible and justifiable immediately after the occurrence of the first hemorrhage on the 23rd of March.*

METHOD OF TREATMENT SUGGESTED BY DR. EMMET.

Dr. T. Addis Emmet, in the light of a case reported by Dr. McBurney, and which was seen in consultation by Dr. Thomas and himself, believed it to be a feasible operation, as soon as the Fallopian pregnancy was recognized, to first dilate the uterus, then dilate the tube, and in that manner remove the fœtus. Dilatation of the uterus took place when only a moderate quantity of fluid was enclosed in its cavity, and at the same time the fluid backed into the Fallopian tubes. He therefore was perfectly satisfied that, with proper instruments, the uterus could be safely dilated, and also the Fallopian tube, and as the cyst was usually near the body of the uterus, its contents could readily escape into the cavity of the uterus when such dilatation was effected. Dr. Emmet then exhibited an India-rubber cot, such as he had been in the habit of using during the last ten years, for the purpose of dilating the uterus. The dilator was manufactured by Shepard & Dudley, and consisted of an India-rubber cot containing a tube into which a sound could be introduced, so that it could be carried to the fundus of the uterus; an additional fixture permitted the attachment of a Davidson's syringe, by means of which the cot could be distended to any degree required. When the uterus had been dilated, a curved sound could be used, and the cot introduced into the Fallopian tube, and dilatation produced as in the former instance.

FEASIBILITY OF A SURGICAL OPERATION.

Dr. Emmet was of opinion that as soon as rupture of the cyst occurred, it was a proper operation to immediately open the abdomen and secure the bleeding vessels; for, in comparison with such operations as ovariectomy, opening the abdomen for that purpose was a simple affair.

Dr. Post referred to a case reported to the International Medical Congress by Dr. —, of Georgia, in which laparotomy was performed for that purpose, and with good results.

Dr. Sell approved of the operation.—*Medical Record.*

OVARIOTOMY SUPERSIDED.—A proposal has been brought before the Paris Academy of Sciences by

M. Tripier to establish a fistula between the cavity of an ovarian sac and the exterior. He has tried it in one case with success. The interior of the sac can in this way be washed out or treated with iodine injections or cauterised. He has used injections of iodised water daily. The galvano-caustic is used to establish the fistula. This operation is less formidable than ovariectomy, and can be easily carried out, but, of course, is not devoid of danger, but it may be applicable in cases where gastrotomy is refused or inapplicable. With regard to injections, they should not be too strong. We may point out that death from poisoning by iodine has been recorded where the drug was injected. This operation may be compared with electrolysis for ovarian dropsy.—*The Doctor.*

DR. McLEOD ON SAYRE'S METHOD OF TREATING SPINAL DISEASES.

Dr. G. H. B. Macleod gave, on a patient at present under treatment for Pott's disease of the spine, a demonstration of Sayre's method of treating this affection. He said one great advantage the system had over the former treatment was, that the patient was allowed to go about, and into the open air. As they were aware there were two kinds of deformities of the spine; Pott's disease (antero-posterior curvature), which was a true disease, in which the bodies became disintegrated; and lateral curvature, not a true disease, as it involved no pathological change, arising from abnormal contraction of the muscles. Pott's disease is mostly seen in young persons, and more frequently in boys and girls, and, as Sayre has pointed out, it is frequently traumatic in its origin. The ordinary idea that Pott's disease is strumous, and due to scrofula, is not borne out by evidence, though it might be true to this extent, that a scrofulous child is more readily affected than another. The early symptoms are a little difficult to recognise. If the lesion be in the cervical region, there is often a feeling of constriction of the neck, dysphagia, and a loud hacking cough. When these symptoms are present, without any indications of chest mischief, the spine should be examined. If in the dorsal region, there are dyspeptic symptoms, with a kind of inspiration, which Sayre described as *grunting*. Pains in and around the chest, and general lassitude, are often present. If lower down, the symptoms are often referred to the bladder. There are wandering pains of the abdomen, thighs, &c. To examine the child, they should take him on their knees, face downwards, the thighs of the surgeon being parted, so as to make extension upon the child's spine. They would see by the behaviour of the child, if Pott's disease were present. By gradually making extension, they would often evoke from the patient a

smile of satisfaction from the relief experienced. This would at once vanish, and a cry of pain be elicited if extension were withdrawn, and the vertebrae crowded on one another. Then again the mode of walking, of stooping, &c., were characteristic. If jumping down from a chair, the child would light on his toes or the fore part of the foot—never his heels. He had a habit of keeping his hands resting on his thighs. When stooping he did not bend his back at all, but by a series of shifts and expedients managed to reach the object he wanted to lift. The pain arising from the affection was often mistaken for growing pains. The principle of Sayre's treatment was by some hard supporting agent to throw the pressure upon the bones not diseased.

Dr. Macleod then demonstrated the treatment on a patient. Dr. Macleod added that he had tried other substances besides plaster of Paris, such as paraffin glue, starch. Glue did pretty well, but was not equal to plaster; while paraffin did not do well, and was dirty to handle. He also pointed out that instead of Sayre's suspension apparatus, it was easy to improvise with a room door an arrangement that would serve the purpose. As regarded abscesses, which sometimes occurred in Pott's disease, Sayre, who did not believe in anti-septic surgery, opened them freely, and cleansed out the abscess with Peruvian balsam (an anti-septic). Dr. Macleod then demonstrated minutely the further treatment for abscesses. He also showed by means of a model that, as proved by Sayre, in what was usually called lateral curvature, there was a rotation of the bodies of the vertebrae upon themselves. On this account he (Sayre) had substituted the term "Rotary Lateral" for lateral, as being descriptive of the exact state of matters. In regard to this kind of curvature, all the ordinary kinds of apparatus went on a wrong principle, and did harm. The object was to get back muscular tone, and this was done by exercising the muscles which had lost their energy. Mere lateral pressure would do no good at all. The spine must be straightened by self-suspension several times daily, for months at a time. The hand on the concave side should be held uppermost. After a considerable experience of these cases of curvature, he had no hesitation in saying that Sayre's treatment of them was very far in advance of any former methods of treatment which he had tried.—*Glasgow Med. Journal*.

TUBERCULAR ULCER OF THE TONGUE.

M. Nedopil, in the *Archiv. für Klinische Chirurgie*, remarks that the diagnosis of secondary tubercular ulcer of the tongue is generally not difficult in the presence of other indications of tuber-

culosis. On the other hand, primary tubercular ulcer can often be scarcely distinguished from cancer unless a microscopic examination be made; while the failure of anti-syphilitic treatment, distinguishes it from syphilitic ulcer, which often has a similar appearance. The tubercular ulcer of the tongue runs a course resembling that of cancer. A small hard nodule on the edge or upper surface of the tongue, which is often overlooked, at last falls off, and leaves a dirty ulcer, with an indurated base which generally spreads more slowly than a cancerous ulcer. A cure can be produced only by early extirpation, which, perhaps, may arrest the development of general tuberculosis. The author has observed four cases in Bilroth's clinic; two of the individuals were thirty-two years of age, the others sixty-eight and seventy. In three cases the ulcer was extirpated, and healing took place in a few days. In the excised pieces the tissue around the ulcer was studded with miliary tubercles, mostly toward the free surface. The morbid process appears to commence with a general transformation of the muscular tissue into a homogenous slightly granular deposit containing proliferating muscle-nuclei. Later, the primary deposits become confluent, and giant cells are formed from the obstructed portions of the blood-vessels; in some of these Nedopil found cavities filled with brown pigment. The growth of the tubercle appears to take place partly through proliferation of nuclei (without cell formation) in the interior, partly through metamorphosis of the neighbouring tissue.—*The Doctor*.

BONE FORMATION AFTER RESECTION OF THE LOWER JAW.

The following is by B. VON LANGEBECK, in the transactions of the "German Society of Surgery," Sixth Congress:—

GENTLEMEN: I am permitted to make this brief communication through the (as I may well say) exceedingly great attention which Prof. J. R. Wood, of New York, has shown, in sending this preparation here from New York by his assistant, Dr. Wiggin, in order to allow it to be demonstrated. Dr. Wiggin must return again to-morrow to New York, and, although our allotted time is very brief, nevertheless I have deemed it necessary to present this demonstration, because otherwise our distinguished American colleague would have sent us this really grand work in vain.

Prof. Wood, Surgeon to Bellevue Hospital, in New York, had the kindness to send me the photograph of this skull last fall—a skull of which the entire under jaw had been extirpated on account of phosphorus-necrosis, and of which the whole lower jaw has, in the course of a brief time, formed itself anew; and when, in my surgical

lecture, I had showed and explained this photograph, *I did not believe that a corresponding preparation really existed anywhere*, before he had the courtesy to send us this skull with the newly-formed lower jaw. I will briefly present the history of the operation, which is described in a short article by Dr. Wood in the "New York Journal of Medicine" for May, 1856, as the "Removal of the entire Lower Jaw, for Necrosis caused by Phosphoric Acid Gas."

A girl—Cornelia S.—sixteen years of age, formerly always healthy, had worked in match-factories for two years and a half, one of which was very badly ventilated. She was occupied eight hours daily in picking matches, but enjoyed the best health until May, 1855. At that time there took place, along with toothache, a swelling of the lower jaw, with suppuration. The patient, however, continued her work up to December, 1855.

Upon her reception into Bellevue Hospital, total necrosis of the right, and partial of the left, lower jaw existed, with profuse suppuration. The pus poured for the greater part into the cavity of the mouth, and outward through a fistula opening in the lower border of the mandibula. Notwithstanding this, her general health had remained good, and her appetite good, only chewing very much impeded.

