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THE Canadian Journal of Medical Science.

A MONTHLY JOURNAL OF BRITISH AND FOREIGN MEDICAL SCIENCE, CRITICISM, AND NEWS.

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SUBSCRIPTION, \$3 PER ANNUM.

All Communications, Letters and Exchanges must be addressed to the Corresponding Editor.

TORONTO, SEPTEMBER, 1879.

Selections: Medicine.

PUS IN THE URINE.*

BY CHARLES MURCHISON, M.D., LL.D., F.R.S.

Three tests are used to determine the presence or absence of pus in the urine.

1. In acid urine where there is a more or less creamy sediment with the upper part clear, heat produces greater or less opacity in the clear portion, and a much more marked one in the creamy layer. Pale lithates clear up on heating.

In alkaline urine, heat makes it a little more opaque (phosphates) cleared up by nitric acid; so that the two tests leave its turbidity much as it was before.

2. If liquor potassæ be added to the acid urine, the pus becomes viscid "ropy." If the precipitate be phosphates no change takes place. In alkaline pyuria the "ropy" change has already taken place.

3. The microscope shows pus corpuscles, identical with white blood corpuscles, a drop of acetic acid causes the granular contents to disappear and in its place a nucleus often three-sided is seen.

Pus in pyuria may have five sources: I. Female genital organs; II. Urethra; III. Bladder; IV. Kidneys and ureters; V. Abscesses which burst into the genito-urinary channels.

1. Pus from Female Genital Organs is due to vaginal leucorrhœa; *b*, uterine do.; *c*, ulcerated os uteri; *d*, cancer of uterus; *e*, lochia; abscesses, (e.g., pelvic cellulitis.) These are distinguished by (1) the clinical history and

symptoms; (2) the microscope shows pavement epithelium from the vagina, cylindrical from the uterus, or cancer structure; (3) a purulent discharge independent of micturitions; (4) absence of pus when the urine is drawn by catheter.

II. Urethral pus comes away before micturition, and between micturitions; urine usually acid. Causes are gonorrhœa, abscess of prostate, Cowper's glands, or perineum. In prostatic abscess there is pain at the end of micturition; rectal examination shows tenderness and pain and on pressure pus (and calculi sometimes) forced out of urethral meatus. Prostatic abscess may simulate stone, but there is an absence of symptoms of a renal calculus having descended; there is discharge during intervals between micturitions; there is often a history of gonorrhœa, swelling and tenderness of prostate; and absence of signs of stone on sounding.

III. Pus from the Bladder, most of it comes away at the end of the micturition; it is viscid and like "ropy mucus;" urine usually ammoniacal, fetid, and deposits triple phosphates; pain in bladder above pubis, increased before or after micturition; tenderness above pubis; increased frequency of micturition. The causes are (*a*) cystitis, (*b*) calculus, (*c*) new growth. A. In simple cystitis there is (1) pain severest just before the micturition, relieved by it, (2) hæmaturia rarely, (3) retention of urine, caused by stricture, enlarged prostate, stone, fevers, paraplegia, gonorrhœa, poisoning by cantharides or blood-poisoning (e.g. gout); (4) absence of symptoms of stone or new growth.

B. In Calculus there is pain at end of micturition and for some time after, and often referred to the end of the penis. Hæmaturia

*Extract of the last clinical lecture delivered by the late Dr. Murchison.

in small quantity, increased by exercise. Increased frequency of micturition, more especially during the day, the reverse being true in prostatic stricture; a sudden stoppage in micturition; a previous history of nephritic colic often; passage of a stone, red sand, or gravel; sounding.

C. *New growths.* Paroxysms of severe lancinating pain, independent of micturition; hæmaturia irrespective of exercise, irregular sometimes at long intervals, sometimes persistent, and copious, presence in the pus, the epithelial cells or villous processes; cachexia and emaciation: absence of stricture, prostatic disease, and other cause, possibly a hard, irregular, tender tumor felt by rectal or vaginal touch; possibly enlarged glands in the groin; thickening of the vaginal wall detected by the sound.

IV. Pus from kidneys or ureters, is at first uniformly mixed with the urine, but after a little settles as a creamy layer; urine acid as a rule but may be alkaline if there be cystitis; then the urine is turbid and does not settle. Pain and tenderness over kidneys, extending down to the bladder and penis; a tumor in the renal region may be sometimes detected. Increased frequency of micturition may be present. The causes are (a) certain rare cases of acute nephritis; (b) calculous pyelitis; (c) tubercular pyelitis; (d) pyelitis from obstruction.

In (a) certain rare cases of acute nephritis such as sometimes supervene in cases of carbuncle, boils, erysipelas, acute fevers, parturition, pyæmia, or gonorrhœa, there is a slight quantity of pus; degenerate products of nephritis in urine, epithelial, pus, or hyaline casts, etc.; the previous history of smokiness or other evidence in the urine of the existence of acute nephritis; 4, a quantity of albumen much too great to be accounted for by the amount of liquor puris; 5, general dropsy not uncommonly; 6, uremic symptoms possibly, such as headache, retching, drowsiness, coma, or convulsions; 7, the absence of any tumor to be detected externally; 8, a dry skin; 9, the previous history of one of the above causes. B. *Calculous pyelitis* is distinguished by: 1, a previous history, though not always, of nephralgia, a pain extending from the kidney to the testicle, penis, vagina, or thigh, attended with