On the 19th of January, 1856, Dr. Wood, made a resection of a part of the right lower half of the jaw, with most careful saving of the periosteum, and with preservation of the chin-portion of the lower jaw. Healing resulted without interruption, but it soon became evident that the entire remaining under jaw was diseased also, and this had likewise to be removed on the 16th of February, 28 days after the first operation. Excepting the retraction of the tongue ensuing upon the removal of the jaw, and the choking symptoms induced thereby, the good effect of the operation and the healing of the wound remained uninterrupted, and in March, 1856, the patient was able to be discharged, recovered.

The reformation of the bone was *complete*, and the function of the new lower jaw left nothing further to be desired. In the photograph taken at this time, you observe the admirable contour of the lower jaw, of which the chin-portion only recedes slightly. Some years later, Cornelia S. died of abscess of the brain, and so Dr. Wood acquired the possession of this skull, which stands before you, and upon which you observe the entire lower jaw, with extremely complete form, only a very little smaller than the original must have been.

Formerly, cases of phosphorus-necrosis came into the clinic here not infrequently, and scarcely a term passed in which some jaw-resections were not performed. Thanks to the better ventilation in factories since 1864, scarcely any cases have come under observation, and it appears that phosphorus necrosis will, at no very distant time, be eliminated.

I have performed subperiosteal resection of the entire lower jaw six times—four times in consequence of phosphorus-necrosis, and twice in consequence of acute osteo-periostitis. In all these cases reformation of new bone was observed, and, indeed, as in the case operated upon by Dr. Wood, with most complete restoration of the function.

When one extirpates the entire lower jaw from under the periosteum at one sitting, the chin must invariably recede. The room for the formation of the new lower jaw is restricted by muscles, namely, by the genio-glossi; the contour of the new lower jaw develops imperfectly, and the chin-portion of it retreats more or less perceptibly. In order to obviate this evil, I have, like Dr. Wood, made the operation at *two different times*, and at first cut out from the periosteum the smaller portion of the mandibula—which was, however, most diseased—leaving the chin and larger portion alone, and then, after four or six weeks, resected the remainder. But even then, as this photograph and the description given by Dr. Wood indicate, the lower jaw is always smaller, and the normal prominence of the chin is lacking.

The evil is almost completely avoided, if as Billroth has recommended, one leave behind in position osteophytes from the necrosed bone, in immediate contact with the periosteum. This photograph shows you such a case. I cut out first the smaller part of the necrosed jaw-bone, and, after new bone could be distinctly felt—six weeks later—I cut out the greater part, with the chin-portion. The resected jaw here shows you that osteophytes were left almost completely around. The photograph, which is taken half in profile (August Matthe's), shows you that the contour of the lower jaw is very complete, and that the chin stands out in the normal manner.

The skull sent to us by Dr. Wood settles at once the question of the durability of the newly-formed bone. It has, indeed, been repeatedly maintained, that the newly-formed bone, after subperiosteal resection, cannot be of a durable kind, but that it subsequently must be reabsorbed. At all events, this may happen, and I have myself seen it in the case of a woman suffering from phosphorus-necrosis of the lower jaw, much reduced by long suppuration, whose lower jaw, newly formed after resection, was, after a twelvemonth, almost entirely reabsorbed. Such an absorption of bone is, however, a rare occurrence in my observation, and I can testify to the unchanged persistence after years of the new bone-formation, after subperiosteal extirpation, as well in the lower jaw as in long bones (tibia, radius, os metacarpi pollicis).

Dr. Wood's patient died some years after the operation, and yet you see the new lower jaw preserved in all parts, although a trifle smaller than was the original jaw.—*N. Y. Med. Record.*

THE METRIC SYSTEM* IN A NUT-SHELL.

BY EDWARD WIGGLESWORTH, M.D.

Surgeon-General Woodworth, of the U. S. Marine Hospital Service, May 3 issued a circular, with the approval of Secretary Sherman, requiring medical officers of the Marine Hospital Service to make use hereafter for all official, medical, and pharmaceutical purposes, of the Metric System of Weights and Measures, which has already, under the act of July 18, 1866, been adopted by this service for the purveying of medical supplies.

The metric system is already *legalized* in both America and England. The only question now is, which of the two, the most progressive or the most conservative nation on earth, shall be the first to definitely and finally adopt it as an *exclusive* system? [N.B.—England was 400 years behind the continent in adopting our present arithmetic.] Russia has already taken the preliminary steps towards its final adoption. The rest of the civilized world long since made the system obligatory, in whole or in part, except that, in Sweden alone, its obligatory use is to date from a period in the future, 1889.

Now, what is this metric system? Metric is from the Greek word "metron," a measure, spelled with Epsilon, e short, and therefore pronounced, mè-tric.

The meter [measure] is practically, a fixed quantity, namely, the ten millionth part of the earth's quadrant from the Equator to the North Pole. With the meter everything can be *measured*, for it is itself the unit of a length; a cube, the edge of which is tenth of a meter, is the unit of capacity [Liter], and the weight of a cube of rain water, at its extreme contraction, the edge of which cube is a hundredth of a Meter, is the unit of weight [Gram].

It is the gram alone which concerns physicians for, in the metric system, *everything is best prescribed and dispensed by weight alone*; numbers upon a prescription paper being regarded by the pharmacist as representing Grams, Liters, or Meters. These are; Deci for tenth, Centi for hundredth, Milli for thousandth; Dekka for ten, Hekto for hundred, Kilo for thousand. Having these few words, the terms of Troy, Avordupois, and Apothecaries' weight, and of liquid measure, may be regulated to the limbo of pounds sterling, shillings, four-pence-ha'pennies, and farthings. As we say dime, cent, milli, so we say decigram, centigram, milligram. These prefixes are Latin, and *diminish* the value. Dekka, hekto and kilo are Greek, and *increase* the value. The mnemonic is

*"Universality, Uniformity, Precision, Significance, Brevity and completeness. A system of weights and measures born of philosophy rather than of chance."—Charles Sumner.

G I L D, *i.e.*, Greek Increases, Latin Decreases, Dekka occurs in the English word decade, hekto in hecatomb; kilo in chiliad.

"Being accustomed to the words mill, cent, and dime, we shall find the words 'milligram' quite as simple and easy to pronounce as our words 'pennyweight-troy,' 'hundred weight-avoirdupois,' 'scruple-apothecaries,' etc., notwithstanding the assertion to the contrary of those who grieve to give up the 'short and sharp Anglo-Saxon words used in our present familiar old tables of weights and measures.'"

Practically, moreover, for physicians, the whole system is reduced to grams and centigrams, just as in money to dollars and cents. On the right side of the prescription paper draw a perpendicular line from top to bottom. This decimal *line* takes

OLD STYLE.	METRIC.
	Gram.
m i or gr. i . . . equals	06
f ʒi " ʒi	4
f ʒi " ʒi	32

the place of all the decimal *points*, and obviates the possibility of mistakes. This is the way dollars and cents are separated on business papers. Additional security is gained by writing the decimal fraction [centigrams] of half size and raised above the line [of grams], since it represents a numerator of which the denominator 100 is given. To make assurance doubly sure, "Grams" may be written between the integer-column of figures, and if wished, the word "decimals" over the decimal column.

Now, what is a Gram? or rather, the values, metrically expressed, of our present awkward weights?

	Prussian.	Practical.	Precise.
Grain I =	0.06	0.06	0.065
ʒ I =	1.25	1.25	1.29
ʒ I =	2.75	4.0	3.89
ʒ I =	30.0	32.0	31.1

The "practical" table alone concerns us. The "Prussian" [by order of the Prussian Ministry, Aug. 29, 1867] is given merely to show that our table is even nearer the actual truth than one which has been proved by actual experience to answer every purpose. The values of the grain and scruple are a little too small. As they are used for powerful drugs this is an error in the right direction. The values of the drachm and ounce are a trifle too large, but the proportions and therefore the ratio of drug to vehicle are preserved.

A prescription written metrically is always proportionate, and whether the pharmacist uses pennyweights, pounds, or tons; gills, pecks, or chaldrons; pints, gallons, or hogsheads, the ratios are preserved, and a teaspoon dose contains the same amount of medicine.

As regards administration, a teaspoon represents five grams, a tablespoon twenty grams; for a teaspoon holds one and one-third fluid drachms, a tablespoon a trifle more than four times as much.

In the Metric System *everything is weighed*, thus obviating the difficulties of evaporation, refraction and adhesion, and obtaining more conveniently, more exact results. In our old "systemless system" some fluids were measured. How shall we obtain with weights, the desired bulks of fluids with varying weights? Must we learn the specific gravities of all fluids?

Not at all!

1. Fixed oils, honey, liquid acids and chloroform, must at present be prescribed in our old weights, not measures, according to the pharmacopœia. Here change old weights to metric ones.

2. Not enough chloroform or ether is included in any one prescription to admit of harm arising from the amount contained in a single dose, even were their weights regarded as the same with that of water. Moreover, it is not difficult to remember that ether weighs seven-tenths as much as water, chloroform twice as much as ether.

3. There remain infusions and tinctures, glycerine and syrups. These four are used in bulk as doses, or as solvents or vehicles. The former two may be regarded as identical in weight with water; the latter two as one-third heavier, and when prescribing these we need merely write, by weight, for four-thirds as much as we should write for were we prescribing water, and we obtain an equal bulk. The teaspoon or tablespoon dose will then contain the desired amount of the drugs employed.

Or, simplest of all, we can make any mixture up to any desired bulk by merely directing the druggist to use enough of the vehicle to bring the whole mixture up to the requisite weight for that bulk.

The Metric Bureau, 32 Hawley Street, Boston, will furnish metric prescription-blanks to order, to druggists or physicians at four-fifths printer's rates, or any blank can be made sufficiently metric by a perpendicular line at the right, headed *grams*.

ALCOHOL AS FOOD.

Having read with interest the correspondence upon the above subject, I beg to quote a case that has lately occurred in my practice, which, in my opinion, proves that alcohol is a food. On March 1st, 1878, I was called to see a gentleman, a distinguished officer, who had seen much active service, and found him in a very weak and low state. I was assured by his friends that the only food he had taken for nearly a year, had been one egg *per diem*, beaten up with sherry. I was sent for in consequence of his refusal to take the egg any longer, or any food, with the exception of alcohol. I persuaded him to take milk, which he did, but

only half a pint a day, for three weeks; after which time until the day of his death, in June, he took nothing but alcohol in various forms. He was nursed throughout by a skilled nurse, in whom I have every confidence, Dr. PHIBBS. — *British Medical Journal*.

TREATMENT OF ENLARGED PROSTATE.—It has been found desirable in the Dispensary practice to adopt a method of treatment for enlarged prostate, obviating the use of any instrument, as the patients are usually unable to buy one. A certain amount of relief is obtained by the fluid extract of buchu or of triticum repens, when the secretion is turbid or acid, but their efficacy is, of course, slight when unaccompanied by the introduction of the soft catheter. It was my good fortune to try the effect of the fluid-extract of ergot in large doses for those cases, and was tempted to do so by the success I obtained from it in treating a case of simple incontinence without enlarged prostate. The treatment proved successful, and is now a standard one with us in the surgical department. The following case will illustrate the way in which it acted:

W. M., aged twenty, laborer, came to the Dispensary, May, 10th, 1876. He stated that for some 10 or 11 years he suffered from dribbling of urine. On May 3rd his troubles were much aggravated, and he came for relief. A catheter was introduced, relieving his bladder. The patient was then at once put upon the fluid extract of ergot in teaspoonful doses, to be taken three times a day. Previously he had passed water with extreme pain and difficulty seven or eight times a day, and from four to five times a night. He experienced great relief from the ergot.

May 23rd. — He reported that his water was now passed only five times a day, and twice at night. The water is clear, and there is little pain in passing it. In cases where the patients can buy the soft, elastic catheter (Nelaton's), it is recommended, with directions to use it twice or three times daily. This treatment may be combined with the use of ergot; but ergot alone has been found of great advantage, the patients returning at regular intervals to have their medicines renewed.—*Dr. Satterthwaite, N. Y. Med. Journal*.

THE HOT MUSTARD-BATH IN PNEUMONIA IN CHILDREN.—Dr. Leonard Weber, of New York, gives his experience in the use of this remedy, in the *American Journal of Obstetrics*, April, 1878. He has used the mustard bath only in the severe cases of pneumonia of children. For years the treatment followed by him was that of the late Professor Traube, namely, the use of infusion of digitalis and nitrate of soda, whenever the pulse

and temperature of the patient were high, and there was an indication that something must be done to bring them down. This treatment proved satisfactory for a long time, but he finally failed to have his former success; and in the asthenic cases admitted to St. Francis's Hospital, New York, more than fifty per cent. died in spite of all treatment; and twelve per cent. of the sthenic form died, under the use of digitalis and an evening dose of Dover's powders. He further says:—"The great value of the hot mustard-bath as a means of saving the life of a pneumonic patient, after other remedies had failed, I learned in 1869. About a year before that, I attended J. A., ten months old, a previously healthy and robust child, afflicted with extensive pneumonia, after having been sick for a week with bronchitis. On the third day after I had seen and treated her in the usual manner, she became rapidly cyanosed and died. In November, 1869, another female child of about the same age and similarly good constitution, in the same family became affected in the same way, and when I saw it I recognized pneumonic infiltration of both upper lobes. In spite of emetics, digitalis, mustard plasters and poultices over the chest, she became cyanotic at the end of the third day, with stertorous breathing, cold extremities, and failing heart action. It occurred to me at this stage to immerse the patient in a hot mustard-bath of 105° F., prepared by diffusing about a pound of mustard in a baby-tubfull of hot water. I kept her in for about ten minutes, making thorough friction all over the surface, and until the skin had assumed a pinkish color. After being put to bed, which I had well warmed previously, the child began breathing easier and soon fell asleep. The skin remained warm, and an hour after the bath the child was perspiring freely. With the improvement of respiration, the pulse became stronger and less frequent, and the child took the breast most readily. Encouraged by this success, I repeated the process four hours later with the same good result; and after having administered five baths in the course of forty-eight hours, and given no medicine whatever, I had the satisfaction of seeing my patient convalescent."

Since then Dr. Weber has had about fifty cases, and gives here a short account of six of the most severe ones; all of them recovered, some of them being complicated with whooping-cough and measles, and in some cyanosis had occurred, the hot mustard-baths relieving the congested lungs and helping the over-burdened heart, after other remedies had failed to be of service.

The *modus operandi* given is that the mustard is a powerful irritant, and the hot water dilates the bloodvessels, and thus a large amount of blood is drawn to the periphery over the whole body, and the obstructed pulmonary circulation and heart's action are relieved. Again, the bath is regarded

also as a powerful excitant and stimulant of the central nervous system, respectively of the vaso-motor center acting upon it by way of reflex, through irritation of the nerves at the periphery, and thus relieves the comatose condition, where camphor and carbonate of ammonia have failed,—*American Practitioner*.

ANAL FISSURES.—"Our next patient has an affection of the rectum. He is already under the influence of ether, but is not breathing freely. When the head of an etherized patient is allowed to fall too low, you will invariably find that trouble begins. The tongue naturally gravitates backward because the patient has no muscular control over it. Whenever this happens stertorous breathing will at once be heard. It will then be necessary simply to raise the patient's head. The tongue comes forward, and respiration again becomes easy. There is another condition in which an etherized patient becomes tetanic. He has opisthotonos, draws himself forcibly and convulsively backward, and his movements are spasmodic. In such a case the need is air, and the ether should be withdrawn. If he throw himself back with great force, turn him on his side, and the condition will pass off. Our patient is nauseated. After he has vomited he will go to sleep easily. He is a laboring man, and says he cannot give us more than one week in which to treat him. At stool he suffers great pain. Yesterday I hastily examined him, but am not yet fully acquainted with his trouble. What I then saw I see to-day, namely, three or four small fissures, which undoubtedly are the entire cause of his suffering. One of them is healed, and another nearly so; a third is raw and ulcerated. When the anus is stretched in the act of defecation the fissures reopen and give intense pain, just as the cracks in the corners of the mouth during a meal.

Introducing my finger I do not feel anything abnormal within the rectum. It is probable that the trouble is confined to the margin. The method of treatment is to work the two thumbs into the bowel, grasp the tuberosities of the ischia with the fingers, and then rupture the sphincter muscle, as I have now done. The cracks have thus been widened. I now pass an Allingham speculum and examine higher up. I find nothing but this fissured condition, which is very marked, as I will show you in a moment by thoroughly stretching the rectum. The principal fissure is situated on the posterior wall. I now take the knife and lightly score the membrane, just cutting down to fissure itself. This I do in several directions. We shall keep the bowels open for a week. Aside from this, merely ordinary care is all that will be necessary.—*Boston Med. and Surg. Journal*.

EX-SURGEON GENERAL HAMMO, 'D.—The *New York Med. Record* (March 9) says that this dis-

tinguished surgeon, to whose great ability and untiring devotion the admirable conduct and management of the Medical Department of the United States Army during the late civil war was principally due, is about to receive some reparation for the iniquitous treatment he was subjected to by being deprived in 1864 of the high post of Surgeon-General, at which he had laboured so successfully. By the general consent of the profession in the United States, and those of its members in Europe who were acquainted with the circumstances, it was admitted that his displacement was brought about by one of those iniquitous pieces of political jobbery which has so often disgraced the United States Government; and it is certain that the estimation in which he has since been held by his professional brethren, and the distinguished career which he has pursued, could never have resulted had the charges which were trumped up against him had any foundation in fact. It is a matter of congratulation, then, that this is about to be publicly acknowledged, and a tardy, although imperfect reparation accorded. A committee of Congress has reported that it has examined with searching scrutiny the evidence adduced at his trial, and pronounces it worthless. It therefore recommends a bill to be framed (which has since passed), enabling the President to annul the sentence then pronounced. The Bill, however, will prove a lame piece of justice, for while decreeing that Dr. Hammond shall be placed on the retired list of the army as "Surgeon-General," it adds that this shall be "without pay or allowances, past, present, or future." This is something like our fashion of granting a royal pardon to one who ought never to have been convicted.