rigors, nausea, vomiting, frequent micturition, hæmaturia, retraction or swelling of the testicle, pallor, a quick, feeble pulse, and some fever, perhaps; 2, pain and tenderness, or simply a burning or aching, not necessarily in all cases, however, more or less constant in the region of one kidney or both, which is increased by much exercise and fatigue, or may be present only during fatigue; hæmaturia, especially when the calculus is composed of oxalate of calcium, and in any other case after violent exercise, while microscopic blood is usually present at other times; 4, a variation in the quantity of pus from day to day; 5, the absence of casts; 6, crystals of uric acid, or, not uncommonly, of oxalate of calcium; 7, a tumor in certain cases, not in all, more or less painful, in the kidney region, which enlarges when the quantity of pus in the urine diminishes, and becomes smaller, or disappears, when the quantity suddenly increases; 8, attacks of intermitting pyrexia, occasionally ushered in by rigors, and followed by profuse sweating, which are most severe when the tumour is largest; 9, the absence of dropsy and other signs of acute nephritis, though the patient may ultimately die of uræmia, due to the wasting of the secreting tissue of the kidney; 10, its duration, which may be a fair lifetime (one case lasted forty years), or may end favourably, by the stone passing into the bladder, or becoming encysted.

C. *Tubercular pyelitis* is distinguished by: 1, the absence of any history of renal colic; 2, a constant dull pain in the back, over one kidney or both, with exacerbations when the ureter becomes blocked, and which is accompanied by tenderness over one kidney, in nine cases out of ten. 3, hæmaturia not uncommonly, which is slight, and may be the earliest symptom, and then disappear; 4, the unvarying, or steadily increasing, quantity of pus in the urine; 5, the absence of casts from urine, and the presence often of amorphous granular matter insoluble in acetic acid, of particles of caseous matter, or fibres of connective or elastic tissue; 6, the absence of crystals; 7, the formation, if the ureter be blocked, of a tumor, which may point externally, or even stretch across the middle line (of sixteen cases, a tumor formed in seven); 8, persistent pyrexia, usually intermittent and hectic, with night-sweats; 9, as a rule,

persistent and rapid emaciation, but the patient may even gain flesh under treatment ; 10, signs of tubercle in the lungs, bowels, testes, præstata, vertebræ, or elsewhere ; 11, the fact that it occurs more frequently in males than in females ; 12, the absence of dropsy and any tendency to uræmia, the patient dying from exhaustion ; 13, the rapid progress of the disease, which rarely lasts two years.

D. *Pyelitis from obstruction of the urinary passages* is distinguished by : 1, the history and the symptoms of a primary obstructive disease, as cancer of the uterus, stricture, enlarged prostate, hydatids in the pelvis, etc. ; 2, constant aching pain and tenderness in the back, over one kidney or both ; 3, copious urine of a low specific gravity, with little urea or albumen ; 4, a varying quantity of pus in the urine, possibly with casts, consisting of pus-cells from small abscesses in the substance of the kidney, or with an alkaline reaction due to the concurrent cystitis ; 5, very commonly paroxysms of intermittent pyrexia ; 6, the great tendency to headache and uræmic symptoms.

V. *If the pus be from an abscess bursting into the urinary passages*, its places of origin may be very various, some of them being : A. In rare cases, empyema. B. A tropical abscess of the liver. C. A psoas abscess. D. A prostatic abscess. E. Pelvic cellulitis after or independent of parturition. The urine is usually acid, and the pus falls as a creamy layer. Further, the diagnosis depends upon : 1, the clinical history previous to the pyuria ; and, 2, the concomitant symptoms and signs of the primary disease.—*New York Medical Record*.

CONTRACTURES IN HEMIPLEGIA.—A hemiplegia (cerebral) quickly followed by contractures, nearly always quickly results in death. It is always a sign of cerebral hæmorrhage, sclerosis, or softening from embolic or thrombic occlusion. Hysteria must be eliminated in the diagnosis. In it contracture occurs suddenly, develops rapidly and varies frequently ; facial paralysis is absent, but there is hemianæsthesia. Finally the contractures (except in the oldest cases, where organic lesion has developed) yield to anæsthetics.—*Cinn. Lancet and Clinic*.

BRITISH QUALIFICATIONS IN CANADA.

At the recent meeting of the General Council of Medical Education and Registration of Great Britain the question of Colonial registration of British qualifications came up for discussion. The following excerpt is from the *British Med. Journal* of July 26th :—

Communications from the Colonial and Privy Council offices, with legal opinions thereon by Messrs. Jenkyns and Ouvry, and an application from a Canadian practitioner, in regard to registration in Canada, referred to the General Council by the Executive Committee, were ordered to be received and entered on the minutes. Among the documents, was a petition from the College of Physicians and Surgeons of Ontario to his Excellency the Governor General of the Dominion of Canada, dated March 7th, 1879, asking him to submit the case of the petitioners, as set forth in their memorial, to Her Majesty's Government, and to recommend that those portions of the Medical Act passed by the Imperial Parliament which affect Canada and interfere with the rights of self-government and self-legislation conferred upon her Parliament and the legislatures of her several provinces by the British North America Act (1867) may be repealed. Among the grounds of this request were the following.