MEDICAL EVIDENCE IN COURTS OF LAW.—In a case which is exciting a good deal of attention this week, arising out of an alleged assault upon a popular actress, Mr. Prescott Hewitt was quoted in court as having requested that other evidence than his own might be taken, as he declined to appear as a witness in court. It is well known that many other surgeons of similar position to that occupied by Mr. Prescott Hewitt, and equally solicitous of preserving professional reputation intact before the public, have for many years adopted a similar course. We do not remember to have seen, for instance, Sir James Paget, or Mr. Savory, or Mr. George Pollock, make any appearance as medical witnesses in contested cases. Of course it may be said, and will be said, that, for the purposes of justice, it is essential that expert evidence should be forthcoming; and that, if all medical men of high reputation were to adopt a similar course, the evidence forthcoming at railway and other cases would be often of a less satisfactory character than that which even now often proves the cause of much public scandal. The force of

such an observation is undoubted, and this is a consideration not to be undervalued. On the other hand, under the present unsatisfactory conditions of the taking of medical evidence in courts of law, it may be doubted whether, if practical protests of this sort were pretty universal, it would not more effectually than any other course lead to the desired reform by which expert evidence should be taken in an impartial manner for the information of the court. Certain it is that judges and lawyers alike concur in estimating, as a rule, very cheaply the sort of medical evidence which is now so frequent in courts of law, nor do they hesitate, both officially on the bench and on public occasions, and in private, to express a strong regret for the sort of conflict which frequently occurs before them, and their opinion that it does not tend to increase the respect entertained for the acquirements and impartiality of the members of the medical profession. The resolution taken, therefore, by such men as Mr. Prescott Hewitt, Mr. Pollock, and Mr. Savory, to decline to give expert evidence, is readily understood, and will meet with a good deal of sympathy, and if the example were more generally followed, although it might tend in the first instance to still greater degradation of medical evidence in courts of law, it might probably, by that very fact, ultimately lead to very salutary reform.—*Brit. Med. Journal.*

CAUSTIC APPLICATION TO THE CERVIX UTERI IN THE VOMITING OF PREGNANCY.—Dr. J. Marion Sims, considering the suggestions it contains of great importance, contributes to the *London Lancet*, a paper written by Dr. M. O. Jones, of Chicago, on the experience of the latter with the application of caustic to the cervix uteri in the vomiting of pregnancy. He believes that this vomiting is a reflex phenomenon, which fact may account for the unsatisfactory treatment of it by the stomach. Within six years he has treated successfully five cases, his plan being to excite, by means of caustic applications, an irritation or superficial inflammation of the os and cervix uteri, thus concentrating the reflex nervous phenomena at the point of irritation and thereby relieving the stomach.

In his first patient he applied the caustic to the os only. The benefit was very noticeable within twenty-four hours. Being somewhat apprehensive he applied it only sparingly, and in a few days applied it again, obtaining still greater relief. He used it the third time, but suspects the third application was really unnecessary. The patient remained free from sickness or vomiting until the end of pregnancy. In his second case he applied the caustic only twice, complete relief following the second application. In the third and fourth cases, one application was sufficient, although the fourth was one of the most harassing and persistent cases

that ever came under his care. The stomach rejected everything taken into it, and the patient grew feeble, and became so emaciated that she was scarcely able to leave her bed. The caustic was in this case applied very freely to the os and vaginal cervix. In all of his cases all the usual remedies had been faithfully tried before the caustic was resorted to.

Dr. Sims adds notes of a case occurring in his practice, in which this treatment was marvellously successful. His first application of the caustic in solution of two drachms to the ounce was followed by great improvement. At the end of five or six days there was some nausea, which was, however, not distressing. The pencilling of the neck of the womb with pure carbolic acid until it was completely enveloped in a whitish film, relieved the nausea, and the day following she was perfectly well.—*Mich. Med. News.*

POLYURIA SUCCESSFULLY TREATED BY ERGOT OF RYE.—A case of polyuria is reported by Dr. Rendu (*France Médicale*, Feb. 27, 1878) in which ergot was successfully employed. There was supraorbital neuralgia, vertigo, with loss of consciousness, excessive thirst and hunger, with emaciation and loss of strength, although the patient consumed a considerable quantity of food. The urine contained no trace of sugar; the quantity was about ten quarts a day. The urea eliminated by this means in the twenty-four hours amounted to from about 1,250 to 1,400 grains. Before having recourse to ergot of rye, tincture of valerian was first tried for this patient, in the dose of fifteen minims, and soon afterwards of half a drachm. Under the influence of this treatment, the urine diminished by nearly a quart. Sulphate of atropine, in the dose of one *milligramme* (0.15 grain) at first, then two, daily, produced a similar improvement, but no advantage was found in persevering in this course, since the appetite diminished with the valerian, and the thirst increased with atropine. Ergot of rye was then tried. The success of this agent was remarkable. In eight days the urine fell to 1,600 *gram.* and the urea to 15 *gram.* in the twenty-four hours; the emaciation was stopped, the strength returned, whilst the thirst and the excessive desire for food also disappeared. Dr. A. Costa, (*New York Hospital Gazette*, Feb. 15,) reports also a case of diabetes insipidus, with the excretion of ten pints of urine daily, without sugar or albumen, marked by a great emaciation, and states that he treated the patient with fluid extract of ergot, which treatment had been followed with striking success, *i.e.*, complete cure in two cases in private practice. Dr. A. Costa put the patient upon an initial dose of half a drachm of the fluid extract thrice daily, the dose to be increased gradually, first to one drachm, and then to two drachms. There was at once apparent great

reduction in the quantity of urine passed daily. From ten pints it fell to six pints daily, then to three, where it remained. Even before reaching the present limit, he ordered the dose to be gradually reduced, first to one drachm, and then to half a drachm. Then it was stopped altogether, and mint water substituted in its place. For the past two weeks he had no ergot, and might be considered permanently cured. The amount of urine daily passed varied between two and three pints.—*British Medical Journal.*

TURPENTINE IN WHOOPING-COUGH.—Dr. Albrecht Gerth cured a case of laryngeal catarrh by inhalations of oil of turpentine. Twenty drops were placed on a handkerchief, held before the mouth and nose, and about forty deep inspirations taken. This was done thrice daily, and the cure was quite rapid. In the same family he found a child fifteen months old, with pertussis in the convulsive stage. The infant was quite exhausted and vomited almost all nourishment. There was at the same time some bronchial catarrh, with slight nocturnal elevations of temperature. Its constitution was scrofulous. Gerth decided to experiment here with the turpentine. He overcame the difficulty of administration by getting the mother to hold the moistened cloth before it during its waking hours, and to drop the oil upon its pillow while asleep. The result exceeded all his anticipations. Before the termination of twenty-four hours, the frequency and severity of the attacks had perceptibly diminished. The strength of the child was sustained by cognac and champagne, and he ordered that for five minutes of every hour the doors and windows of the room should be widely opened. The improvement was so evident, and so rapid, that these instructions met with but little resistance on the part of the parents, although they were not of the intelligent class.

This experiment was first tried over a year ago; last spring and in autumn pertussis was again epidemic in his neighborhood, and he had repeated opportunities of testing this agent. He gave it to children of all ages, and in all stages of the fever. The initial catarrhal, the convulsive and the terminal catarrhal stages were all decidedly benefitted, the spasmodic attacks being in many cases aborted.—*Allgemeine Wiener Medicinische Zeitung*, No. 12, 1878.—*Cinic.*

CATGUT SUTURES IN CÆSARIAN SECTION.—Translated by Dr. A. Kaiser, from an article in *Archives de Toxicologie et Malades des Femmes*, by Dr. E. W. Jenks, of Detroit.—In my article (referring to the report of a successful case of Cæsarian Section, published in the December number of the same journal), I maintained the idea that I preferred the gut cord or the silver wire to all other material for uterine sutures, but in the

absence of both I would employ silk or even linen thread rather than use none at all; and subsequently I made allusion to substances equally harmless as the gut cord, the silver wire, etc., thus giving preeminence to the gut cord. Since the article was written I have changed my opinion with regard to employing the gut cord as a ligature in the peritoneal cavity. Theoretically it is the best material on account of its un hurtful character and prompt absorption, but practically it will continue to be an indifferent suture until some one has discovered a method of keeping it well secured, for the warmth and humidity of the peritoneal cavity relaxes and opens the common surgeon's knot. I have employed it in a case of ovariectomy to tie the vessels, and the post mortem examination has but too well proven the truth of my last assertion. I have likewise used it during the past few months on several occasions in plastic operations in the vicinity of the vagina, and in each case, expecting that it would keep the parts in apposition, the result was nevertheless a complete failure. Now, since the only object of uterine sutures in Cæsarian section is to maintain the incised partition walls in contact, to prevent liquids from entering into the uterine and peritoneal cavities, such material only should be employed in cases of this kind, as can be invariably relied upon.

I see by an article, written in an English journal by a writer whose name I cannot now recall, that he claims to have invented a way of making a knot with gut cord, which would neither slip nor untie. I have not tried his method, nor am I disposed, on account of my previous experience, to make my first application with it to the abdomen. It would appear that up to the present time we are possessed of nothing superior for uterine sutures to silver wire and silk thread, and of those two the former is probably the best.

As to the little confidence we can have in gut cord for uterine sutures, I would refer you to the transactions of the London Obstetrical Society, vol. xvii, where a case of Cæsarian section is recorded by Dr. Oswald; the operation was made by Dr. Routh, who closed the wounds of the uterus with sutures of the best gut cord, firmly tying the same. The patient lived three days after the operation. The post mortem examination revealed that the knot was relaxed and opened, so that a quantity of liquid escaped into the abdominal cavity, poisoning the patient.

The opinion of Dr. Routh coincides with that of the majority of his colleagues, that had he used sutures of metal or silk, instead of the gut he could have saved the life of the patient. Dr. Meadows adds, that it was the second case in which death could be attributed to the use of gut cord sutures on the uterus.—*Mich. Med. News*, June 1878.