“The effect of permitting persons registered on the *Medical Register* of Great Britain to register in Ontario without complying with the rules of your petitioners' Council will have a most harmful effect on the progress of medical science in this province.....Physicians and Surgeons are distinct professions in the United Kingdom, but, being registered in the *Medical Register* of Great Britain, a physician or a surgeon can, under the provisions of the Imperial Acts, register in Ontario, and so become entitled to practice in all branches of the profession in that province, although only licensed to practice in one branch in the United Kingdom. . . . A number of diseases are necessarily treated differently in Canada and in the United Kingdom on account of differences, climatic and physical ; so that, in the interests of the public, it is necessary for medical students and professional men to receive a practical medical educa-

tion in Canada, or undergo an examination as to the fitness to deal with such distinctive diseases. . . . A grave injustice will be done to those institutions which resigned their licensing rights in favour of the petitioners if the qualifications of the various licensing bodies in Great Britain and Ireland shall, through the medium of the British *Medical Register*, entitle persons holding the same to practice medicine in the province. . . . The Imperial legislation referred to is practically in opposition to the spirit of the British North America Act, which assumed to leave the people of Ontario to deal with their civil rights."

The petition was supported by a report of a Committee of the Canada Privy Council, which stated—

"The Committee cannot help thinking that these Imperial Acts" (the Medical Act of 1858 and the Act to amend the Law relating to Medical Practitioners in the Colonies, 1868 "were passed without the attention of Parliament having been called to the fact that they infringed upon the legislative powers conferred upon the provinces and the Dominion, and feel assured that on the subject being brought before the notice of Her Majesty's Government, steps will be taken for the repeal of the objectionable provisions. It is obvious that if the legislation be permissible with respect to the medical profession, it might with equal propriety be extended by the Imperial Parliament to every profession, trade, and occupation in Canada, and would thus be subversive of the rights of self government graciously conceded to the people of the Dominion."

The legal opinion of Mr. Jenkyns on the subject was to the following effect.

The petition of the College of Physicians and Surgeons of Ontario is based on an entire misapprehension of the law. The Act of 1858, which was in force at the time when the College of Physicians and Surgeons of Ontario was established, and when the Canadian Federation Act was passed, gave to practitioners registered in the *Medical Register* of the United Kingdom a right to practice throughout the Queen's dominions.

"The Act 31 and 32 Vic., cap. 29, relaxed

the law in favour of the colonies by allowing a colonial legislature to require registered United Kingdom practitioners to be registered in the colonial *Register*, but it preserved the right of those practitioners by allowing them to claim registration as of right. Under this Act, if the Ontario legislature require medical practitioners registered in the United Kingdom to be registered in Ontario, the Ontario Registrar is bound to register them; but otherwise the Ontario Registrar is not obliged to register them, although unable to prevent their practicing without being registered. . . . The Privy Council of Canada omit to notice that at the time the Act of 1858 passed, the Ontario College did not exist. Nor are the Privy Council correct in stating that the Act of 1868 is a greater interference with their self-government than the Act of 1858, because the Act of 1868 does not compel a colony to register United Kingdom practitioners, but authorizes a colonial legislature to do what it could not do under the Act of 1858—namely, require a registered United Kingdom practitioner to be registered in the colony. To preserve the rights conferred by the Act of 1858, it was necessary to provide that if the colonial legislature itself requires such registration it shall not take away those rights, and shall be bound to register such a practitioner without further examination. The interest of Canada would appear to be to maintain the privileges given by the Act of 1858, as, if the pending Bill passes, a holder of an Ontario diploma will be able to be registered in the United Kingdom *Register*, and thus be able to practice under his Canadian diploma throughout Her Majesty's dominions."

The documents having been referred by the President to Mr. Ouvry, for his opinion thereon, he stated that he thought the question might be left where Mr. Jenkyns had put it; that the suggestion of the Ontario College that English registered practitioners are not fit to practice in Canada was peculiar, especially as legislation was contemplated to admit Canadian practitioners here; that the Government must consider the matter as an Imperial question, affecting the relation of the mother country with her colonies; and that it would be a thing to be lamented if, from any action on the part of the colony, freedom to practice should be done away with or limited.

NITRITE OF AMYL IN CHLORAL-POISONING.

BY J. G. SINCLAIR COGHILL, M.D., F.R.C.P. EDIN.

The following case indicates so markedly the value of nitrite of amyl as an antidote in poisoning by chloral-hydrate, and otherwise presents so many other points of interest in connection with the symptoms produced by overdose of that now much used and much abused drug, that I have yielded to the request of some of my medical brethren to make it public.

A. B., aged 62, of spare habit, was a frequent and intense sufferer from gout, in seeking relief for which he had unfortunately become somewhat addicted to alcoholic stimulants and narcotics generally. Late on the evening of the 23rd of April, after a liberal potation of whiskey, he took a large, but unfortunately an unascertained dose of his favorite anodyne, chloral. The dose must have been a very large one, for within a very few minutes he became completely insensible. Fortunately, medical assistance being at hand, the case received immediate attention from the very commencement of the symptoms, which, however, became so alarming, that in about two hours I was sent for. I found that artificial respiration had been kept up for some time, but only with the effect of inducing feeble, superficial, gasping respirations, at the rate of four per minute. The surface was cold and deeply cyanosed, and the pupils strongly contracted to the size of a pin's head. The pulse, however, was 80, full, but soft and compressible. I had the tongue at once pulled forward, and maintained in that position with forceps. Taking the state of the pupils as an indication, and remembering Liebreich's theory of the decomposition in the system of chloral into chloroform, I immediately administered by inhalation from a handkerchief about twenty drops of nitrite of amyl. The effect was immediate. Within two minutes, warmth had returned, even to the extremities, and the surface had assumed the hue of health. Within ten minutes, the respirations had become much deeper, reaching nine per minute, and afterwards gradually increased up to twelve. The amyl had to be repeated in a