THE ANIMUS OF SUITS FOR MALPRACTICE — Of the many suits for malpractice that have come

under our observation, we have scarcely ever known of one which did not exhibit on the part of the prosecution, a baseness of motive, and an absence of honor thoroughly disgraceful to the human character. Nine times in ten the plaintiff is a pauper who has received the gratuitous service of the man whom he prosecutes; or worse than a pauper, a sordid villain, who resorts to the expedient to evade payment, or as a business speculation. There is always a ring, which is completed by one or more jackals of the law, who are prompt to instigate litigation for the purpose of plunder, and one or more medical witnesses of the sneaking and malicious type. *The Pacific Medical and Surgical Journal*.

NEW USES OF BELLADONNA.—We cannot too frequently direct the attention of the profession to the invaluable action of atropine, or belladonna in night sweats, so prevalent and prostrating a symptom in case of debility and in consumption. We have used it in the form of powders of atropia $\frac{1}{10}$ gr. with sugar or $\frac{1}{4}$ to $\frac{1}{2}$ gr. solid extract, in pill form or 15 to 20 minims of the tincture answers equally well. We have found the following formula almost a specific in phthysical cases with troublesome coughing:

R Atropia sulph. grs. i

Morph. sulph. grs. viij

Acid sulph. aromat ʒij

Aquæ menth pip ad ʒi M.—Dose—5

drops thrice daily, and at bedtime. The morphine and acid may be omitted, and in sore throat giving rise to coughing, nitric acid may be substituted for the sulphuric with advantage in five drop doses.

The tincture is being used with advantage externally in night sweating. Mr. Nairne writes in the *British Medical Journal* of February 2, that for some little time past he has employed the common pharmacopœial tincture of belladonna for sponging the body in cases of phthysical and excessive sweating, and invariably with marked benefit. So far as his experience goes, he has found it much better than anything else; if applied before a sweating comes on, it prevents it; if during the sweating, it almost immediately controls it. Two teaspoonfuls of the tincture mixed with an equal quantity of whiskey are quite sufficient (applied with the hand), to cover the whole body and produce the desired effect.

LACTOPEPTINE. — Pepsin is unquestionably a valuable remedy in some cases of indigestion, but does not seem to meet all the requirements of many dyspeptic cases. Lactopeptine is presented to the profession as meeting all the indications in cases of mal-nutrition and non-assimilation, composed according to the formula, of Ptyalin, Pepsin, Pancreatine, Hydrochloric and Lactic Acids. It is

claimed to be a combination of all the digestive agents. If we can prescribe chemically for disorders of the digestive function, such a combination would appear worthy of trial, and experience has demonstrated its value in many cases. Dr. Merritt remarks: "The more my experience in its varied applicability extends, the more its beneficial effects appear." *Buffalo Medical and Surgical Journal*, Dec. 1877.

EARLY PUBERTY.—Dr. H. Yates, of Kingston, Canada, reports the following extraordinary case of early puberty in the *London Lancet*: "The child, a female, is two years and three months old. I was consulted by the mother, who supposed it had some mammary disease, there being a symmetrical enlargement of both glands. Struck by their appearance, I had the child stripped, and found what appeared to be a fully-developed woman! Abundance of hair on the pubes and in the axillæ. The genital organs, as well as the mammæ above mentioned, seemed to be fully developed. For the last three months the child had menstruated regularly three days every four weeks. She was flushed, and complained of headache and pain in the back and thighs while menstruating. She weighed forty-eight pounds."

HEAT OF THE BRAIN.—The *Lancet* tells us that M. Broca has recently laid before the French Medical Association some curious facts concerning the temperature of different parts of the skull. By numerous experiments he has found that while at rest the temperature of the surface of the head is .2° Fahr. higher on the left side than on the right. When the brain is active, equilibrium is established. When continuous but moderate mental effort has been maintained for ten minutes the temperature is raised about 1° Fahr. The temperature of the frontal, temporal and occipital regions of the skull are also different, that of the frontal region being more than 4° Fahr. higher than that of the occipital. —*Chemist and Druggist*.

GALVANIC AND FARADIC CURRENTS IN NEURALGIA.—As a guide to the proper current indicated in the various forms of neuralgia, Dr. Rockwell says: "I find the effects of pressure are exceedingly useful. I would not lay it down as a law, but it will be found in the great majority of cases of neuralgia where firm pressure over the affected nerves aggravates the pain, the galvanic current is indicated, while the Faradic current has the greater power to relieve, when such pressure does not cause an increase of pain.—*Med. & Surg. Brief*.

RELATIVE DANGERS OF VERSION AND FORCEPS.—A Belgian writer, Dr. Kuborn, has examined the recent statistics of the Russian hospitals, to deter-

mine the relative dangers to the infant of deliveries by version and by the forceps. He has collected the respectable number of 7,100 cases of labor where one or the other method was used. The results are in favor of the forceps. They showed a mortality of but five per cent., while version was followed by the death of the infant in eight per cent. of the cases.—*Med. & Surg. Reporter, Phila.*

A DECEPTIVE PATIENT.—A story is told in the *Revue Médicale de l'Est* of a patient who lost his life by deceiving his doctor. The man was suffering from lead-poisoning. The physician, oddly named Professor Forget, prescribed strychnia pills, which produced no effect. The dose was increased successively to two, three, five and six pills, without any result. Finally the doctor ordered the patient to take five pills in his presence. The man did so, and died within two hours. After his death all the pills previously prescribed were found secreted behind his bed.

A MILK TEST.—A German paper gives a test for watered milk, which is simplicity itself. A well-polished knitting needle is dipped into a deep vessel of milk, and immediately withdrawn in an upright position. If the sample is pure, some of the fluid will hang to the needle; but if water has been added to the milk, even in small proportions, the fluid will not adhere to the needle.

CHLORAL IN RETENTION OF THE URINE.—Tidd noted a case in which catheterism having failed in consequence of the patient being pregnant, and no urine having passed for twenty-four hours, two doses of ten grains of chloral, one half an hour after the other, produced profound sleep and voluntary passage of an enormous quantity of urine.—*Gazette Med. de Rome*.

SEWER GAS.—Among many disorders which may arise from the effluvia of drains and sewers, two have been recently mentioned in the English journals for the first time, viz: abscess of the cervical glands, and a tendency on the part of ulcerated surfaces to become sluggish and to yield to no ordinary management. Sometimes these ulcers take on a diphtheritoid appearance.

ERGOT IN CARDIAC DISEASES.—Massini recommends ergot in simple hypertrophy and cardiac degeneration, when digitalis administered for some time produced no effect. In valvular troubles ergot appears to have but little effect. He prefers the preparation obtained by maceration.—*Med. Med. Jour.*

OVARIOTOMY in a child of eight years was recently performed with success by Spencer Wells.

THE CANADA LANCET.

A Monthly Journal of Medical and Surgical Science

Issued Promptly on the First of each Month.

Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Advertisements inserted on the most liberal terms. All Letters and Communications to be addressed to the "Editor Canada Lancet," Toronto.

AGENTS. DAWSON BROS., Montreal; J. & A. McMILLAN, St. John, N.B.; Dr. C. W. BERNACKI, 271 W. 22nd St., New York; GEO STREET & Co., 30 Cornhill, London, Eng.; M. H. MAHLER, 16 Rue de la Grange Bateliere, Paris.

TORONTO, NOV. 1, 1878.

AN ANIMATED MOLECULE.

We are indebted to the talented author, Dr. Daniel Clarke Medical Superintendent of the Lunatic Asylum, Toronto, for a copy of the above interesting brochure of 42 pages, which we doubt not have cost the writer much earnest thought and extended research. Were we as well versed in metaphysics as we are led to believe Dr. Clarke is, we should be better able to review his production in terms befitting its merits; but, perhaps to our shame, we must confess, that though we have often tried to possess ourselves of some degree of competency in this branch of science, we have almost invariably retreated from the enterprise, with the blushing conviction that our mind was never designed for this sort of work, just as *Burns*, dumb-founded and bedizened, in contemplation of the *Alloway* witch scene, was forced to collapse, in the hapless lines:

"But here my Muse her wing maun cour,
Si' flights are far beyond her power."

So we, confronted with the *ego* and the *non-ego*, the *objective* and the *subjective*, the *conditioned* and the *unconditioned*, *et hoc genus omne* of writers on this transcendent department of philosophy, have ever been constrained to own ourselves utterly incompetent. Even since we read Dr. Clarke's pamphlet, we made some effort to qualify ourselves for the duty of understanding a portion of his ingenious argument, by searching for a clear exposition of the radical terms *the ego*, and *the non ego*, and we thought we could not seek for what we needed in a better author than the renowned Sir William Hamilton, the Samson of "Common Sense." Here was what we found in the wondrous treatise of this philosopher, in elucidation of the *self* and *not self*, alias *ego* and *non ego*.

"Whatever comes into consciousness, is thought by us, either as belonging to the mental self, exclusively (subjective—subjective,) or as belonging to the non-self exclusively, (objective—objective,) or as belonging partly to both, (subjective—objective.) It is difficult however to find words to express precisely all the complex correlations of knowledge. For in cognizing a mere affection of self, we objectify it; it forms a subject object, or subjective object, or subjectivo-subjective object: and how shall we name and discriminate a mode of mind, representative of and relative to a mode of matter?"

Well, now, if our reader stands enlightened by the preceding agglomeration of subjective objects, and objective subjects, all we can say is that he is an apt scholar, and we congratulate him on his facility of comprehension; but at the same time we are very much inclined to regard the metaphysical *ego* and its negative as very nearly "all in my eye."