smaller dose in about two hours, with permanent effect. At 9.30 next morning, the general condition was found to have improved somewhat, but there was no return of consciousness; and an attempt to give fluid nourishment by mouth had produced great embarrassment of breathing. I ordered an enema of brandy and Liebig's extract in arrowroot to be given, and repeated every two hours. After the second enema, the patient became quite sensible, recognized and spoke to those around him, and swallowed some food with little trouble. I saw him again at 6.30 p.m., when the water was drawn off normal in amount and quality. I am informed that he continued to improve until 9 p.m., when he suddenly started up as if from sleep, with staring eyes, threw up his hand, uttered a cry, and fell back dead. I am inclined to think this fatal result might possibly have been averted by a more copious and frequent stimulation *per anum*.

The principal points of interest to be noted in this case are the extreme contraction of the pupils; the intense affection of the respiratory, the complete immunity of the circulatory, system; the rapid recovery of warmth and colour, with restoration of the respiratory function under the influence of nitrite of amyl; the return of consciousness in response to stimulation *per anum*; and the sudden failure of the heart's action, which proved immediately fatal.

In cases of poisoning by chloral-hydrate, very opposite observations are on record with reference to the state of the pupils, and also as to the relative extent to which the action of the heart and lungs is influenced by the drug. Mr. W. Sedgwick, who has made a special study of the subject, states that in most instances the pupils are contracted; while Dr. Cleveland, and especially Dr. B. W. Richardson, report the contrary to be the invariable condition. I believe that the explanation of these apparently discrepant phenomena must be sought for in the difference in the amount of the drug swallowed, and the corresponding rapidity of its action. When chloroform is administered in excess *too rapidly*, it seems to prove fatal by paralyzing the respiratory centres, while the pulse remains comparatively unaffected, the

pupils being *contracted*; but when chloroform inhalation is kept up *too long*, so that the drug accumulates slowly in the system, the heart first yields to its influence, and succumbs earlier than the respiration, and under these circumstances the pupils will be found *dilated*. I have ascertained these conditions, both experimentally in the lower animals, and from a large experience of chloroform administration commenced twenty-two years ago, while assistant to the late Sir James Y. Simpson. A parallel discrepancy in symptoms may be noted also in cases of delirium tremens, where the phenomena of the attack have been developed as a result of prolonged drinking to excess, or from one deep debauch.

Liebreich, the discoverer of chloral-hydrate, believes that it acts on the system by being resolved into chloroform from decomposition in the presence of an alkali; and although this opinion is purely theoretical, yet it must be admitted that there are marked and close resemblances both in their physiological and therapeutic effects. This would at once explain why nitrite of amyl should be the best antidote in chloral-poisoning, much more certainly than strychnia, which has been proposed as its antagonist; while, strangely enough, nitrite of amyl itself is proposed by Dr. B. W. Richardson as the antidote to strychnia poisoning. May it not be that nitrite of amyl will prove the appropriate antidote when the drug has been administered in such quantity as to act rapidly on the respiratory centres, *with contracted pupils*, and that strychnia should be given when the drug has acted slowly as a cumulative poison when the heart has succumbed, *and the pupils are found dilated*?—*Brit. Med. Jour.*

TREATMENT OF HYPERTROPHY OF THE TONSILS.
—**QUINART.**—In cases of non-inflammatory hypertrophy of the tonsils, Dr. Quinart recommends massage of the hypertrophoid glands followed by alum gargles. The moistened index finger is plunged into powdered alum and is then carried directly to the tonsil to compress and malaxate it. This being done the patient makes use of an emollient or aluminate gargle, and at the end of two or three days he will be able to do the massage himself.—*L'Union Médicale.*

ON LEUCIN.

BY DR. JOHN C. PETERS.

In the article on Acidity in the April number of the *Physician and Pharmacist*, leucin is constantly spelled "lencin." The typographical error escaped the attention of the author, to whom the proofs were submitted, but it is supposed that any one at all conversant with the subject, readily made the obvious correction. Still, as this affords an excellent opportunity to say a few words more on the subject of leucin, the juncture will be taken advantage of to complete the subject.

We will follow Murchison, who is most clear upon the subject. In the first place, *urea* is found in various parts of the system, and largely in the liver, where its appearance is preceded by leucin and tyrosin, which are afterwards to be converted into uric acid and urea, which then are merely eliminated by the kidneys.

This is noticed more particularly in acute atrophy of the liver, in which there is a great diminution, or else the total disappearance of urea and uric acid from the urine, and also of the chlorides, sulphates and earthy phosphates, and the substitution of two new substances of a peculiar nature, viz., leucin and tyrosin.

These substances are products of the metamorphosis of nitrogenous matter, intermediate between the albuminous fibrin on the one hand, and uric acid and urea on the other.