Dr. Clarke tells us, "it," (the *ego*) "is a substance more subtle than the ether which pervades all nature." Who, after reading Hamilton's above cited explanation, will for a moment doubt the subtlety of the artful dodger? It must be "the highest development of that entity called magnetism," for it certainly magnetises, and mesmerizes likewise, all who approach it. Why! it must be one of the staff of that master spirit, which has been styled "the prince of the power of the air," and everybody knows what an uncanny metaphysician he is. Let no one wonder then, that we take our leave rather precipitately of this part of Dr. C's essay, yet we must be pardoned for this expression of our doubt, as to the efficiency of Dr. C's vindication of the non-materiality of mind: for ultimately to assume, that this entity is but a super-refinement of magnetism, comes, in our interpretation of language, so very near to materialism, that we fail to realise the difference, though we are perfectly sure that any such conclusion must be utterly antagonistic to Dr. C's convictions.

We could very much have wished that Dr. C. had seen his way clearly through his subject, so as to have avoided the metaphysical obscurities which intrude between our dull optics, and a distinct understanding of his ingenious arguments; for we confess that we have an almost never failing admiration of everything that comes from his gifted pen: and what is still more and better, we

have the very highest respect for the honesty and purity of purpose which actuates him in all undertakings, and upon all occasions. We do not hesitate, therefore, to recommend to all our readers, but especially to such as are gifted with higher metaphysical competency than we dare pretend to, the careful perusal of the *animated molecule*. None can fail to be surprised at the amount of powerful writing, with which a talented author can envelop so minikin a thing. How many volumes, in like proportion, should be devoted to a whale, or a megatherion? After all, what stronger proof outside of Divine revelation, can we have of the existence of our soul, than our own simple conviction?

THE GREAT SYMPATHETIC.

We have just risen from a perusal of an interesting monograph by Dr. Bucke, Superintendent of the Asylum for Insane, London, Ont., on "The Moral Nature and the great Sympathetic."

The office of the numerous ganglia, placed in the course of the sympathetic nerves is perhaps the most obscure point in the whole range of physiology. Some have regarded them as so many brains, by which impressions are received through the branches, of which each ganglion is the centre, and from which, excitements to motion are sent out; others have believed that they exercise a power of isolating the organs they supply from the influence of the mind, or of obstructing the constant passage of impressions to and from the brain. Many other functions have been supposed to be performed by them. Dr. Bucke considers them to be the especial channels of the emotions. The sympathetic nerve or system of nerves, has received its name from the idea that it is of ultimate importance in the phenomena of what is called sympathy, in which one part of the body is affected in consequence of some peculiar condition of another. A great number, however, of the phenomena, formerly regarded as the effects of sympathy are now clearly explained by reflex action of the cerebro-spinal axis; many others depend on some generally operating influence as a peculiar condition of the blood, &c., &c. Dr. Todd in his physiology remarks, "Two questions are to be solved. 1st Is the sympathetic a distinct and independent portion of the nervous system or is it

merely an off-shoot from the brain and spinal cord, exhibiting certain peculiarities of arrangement. 2nd. Do its fibres exhibit the same powers as those of cerebro-spinal nerves, that is are they sensitive and motor?" That the organs chiefly supplied with the sympathetic nerves are entirely independent of the cerebro-spinal system, and will maintain their actions for a time even after removal from the body, there is no lack of evidence. The peristaltic motions of the intestines, the contractions and dilatations of the heart of some animals tortoise especially will continue for a long time after their removal from the body, or after all the nerves passing to them have been divided. To the second question we reply that numerous experiments of irritating the ganglia of the sympathetic, to see whether it produces pain, have had unsatisfactory results. Nor would any results be conclusive, because the ganglion like parts of the brain might be insensible to injury, though fully capable of perceiving the impressions transmitted to them through their nerves. The pain of the diseases of internal organs is amply sufficient to prove their sensibility, though it does not determine whether the impression of pain is conveyed through filaments of the sympathetic system or through those few of the cerebro-spinal system which are mingled with the former in the common sheath. Dr. Bucke in his first paper on the sympathetic, read before the Association of Medical Superintendents of American Institutions for the Insane, held at St. Louis Mo. in May 1877, puts five questions, 1st. Is it a motor nervous system, if so; in what sense? 2nd. Is it endowed with sensation? 3rd. Does it control the functions of the secreting glands, as the gastric, mammary, intestinal, salivary, lachrymal, liver, kidneys and pancreas? 4th. Does it influence the general nutrition of the body, and if so, in what manner? 5th. Is it the nervous centre of the moral nature, that is of the emotions? To the first he adduces evidence in support of the great sympathetic being a nerve of motion to unstriped muscular fibres, the exception, being the circular fibres of the iris, supplied by the third cranial nerve. To the second question, whether it is sensory, he answers in the negative. To the third he argues from instances quoted, that the great sympathetic can, and does, exercise a controlling influence over the secretion of glands which receive no other nerves, such as the kidneys. That,

as it is at least equally distributed to other glands which receive cerebro-spinal nerves, and no other function appears for it to perform, it influences the secreting functions also. That the testes are supplied with cerebro-spinal nerves, whilst the homologous organs in the female are not. That cerebro-spinal nerves, when sent to glands have another obvious function to perform, besides that of controlling the secretions of those glands, and that it is consequently unnecessary to suppose that they do this likewise. 4th. In support of the belief that the sympathetic does influence the general nutrition of the body, Dr. Bucke thus argues: "The nutrition of paralyzed limbs though not up to par on account of want of exercise, is still pretty well kept up; while if those limbs could be deprived of sympathetic nervous influence, instead of cerebro-spinal influence, we have reason to believe that their nutrition would fail absolutely, and that they would die. All arteries are accompanied by sympathetic nerves, besides which, there are without any doubt, as pointed out by Davey, in his work on the great sympathetic, hundreds of minute sympathetic ganglia scattered among the tissues and organs of the body, which send filaments to parts in the neighborhood of each of them, so that the distribution of the great sympathetic nerve, is probably, absolutely universal, while the distribution of the cerebro-spinal system is far from being so." 5th. That the sympathetic is the nervous centre of the moral nature, that is of the emotions. For our readers to be enabled to grasp fully Dr. Bucke's reasons for the opinion, that the moral and intellectual nature are essentially distinct from one another, we must refer them to his two papers on the subject; the first in the October number 1877 of the American Journal of Insanity; the second read before the Association in May, 1878, and published by Ellis, Roberts & Co., Utica, N. Y. They may not agree in every view of the author, but they will certainly read the papers with pleasure, and consider them to be possessed of great merit. Our space is too limited to permit a disquisition upon dogmas, that might by some be viewed as arbitrary, and as a new departure from previously recognized views of the indivisibility of the moral and intellectual natures as centered in the cerebro-spinal system.

THE FEVER SCOURGE.

A correspondent sends us the following.—It is a mistake to suppose that the present fever scourge raging in the South is the most severe that has ever been known to our neighbors. In former years it was much more severe than it is at present. Take new Orleans alone, and up to the present we find that there have been a little more than three thousand five hundred deaths, and the maximum deaths, we find, has been 103. But if we go back to 1853, we find that there was as many as 250 deaths in a single day. During the month of August in that year there were, on an average, 180 deaths daily, and this too when the population was only 80,000, much less than it is at present. Out of this 80,000 it is reported that 20,000 died during the season, a mortality which is far in excess of that of the present time. The sanitary regulations of New Orleans are still very defective. The ground is low and swampy, and we must attribute the existence of the disease in 1853 to the then bad drainage. But worse than this took place at Barbadoes in the year 1647. This is the earliest notice we have of yellow fever, and we find it in "Legon's History of Barbadoes." He tells us that in that year, before the expiration of a month, "the living were scarcely able to bury the dead." Again, in 1793, the yellow fever destroyed no less than 6,000 men of the garrison of Port Royal in the course of a few months. In 1804 the yellow fever was brought to the South of Spain, and visited Cadiz, Malaga, and Carthagen. In the same year it destroyed more than one-half of the population of Gibraltar, for out of a population of 14,000 souls, only twenty-eight escaped attack. In 1793—there were 3,500 people died of yellow fever in New York, when it had only a population of 50,000, and in 1822, about 200 people died of the same disease in the same city.

It is consolatory to know that the present scourge is nearly at an end.

STRYCHNIA AND ITS ANTIDOTE.

A correspondent in an exchange says: Wanting to banish some mice from a pantry I placed on the floor at night a slice of bread spread over with butter, with which I had mixed a three-penny packet of "Battles Vermin Killer," which contains

about a grain of strychnia along with flour and Prussian blue. The following morning I was roused by a servant telling me that a favorite Skye terrier was lying dead. I found that the mice had dragged the slice of bread underneath the locked door, and that the dog had thus got at it and eaten part equal to about one-sixth of a grain of strychnia; it lay on its side perfectly rigid; an occasional tetanic spasm showed that life was not quite extinct. Having notes of the experiments made by direction of the British Medical Association last year on the antagonism of medicines, and wherein it was conclusively proved that a fatal dose of strychnia could be neutralized by a fatal dose of chloral hydrate, and that the minimum fatal dose of the latter for a rabbit was twenty-one grains, I at once injected under the dog's skin forty-five grains of the chloral in solution, my dog being about twice the weight of a rabbit. In a quarter of an hour, fancying the dog was dead, as the spasms had ceased and it lay apparently lifeless, I moved it with my foot, when it at once struggled to its feet, and shortly after staggered to its usual corner by the parlor fire; it took some milk, and except for being quieter than usual, seemed nothing the worse for the ordeal it had passed through. That the fatal effects of a poisonous dose of strychnia were thus counteracted so successfully by what I should say was a poisonous dose of chloral, given hypodermically, is an interesting fact verifying the experiments I alluded to. Without such experiments on the lower animals, a medical man might often be found standing by, helpless to aid his fellow-man under similar effects of poison.

PRIZE FOR ESSAY ON HYDROPHOBIA.

A prize of one hundred pounds sterling has been offered for the best essay on "Hydrophobia, its Nature, Prevention and Treatment," by V. F. Bennett Stanford, Esq. M.P., to be awarded by the Royal College of Physicians, London, England. The prize is open to any one who chooses to compete for it. The conditions are as follows: (1) The Essay must be in English, or accompanied by an English translation. (2) The Essay must be delivered to the College on or before January 1st, 1880. (3) Each Essay to be accompanied by a sealed envelope, containing the name and address of the

author, and bearing a motto on the outside. The same motto to be inscribed on the Essay. (4) The Essay may be the joint production of two or more authors. (5) The Essay if not published by the author within a year, to become the property of the College. (6) The Prize not to be awarded unless an Essay of sufficient merit be presented.

The questions which are thought by the College specially to require investigation are: (a) The origin and history of outbreaks of Rabies, particularly in the United Kingdom and its dependencies. (b) The best mode of prevention of Rabies. (c) The characteristics of Rabies during life, the anatomical, and chemical changes which are associated with the disease in its successive stages, particularly in its commencement. (d) The origin of Hydrophobia in man. (e) The chemical and anatomical morbid changes observed in the subjects of the disease, with special reference to those having their seat in the organs of the nervous system, and in the salivary glands. (f) The symptoms of the disease particularly of its early stages as illustrated in well observed cases in its commencement. (g) The diagnosis of the disease in doubtful cases, from conditions more or less resembling it. (h) The alleged prolonged latency of the malady. (i) The efficacy of the various remedies and modes of preventing the disease, which have been proposed, and what plan of treatment, whether prophylactic or curative, it would be most desirable to recommend for future trial.

MANITOBA AS A HEALTH RESORT.

The climate of Manitoba—the new Province of the Dominion—seems in its dryness and general salubrity especially adapted to the necessity of persons troubled with bronchial affections and incipient phthisis. The water of the red river is strongly alkaline, so that persons new to that district are somewhat troubled to make use of it. Several cases of debilitated health from incipient lung and heart affections, have been completely restored to health by a sojourn of two or more years in Manitoba, and the North-west, and while we are unable from lack of sufficient data, to particularise or discuss the *pros* and *cons* in detail, yet, nevertheless, sufficient information has come to our knowledge to confirm us in the opinion

that the climate of Manitoba and the North west, offers signal advantages to the invalid, and especially to sufferers from incipient constitutional affections of any kind.

We trust ere long to have valuable communications upon this matter from resident physicians in the district, of long experience, which we will lay before our readers.

COLLEGE OF PHYSICIANS AND SURGEONS, QUEBEC.—The semi-annual meeting of the Governors of the above named college took place at Quebec, on the 25th Sept. The following were present: D. J. P. Rottot, President; C. E. Lemieux and R. P. Howard, Vice-Presidents; A. G. Belleau and A. Dagenais, Sec's; L. La Rue, Registrar; J. A. Sewell, E. A. De St. George, W. Marsden, M. J. Ahern, P. Wells, F. W. Campbell, E. H. Trudel, A. H. David, E. P. Lachapelle, A. T. Michaud, J. Marmette, L. Tetu, C. Gingras, L. J. F. Rousseau, P. A. A. Collet, J. B. Gibson, J. Prevost, A. Rivard, L. D. Lafontaine, E. Laberge. Hon. A. H. Paquette, F. X. Perrault, P. E. Mignault, N. H. Ladouceur, Hon. J. J. Ross, M. G. E. Badaeux, F. D. Gilbert and F. Paré. Drs. W. E. Scott, of McGill College was appointed a Governor in place of Dr. Fenwick, resigned; E. Ives, of Coaticook, in place of Dr. Worthington, resigned; and H. St. Germain, of St. Hyacinthe, in place of a member deceased. Dr. E. P. Lachapelle was appointed Treasurer.

The following graduates received the license to practice on presentation of their degrees: A. Noel, M.L., E. Morin, M.L., A. Vincelette, M.L., J. E. Bolduc, M.L., A. Methot, M.D., H. Sirois, M.D., A. Watters, M.D., A. Gauvreau, M.L., H. Trudel, M.L., L. O. M. Bellemare, M.L., P. P. Delaney, M.L. of Laval University; and J. McKinley, M.D., C.M., and C. N. Stevenson, M.D., C.M., of McGill University. Messrs. C. M. Draper and L. H. Annable passed a most successful examination and obtained the license.

The following examiners were appointed for next meeting:—*Anatomy*, Dr. C. E. Lemieux; *Surgery*, F. W. Campbell; *Med. Jurisprudence*, F. Paré; *Physiology*, E. P. Lachapelle; *Medicine*, F. D. Gilbert; *Materia Medica*, L. J. E. Rousseau; *Midwifery*, E. H. Trudel; *Botany*, M. G. E. Badaeux; *Hygiene and Chemistry*, M. J. Ahern.

Candidates for the next preliminary or matricu-

lation examination can apply for information to Dr. Howe, Montreal High School, Rev. Mr. Verreau, Montreal Jacques Cartier Normal School, Rev. Dr. Laflamme, Quebec Seminary, and Prof. M. Miller, Quebec High School.

MINERAL WATERS.—The prescribing of mineral baths and waters forms, at the present day, a prominent feature in medical practice, but from the number of springs with which the land is blessed, it is sometimes perplexing to make a proper selection. The Caledonia Springs, however, situated between Montreal and Ottawa, near the Ottawa River, have taken a prominent position, and from their long use, their properties have become thoroughly known and appreciated by the profession at large. The white Sulphur water, here, while of a superior character, is greatly aided by the other saline waters beside it, making the curative qualities cover a wide range of diseases. The complete recovery of many visitors to these Springs is really wonderful, especially in cases of rheumatism, dyspepsia, blood and skin affections, and diseases of the liver, kidneys, bladder, &c. The Grand Hotel offers the best accommodation, but every class of visitors is well provided for. The season is from June to October.

A WOODEN MAN.—A lay figure, the counterfeit presentment of a man, which is being exhibited in Brussels, is described by a London correspondent as by far the most remarkable invention of the kind which the world has yet produced. It is by a Frenchman named Fabre, who has spent twenty years in getting it up. The figure has organs of speech corresponding to the human, and in the rear a set of keys to be played upon for producing a very good imitation of human articulation. Whether called a piano-man, or a man-piano, we are not informed. The writer adds: "This talking Psycho can, in fact, carry on a conversation; and the movements of its mouth are so like nature that the machine is to be used for teaching the deaf and dumb how to carry on a system of speech by imitating the lip movements of the talking figure.

A NEW BATTERY.—The *Boston Journal of Chemistry* says that an Italian professor has devised a new battery, based on a fact forgotten hitherto, though known to science—that of the dissolving of zinc in a solution of sulphurous acid, without the

least development of hydrogen. His battery, made on this principle, is said to act excellently, and to give a very strong current. The inventor calls attention to a curious phenomenon observed in the course of his experiments. When the zinc plate is immersed, either in a solution of sulphurous acid or in one of bisulphite of potash and soda, the liquid is observed to lose color at first, then become for a few seconds of the same colour as a solution of bichromate of potash; this coloration commences at the zinc, and is diffused in the mass, as if absolutely independent. No salts of zinc are known to give such a colour.

CORRECTION.—In our report of the proceedings of the Canada Medical Association, it is stated that a "motion was passed that in future, all papers be read before the discussion takes place, Dr. Canniff, objecting." The facts are,—Dr. Bucke suggested that it would be desirable to have all the papers on the programme read before discussion on any took place. Dr. Canniff, disagreed, and the matter dropped.

The death of Dr. W. L. Atlee, of Philadelphia, from cancer of the stomach is announced in our exchange Journals. He was 71 years of age. He was a great advocate of ovariotomy, and has left behind him a work on that subject which embodies his own experience in upwards of three hundred cases.

JOURNALISTIC.—The *Cincinnati Lancet and Observer* and the *Cincinnati Clinic* have been consolidated under the name of the *Cincinnati Lancet and Clinic*. It is issued weekly and is one of the best journals published in the United States.

The *Ohio Medical and Surgical Reporter* has been discontinued.

Sir Robert Peel, speaking of Lord Eldon, said that even his failings leaned to virtue's side, upon which a bystander observed that his lordships failings resembled the leaning tower of Pisa, which, in spite of its long inclination, had never yet gone over.

PROFESSOR SCHWANN, author of the cell theory, is teaching physiology in the Belgian University. A festival was held lately at Liege, in honor of the fortieth anniversary of his professorship.

Dr. Demarigny, Government Inspector of Prisons and Asylums, Quebec, has been engaged on a minute Inspection of the Beauport Asylum.

REMOVALS.—Dr. Philp of Waterdown, has removed to Hamilton. Dr. S. E. McCully of Morpeth, has removed to Waterdown.

Dr. Dupuis, of Kingston, has been delivering to the teachers in training at the Frontenac Model School, a course of lectures on "Hygiene."

CORONER.—S. E. McCully, M.D., of Waterdown, to be an Associate Coroner for the county of Wentworth.

Reports of Societies.

MICHIGAN STATE BOARD OF HEALTH.