It is well known that there is a great destruction of fibrin in the liver, which is converted first into leucin and tyrosin, and should be still further changed into uric acid and urea, in order to be cast out of the system by the kidneys. But this process is stopped in its first stages in the liver in acute yellow atrophy, and instead of urea and uric acid leucin and tyrosin, in their crystalline forms, are found in the tissues of the liver, spleen and kidneys, and are also excreted in large quantity in the urine, from which they separate as a distinct deposit on standing, or they may easily be obtained by evaporating a few drops of the urine on a glass slide. The detection of these crystalline bodies in the urine in a severe case of jaundice may be said to clinch and complete the diagnosis of acute atrophy of the liver.

To repeat, we may say that the albumen of the food is converted by the gastric juice into peptone, which is absorbed by the intestinal veins, and carried to the liver, where it is just decomposed into glycogen, leucin and tyrosin, which should be ultimately resolved into uric acid, and then into urea.

One of the most constant signs of functional derangement of the liver is an imperfect formation of urea, out of uric acid, evidenced by the deposit of lithic acid or lithates, and of a dark colouring matter closely allied to lithic acid in the urine.

This shows that leucin and tyrosin have been changed into uric acid, but its further conversion into urea has been checked.

In the several organic disorders of the liver, the formation both of uric acid and urea has been stopped, and leucin and tyrosin only have been made.—*Physician and Pharmacist.*

HOSPITAL MEDICAL REGISTRATION.

The value of the information that has already been derived from the accumulation and arrangement of vital statistics is in itself sufficient encouragement to call forth further good work in this direction. Our large hospitals, as museums and laboratories of clinical and pathological facts, afford a wide field to the statistician; but at present, in too many instances, these facts are little used for the furtherance of knowledge. The question of the general registration of disease has often been mooted; and, if ever public medicine is to be advanced by medical registration, the methods must be first organized in our hospitals, where the greatest facilities exist for carrying on such work accurately and effectually. The term "registration" is here used to indicate the systematic record and arrangement of the facts observed in the clinical and pathological examinations. Hospital cases, without registration, are like specimens in a museum unlabelled and uncatalogued; registration is the collection and arrangement of facts, and affords the opportunity for the application of the logical law, that phenomena which vary coincidentally are connected by some line of causation.

In organizing and carrying out in practice a

plan of registration, some general systematic supervision of the primary recording of the facts to be registered is obviously necessary. As the work of case-taking is largely carried on by clinical clerks, it is very desirable that special instruction in systematic case-taking, as distinct from clinical examination, should be given to students before undertaking this duty.

Each case, when completed, should have the diagnosis endorsed upon it; the primary disease, secondary conditions, and complications, being here epitomised, in order that each of these heads may be duly registered.

It is highly desirable and perfectly practicable to arrange an index of diseases. An abridged nomenclature of diseases, or diseases and symptoms, being decided upon, the name of each day may be written at the head of a page, and arranged in alphabetical order; while vertical columns in the page are headed as "reference to case," "age," "result," "days in hospital," etc., these particulars in each case being entered on the same line, and one line devoted to each case. Such an index, if constantly posted up, would be of great value, giving a running account throughout the year of the statistics of each disease and reference to the notes of each case. The primary diagnosis of disease would be entered in the index; and secondary conditions and complications, or important symptoms, might be entered in red ink, thus indicating that they were not the primary disease. We trust that this subject will receive the attention it merits, as essential to the full use of the facts recorded in clinical and pathological work for the advancement of science.—*British Medical Journal.*

CHRONIC ULCERS AND ECZEMA CURED BY GALVANISM.—Take a silver plate large enough to cover the patch or ulcer, attach it by a copper wire to a plate of zinc. Place a piece of lint over the ulcer and upon it fasten the silver plate by means of a bandage. Wrap the zinc plate in lint, kept wet in dilute acetic acid, and secured to the limb by a bandage. In a case reported, an obstinate ulcer became covered with granulations after the battery was worn three days and in six days was healed.—*N. Y. Med. Record.*

PROGNOSIS IN INFANTILE PARALYSIS.

In a clinical lecture delivered by Prof. Jules Simon (*Gaz. Méd. de Paris*, Jan. 11, 1879) at the Hospital for Sick Children, the following points regarding prognosis are worthy of notice. Generally speaking, this disease leaves behind it a greater or less degree of paralysis. In a well-marked case, which has lasted four or five weeks, the cure will never be complete. But this persistent paralysis should not justify us in always giving a grave prognosis. For, though it may be always apparent to the skilled observer, the paralysis may disappear sufficiently to escape the notice of all others, and in other cases it may be remedied by orthopædic apparatus. M. Simon considers that there are three periods in the malady, in which the prognosis may be given in different terms. Quite at the outset, it being impossible to foresee the result, prognosis must be guarded and general. Time is the main element in prognosis now. In the second period, more precision is possible in prognosis. If the paralysis tends rapidly to improve, the prognosis is not very serious; but if it persists and spreads, there is a fear of muscular atrophy, fatty degeneration, and consecutive deformity. If the paralysis is soon accompanied by atrophy, *i.e.*, in from ten or fifteen days to three weeks, cure is impossible, and deformity will remain; but if the atrophy comes on slowly, the disease will, at least to a great extent, get well. In other cases, we are in presence of the accomplished fact. The patient is seen in the stage of deformity of infantile paralysis; there is atrophy and shortening of the limbs or club-foot. But even in these cases much may be done to justify a not altogether unfavourable prognosis by the judicious use of orthopædic apparatus. The etiology of infantile paralysis is very obscure. It is rarely seen before the age of six months, or after three years. M. Simon has seen cases which began at the ages of 4, 7, 7½, and even 12 years; but these are exceptional. Sex appears to have no influence. The occurrence of dentition and diarrhoea have been credited with it; lastly, *cold*, and especially staying in a damp place, have appeared to M. Simon to have been the cause in some cases he

has seen, so that there would seem to be a rheumatic infantile paralysis.