The regular quarterly meeting of this board occurred July 9th, 1878, at Lansing, all the members being present as follows: Dr. R. O. Kedzie, President, Dr. H. O. Hitchcock, Dr. H. F. Lyster, Hon. L. Roy Parker, Rev. D. C. Jacobes, and Henry B. Baker, Secretary.

The subject of a text book on hygiene for common schools was discussed. No members of the board had seen a book suitable for such use, and it was thought very desirable that one be prepared. Dr. Hitchcock then offered the following resolutions, which were adopted:

Resolved, That this board respectfully request the board of regents of the University of Michigan and the Trustees of the Detroit Medical College to establish in their respective institutions, at the earliest practicable moment, full chairs of public hygiene and fill the same with thoroughly competent professors.

Resolved, That this board respectfully request the controlling boards of all the collegiate institutions as well as the high-schools of the state to see that a course of instruction in public hygiene be given in each of their several institutions.

Dr. Lyster mentioned that in the interests of public health he had delivered a course of lectures before the medical class at the University of Michigan during the past six months. He presented a syllabus of each lecture delivered.

Dr. Kedzie presented some results of his investigations on the subject of lead poisoning by the use of tinned ware and other vessels containing lead.

The subject of Sanitary Conventions was considered, and after some discussion in regard to the

kind of subjects to be treated, and their mode of treatment, it was voted to hold such a convention at Coldwater, Mich., during the coming winter, being invited to do so by Dr. J. H. Bæch of that city. The Secretary was directed to make the necessary preparations.

Invitations were also received to hold Conventions at Pontiac and Detroit, from Rev. D. C. Jacobes and Dr. Lyster, who on behalf of the citizens of their respective cities, promised active efforts for the success of such meetings.

One interesting feature of these meetings is the exhibition of all sorts of sanitary appliances, a kind of sanitary fair where all interested can exhibit or examine articles designed to meet the wants of the people in their efforts for public and private health.

Books and Pamphlets.

ZIEMSEN'S CYCLOPEDIA OF THE PRACTICE OF MEDICINE. New York: Wm. Wood & Co. Toronto: Willing & Williamson.

We are in receipt of three volumes of this great work. Vol. VIII on "Diseases of the Chylopoietic system; Vol. XIII, Diseases of the Nervous System, and Vol. XVII, Disturbances of Nutrition and Poisons. The translation from the German of these elaborate treatises, now approaching completion, will supply a great want in our medical literature. It is true that we possess a mass of valuable works from English and American authors, on the Theory and Practice of Medicine, replete with careful observation and clinical instruction, and which for the student and busy practitioner, contain all the information that ordinarily is required. In Germany, however, superior means for carrying on anatomical and pathological enquiries have long existed. These opportunities Dr. Ziemssen and his collaborateurs have most diligently availed themselves of, and as a result, have presented to the medical world a Cyclopædia, remarkable for the deep research, great variety, and importance of the subjects treated of. The various translators have executed their task admirably, and the publishers have spared neither pains nor expense in furnishing volumes remarkable for neatness of binding and beauty of paper and type.

Volume VIII treats of the "Diseases of the Chylopoietic system," with chapters relating to

diseases of the bladder and urethra, and functional affections of the male genital organs; the various contributors being Prof. F. A. Zenker of Erlangen, Prof. H. Von Ziemssen of Munich, Prof. Mosler of Griefswald, Prof. Friedrich of Heidleberg, Dr. Merkel of Nurnberg, Dr. Baer of Munich, Prof. Labert of Vevay, and Dr. Curschmann of Berlin. The subjects treated of are diseases of the œsophagus, peritoneum, spleen, pancreas, bladder, suprarenal capsule, urethra, and male genital organs.

Vol. XIII is devoted exclusively to "Diseases of the Spinal cord, and Medulla Oblongata," by Prof. Erb of Heidleberg. The first one hundred and fifty pages are devoted to an anatomical and physiological introduction to general symptomatology and etiology. Diseases of the membranes of the cord are then taken up, afterwards those of the spinal cord proper *e. g.* hyperæmia, anæmia, spinal apoplexy, wounds of the cord, concussion of the cord, spinal irritation, spinal nervous weakness, slow compression of the cord, myelitis acute and chronic, myelomalacia or softening of the cord, multiple sclerosis, characterized by the development of numerous insulated sclerotic nodules, varying in size and of a chronic, inflammatory nature, scattered irregularly throughout the entire cord, and usually also throughout the entire brain, a disease of youth and middle age; tabes dorsalis or grey degeneration of the posterior columns,—the progressive locomotor ataxy of Duchenne, spasmodic spinal paralysis, the sclerosis of the lateral columns of Charcot, the main symptoms being paresis and spasm, hemiplegia and hemi-paraplegia spinalis, including traumatic injuries, inflammation, compression, sclerosis, tumors and syphilis; polio-myelitis anterior acute, or acute inflammation of the grey anterior columns, first described by Jacob Von Heine, subsequently confirmed by Cornil, Prevost, Vulpian, Lockhart Clarke, Charcot, and others, and polio-myelitis anterior chronic, or chronic inflammation of the grey anterior horns, first pointed out by Duchenne. The latter disease is associated with complete flaccidity of the muscles and loss of their reflex excitability, followed by rapidly progressive atrophy in the bulk of the paralyzed muscles. Acute ascending paralysis described by Landry in 1859, is clinically characterized by a motor paralysis generally beginning in the lower extremities, and spreading rapidly over the trunk to the upper extremities.

Men are most frequently attacked. Of the sixteen cases collected by Levi, only four were in women. Secondary degeneration of the spinal cord, diseases of the brain, descending secondary degeneration of the pyramidal tracts, the diseases of cord itself, and peripheral nerves, are all of them well illustrated. Deformities and malformations of the spinal cord, are also treated of, e.g. absence, imperfect development, and duplication of the spinal cord, anomalies in length and thickness, congenital enlargement of the central canal in the spinal cord, abnormal accumulation of fluid within the cavity of the dura mater, in connection with a greater or lesser degree of alteration of the vertebral column, constituting what is called spina bifida,—sclerotic spasm from increased reflex irritability of the spinal cord, intermittent spinal paralysis, toxic spinal paralysis from poisoning by carbonic oxide, sulphide of carbon, tobacco, camphor, ergot, absinthe, mushrooms, also the severe acute paralysis of nervous system, evoked by opium, belladonna, strychnia, and paraplegia dependent on idea, first related by Russell Reynolds, and since met with by Prof. Erb. Forty-two pages are devoted by Prof. Erb, to the anatomical and physiological introduction to diseases of the medulla oblongata. He then treats of hyperæmia and hemorrhage, anæmia, injuries and wounds, acute bulbar myelitis, progressive bulbar paralysis, sclerotic centres, diffuse sclerosis, and as a finale, tumors of the medulla oblongata.

Our readers cannot but acknowledge that the 957 pages thus given to diseases of the spinal cord is the most exhaustive dissertation on record.

FOWNE'S MANUAL OF CHEMISTRY. THEORETICAL and Practical. Revised and corrected by Henry Watts, B.A., F.R.S. New American from the 12th English edition. 12 mo. Philadelphia: H. C. Lea. Toronto. Willing & Williamson.

The rapid strides which are being made in the department of chemistry, render it necessary to revise and correct the text books frequently. This manual is still the student's favorite. The English edition is in two volumes, but the American edition is presented in a single volume without any abridgment. The metric system is used throughout, but the equivalent terms in common use are still retained in brackets. We cordially recommend the book to students.

ATLAS OF SKIN DISEASES, by Louis A. Duhring, M.D., Prof. of Skin Diseases, Pennsylvania Hospital, Part IV. Philadelphia: J. B. Lippincott. Toronto: Willing & Williamson.

The present number contains beautiful plates of Vitiligo, Alopecia Areata, Tinea Favosa, and Eczema (rubrum). The text which accompanies the plates is of the most valuable and suggestive character. The work sustains in ever respect, the favorable opinions expressed regarding the numbers that have been received. While we fully believe that skin disease are best studied clinically yet the vivid pictures here given cannot fail to aid the practitioner greatly in the diagnosis of these affections.

APPOINTMENTS.—W. H. Ellis, M.A., M.B., has been appointed assistant Professor of Chemistry in the school of Practical Science, Toronto.

Dr. W. T. Stuart, has been appointed to the chair of Practical Chemistry, in the Trinity Medical School, Toronto.

Dr. Wm. Osler has been appointed one of the attending physicians to the Montreal General Hospital.

Dr. McPhedrain has been appointed lecturer on Botany and Zoology, in the Trinity Medical School, Toronto.

MATRICULANTS IN MEDICINE, TORONTO UNIVERSITY.—T. M. Milroy; E. R. Woods.

SCHOLARSHIP.—T. M. Milroy.

Births, Marriages, Deaths.

At Brampton, on the 9th ult., the wife of D. Heggie, M.D., of a daughter.

In Toronto, on the 30th Sept., the wife of W. H. Howitt, M.D., of a daughter.

On the 29th ult., A. H. Hughes, M.D., L.R.C.P. Edin., M.R.C.S., Eng., Surgeon, Bombay Army, to Louisa Rosalind, youngest daughter of H. G. Bernard, Esq., of Toronto.

At Newmarket, Oct. 23, J. W. Smith, M.B. Sheffield, to Miss Marion K., daughter of Silas Lundy, Esq., Newmarket.

At Walkerton, Oct., 3rd, J. J. Cassidy, M.D. of Toronto, to Appie A., daughter of A. Mesner, Walkerton.

In Montreal on the 29th ult., Dr. Park, of typhoid fever.

On the 7th ult., Dr. Davignon, of Longueuil, Que.