In 214 children under one year old, among whom 41 were within a month, and 17 within a day old, these last evinced the patellar tendon reflex very markedly. The Achilles tendon reflex was not fully brought out in all the cases of children within one year old; but the patellar reflex was marked in nearly all. The author thinks that this phenomenon is a reflex one, for the distinctness of the symptom decreased with advancing age; although, according to Soltmann, the excitability of the peripheral nervous system gradually increases. This increased excitability is compensated for by the decreased tendency to reflex phenomena.—*London Med. Record.*

The *Louisville Medical News* says:—"The question of fees for teaching does not concern the schools a whit more than it does the profession at large. No other circumstance has worked such fruitful evils as the miserable price which has been set upon entrance to the practice of medicine. It has seduced hundreds of young men from positions intended for them by nature—behind the plough, the counter, at the anvil or upon the shoemaker's bench, where they might have been useful members of society—to follow a seemingly easy path in life, but which, ten chances to one, in such instances leads simply to starvation or to quackery; and meanwhile the bread of deserving men is divided, and the title of doctor, which is given to deserving and undeserving alike, sinks in the estimation of the people. It is all the veriest balderdash, this talk about the honest and deserving poor, and their rights for a chance in life. Where one such suffers by proper fees, a hundred are kept from their ruin; and it is simply in charity that the entrance to what should be a learned and what is a slowly-rewarded profession should be above their temptation. When medicine is thrown open only to self-reliant men, such as are able to pay their way properly, no matter at what cost of self denial, or to those who have friends sufficiently interested in them to pay it for them, men with proper educational advantages will be most apt to enter its lists for a proper course of study.

Surgery.

THE CAUSE AND CURE OF PRICKLY HEAT.

BY G. H. FOX, M.D.

Lichen æstivus, or "prickly heat," an affection which appears as a trifling affair to those who do not suffer from it, but is a serious affliction to those who do suffer, is too well known to require description. It affects both the rich and the poor, the old and the young, the robust and the weak, and occurs not so frequently after a single day or two of very hot weather as after a period of several days during which the thermometer keeps up almost constantly in or near the nineties.

Now that the heated term is rapidly approaching and a large proportion of a sweltering community is doomed to suffer more or less from this annual scourge, a few words respecting its cause and cure may be read with interest. The predisposing causes are prolonged and excessive summer heats, an injudicious diet and a disregard for cleanliness. The exciting causes are unnecessary clothing and perspiration allowed to remain upon the skin. The weather being beyond our control we can only seek to prevent as far as possible its debilitating effect. Much can be accomplished by "keeping cool" mentally, while performing deliberately whatever physical labour is indispensable. Frequent excursions can be made to sea-shore or country even by the poorest classes in our crowded cities, and nothing will prove more invigorating and prophylactic of prickly heat. Diet has a decided influence in predisposing to the affection. How some people can manage to go through July and August on a winter bill of fare and not suffer more than they do is a physiological mystery. When the appetite is dull, as is usual in hot weather, fruit and vegetables should be our chief support, and children showing a tendency to the annoying rash may be restricted with advantage to milk and a very light diet. As a daily beverage, lemonade taken very slowly and in small quantities at a time is a most desirable substitute for iced water. In citing uncleanness as a predisposing cause I do not mean merely a lack of soap and water, since no amount of

bathing will prevent the occurrence of prickly heat, but refer to that mistaken notion of comfort and propriety which leads some to discard flannels with the first approach of warm weather. Without a thin porous texture in contact with the skin no one can expect to be dry and clean while the idea that the friction of a thin merino undergarment can be the cause of prickly heat is a mistaken one. A superabundance of clothing is often an exciting cause of the affection in infants and young children. Fashion, which cruelly exposes youthful legs to the chill air of May and November, demands that babies, whether in July or January, shall wear a certain number of layers of clothing, and in the former month prickly heat is often the penalty. In adults clothing is often discarded when it should be worn—not with a view of keeping the body warm, but for the purpose of keeping the skin dry. A fleshy man or woman perspires freely, the linen or cotton worn next the skin becomes soaked by perspiration, and like a poultice induces a diffused congestion with follicular inflammation. Of flannel some observant sage has remarked that no matter how cold or wet it may be it is always dry and warm. Now when thin merino is worn next to the skin in the hottest weather, and especially when frequently changed, no sour perspiration can decompose upon the skin, macerating the epidermis, irritating the peripheral nerves, and giving rise to an unsightly and uncomfortable eruption.

From what has been said in the foregoing as to the causes of prickly heat it will be inferred that the chief end and aim of treatment is to keep the skin dry. Upon success in this respects depends both the prevention and the cure of the eruption. We cannot of course expect the community to abstain from perspiring during July and August, but we should urge the necessity of keeping the perspiration absorbed as fast as it is excreted, for no one with a perfectly dry skin will suffer from the eruption.

In a very obstinate case it is always desirable to inquire after and to regulate the diet and the clothing, but I have found that in the great majority of cases the eruption will disappear quickly under a routine treatment consisting

of an alkaline diuretic and an absorbent powder. Not to go beyond the resources of the household economy, I often recommend cream of tartar water to be taken internally and starch powder to be applied locally and in general, no better plan of treatment could be asked for.

In place of a weak solution of cream of tartar in water, a whey may be made by adding a half ounce to a quart of milk, boiling and straining out the curd; or a pleasant effervescent drink made by adding a half teaspoonful of bicarbonate of soda to a half glass of lemonade. Other diuretics might be preferable in some cases, and oxide of zinc or bismuth might perhaps be advantageously used as a dusting powder, but I mention the cream of tartar and starch powder plan of treatment as being a very efficacious one, and perhaps the simplest and most available one in ordinary family practice.

Sometimes the skin may be so severely inflamed as to seemingly require some sedative or antiphlogistic lotion, but a cool bath and a little stimulation of the kidneys will immediately lessen the hyperæmia and check the intense pruritus. Lotions and ointments, though often of service, are rarely needed save in cases where the skin has been severely scratched or become the seat of a secondary eczema. A rule of treatment which will invariably prove successful is to keep the kidneys active and the skin dry.—*Physician and Pharmacist.*

INCONTINENCE AND RETENTION OF URINE IN CHILDREN.

BY W. F. TEEVAN, B.A., F.R.C.S.

Surgical causes of incontinence are: 1. Rectal complaints, such as piles, fistula, excoriations. 2. Ascarides. 3. A tight foreskin. 4. Congenital insufficiency of the external urethral orifice. 5. A calculus impacted in the urethra.

If the relation of the calibre of the external orifice to the general urethra be disproportionate the result is that the urine cannot escape as fast as it ought to do, and irritation is set up in the peripheral extremity of the nerve, which disturbs the vesical centres.

If a stone has just entered the meatus internus, it will be firmly and accurately em-

braced by the sphincter, and cause retention. If, however, the stone advance half an inch further, incontinence will be the result, for the calculus will then act as a gag and prevent the sphincter from closing, and the urine will dribble away along the sinuosities of the stone. In cases of incontinence where a surgical cause cannot be elucidated, when the complaint is only nocturnal, belladonna, or sealing the meatus externus with collodion at bed time is most useful. In diurnal incontinence strychnia is indicated. Blistering and an exclusive milk diet must not be neglected. If all other means fail, the application of a mild solution of nitrate of silver to the neck of the bladder is justifiable. Retention of urine in children is usually due to (1) congenital contraction of the meatus externus; (2) phimosis; (3) stone.

A small incision suffices to remove the cause. It is important to keep the enlarged orifice patent by a plug of oiled lint. In phimosis the indication is of course to incise or dilate.—*London Lancet.*

THE HYPODERMIC USE OF CARBOLIC ACID IN PILES.—Prof. E. Andrews, M.D., of Chicago, says, in the *Michigan Medical News*:—The evidence in my hands points to the conclusion that if the following rules be observed the hypodermic injection of piles is less painful and fully as safe as any other operation. 1. Inject only internal piles. 2. Use at first only one part of carbolic acid to twenty parts of the excipient, and stronger solutions only when these fail. Inject only two to four drops at first, and repeat with larger doses if needed. 3. Inject very slowly, smear the parts first with unguent, to protect them from accidental dripping, keep the pipe of the syringe in the pile for a few moments, until the fluid becomes fixed. 4. Treat only one pile at a time, and allow from four to ten days between the operations. 5. Dangerous hæmorrhage has occurred, as in other operations, from the patient proceeding at once to active exercise. He should be confined to bed the first twelve hours, and returned to it subsequently if the parts inflame much or the pile suppurates or mortifies. This great western epidemic of pile doctors is one of the most interesting events in the history of surgery, and seems to have resulted in the addition of a really valuable improvement to our resources.

TREATMENT OF LUPUS BY SCARIFICATION.

Dr. Lelongt, in his thesis upon the pathological anatomy of lupus and its treatment by linear scarification, compares the merits of this method of Vidal with those of the treatment, by scraping, of Volkmann. Dr. T. Veiel was the first to employ the former method. Dr. B. Squire has conjoined both with advantage. Vidal adopts Veiel's method with good success. It does not prevent relapses; it does arrest the course of lupus, and cause its disappearance in a comparatively short time. The skin is locally anæsthetized; then, with a needle like a cataract needle, linear parallel incisions are made as close to each other as possible. Similar cross-cuts are then made, leaving the skin divided into lozenges about 2 mm. broad. These incisions must penetrate the whole thickness of the skin, a rule which it is easy to observe, as the sound and diseased tissues differ markedly in consistency. The whole surface is to be thrown off, so there need be no fear of making too many scarifications. Hæmorrhage is inconsiderable. Iodoform is then every morning powdered upon this cut surface, which cicatrizes in a week, when the process may be repeated. Every lupus nodule requires, on an average, six or seven such scarifications. The scar is flat and slightly depressed, and its redness gradually diminishes. The dermatologist must be ready to repeat the operation the moment signs of a relapse appear. Dr. Lelongt thinks that the subacute inflammation set up in the neoplasm destroys the old, or possibly segmenting, cells, while the embryonic ones with the connective tissue are stimulated to the formation of a cicatrice. This method is adapted to ulcerative and to erythematous lupus. Large surfaces must be treated by small, distinct islands, one at a time, which should be at first in the periphery of the patch, thus arresting more speedily the progress of the disease. This method, as well as that of the curette, have each their advantages; the latter, however, would seem preferable for hypertrophic lupus or where the formation is considerable. The cases in which each is superior can only be decided in due course of time, when the relapses and cicatrices have been more studied.—

Archives of Dermatology.

PARTIAL DISLOCATION OF THE FOURTH CERVICAL VERTEBRA DUE TO MUSCULAR ACTION.

BY JOHN A. WYETT, M.D.

On the morning of March 7, I was summoned to see a lady, who, I was told, had injured her neck. The history of the accident was as follows: In the act of bathing, while standing with her neck twisted, (the face being turned sharply to the left) she had lifted the right forearm and hand over the right shoulder, and was sponging herself between the scapula. While in this position she was seized with sudden and intense pain in the neck, more especially the right side. On arriving, about thirty minutes after the accident, I found her suffering intensely; the neck was twisted to the left and immovable, and the face turned and looking over the left shoulder. Her left hand was grasping the right side of the neck over the fourth cervical articular processes. She complained that she could scarcely breathe, and that there was a painful numbness running down the right arm. On running my finger down along the processes of this side, I found there was an intense pain on pressure at the junction of the right articular processes of the fourth and fifth vertebra. Seizing the head, I carefully attempted to rotate it to the right, but the entire body turned with it. Feeling confident that there was a dislocation forwards of the fourth articular process of the right side, upon the fifth, I seized the head from behind, on both sides, placing each hand with the thumb under the occiput, and the fingers under the jaw and chin, and turned the head slightly to the left, then made strong extension and rotated to the right. The head turned into its position without any trouble, and the pain instantly ceased. I moulded a shellac splint on the right side of the neck, and over the shoulder of the same side, and threw a figure of 8 roller around this shoulder and the neck. During the next two days there was considerable pain in the right arm and side, and along the track of the cord, which was relieved by morphine.

The patient recovered fully in a week, and has not since suffered. It is now more than three months since the accident. Dislocation

of the vertebra, without fracture is in itself a rare accident, and a simple displacement by muscular contraction has, as far as I am informed, not been reported. I am fortified in the correctness of the diagnosis in my case by the following facts :

1. There was complete fixation and immobility of the neck, which was relieved by the successful reduction.

2. Interference with respiration, showing that the filaments of the phrenic nerve were pressed upon. Pain in the arm, due to the pressure on those filaments of the fifth nerve escaping from the fourth vertebral foramen, which join the brachial plexus. Pain in the track of the cord, due to the slight pressure it received from an incomplete dislocation of the vertebra. Entire disappearance of these symptoms at the moment of reduction.

3. That there was no fracture, was evident from the absence of crepitus and the rapid recovery. The symptoms could not have resulted from rupture of muscle or tendon, because it would not have rendered the neck immovable, nor would the pain have disappeared so rapidly in case of rupture, where there would have been more extravasation and consequently more material for absorption.—*The Hosp. Gaz.*

APHORISMS ON THE NATURE AND TREATMENT OF GONORRHOEA.—Dr. Louis Bauer lays down the following, in the *St. Louis Clinical Record* :—
 1. Gonorrhœa is indisputably a local disease.
 2. The cause of gonorrhœa is local also, and of ephemeral duration.
 3. Gonorrhœa is inflammatory in character, and if not disturbed by stimulating treatment, limited to the anterior portion of the urethra.
 4. Primarily gonorrhœa affects the mucous membrane only.
 5. Whatever may be the primary disintegration of the urethral lining by gonorrhœa, the structures involved are endowed with the power of spontaneous repair, that is to say, the reproduction of epithelium.
 6. The reason why the erythematous inflammation of the urethral canal deserves special consideration and treatment is its special function to serve as an aqueduct for a saline fluid (urine).
 7. The only rational indications for the treatment of gonorrhœa are :
a. To protect the raw surface of the mucous membrane against contact with urine.
b. To dilute the urine by frequent bland beverages, warm (alkaline) baths, and the like.
c. To reduce the inflammation and the hyperæsthesia of the nerve papillæ.

Midwifery.

OVARIAN MENORRHAGIA.

BY ALFRED MEADOWS, M.D., LOND., F.R.C.P.

* * * * *

L. F., aged 23, had been married four years, but was never pregnant. Her catamenia began at thirteen, and at once continued every three weeks, being very profuse, and lasting for seven or eight days. Since marriage they had been even more profuse, and had also been accompanied by a good deal of pain.

I would here remark that such a history as this at once suggests to my mind ovarian troubles. From the very commencement of what I may term the ovular life of this woman, there was an abnormal element about it. Her menstrual periods, in other words, her ovulation, occurred much too frequently, and the effect upon the uterus was shown by an exaggeration of the menstrual discharge. Then again, when, by reason of her marriage, her sexual functions were stimulated, ovarian activity was yet further increased ; and now, for the first time, pain was added to the history, and the uterine discharge was still further increased. Thus far, then, clinical history and physiological and pathological teaching went hand in hand. Now let us see what the physical examination revealed.

The cervix uteri was situated rather posteriorly in the pelvis, and somewhat more to the left side. This latter displacement seemed to be caused by a swelling of the size of a hen's egg, situate in the region of the right ovary. On the left of the uterus, a similar but smaller swelling was felt. Both these swellings were extremely tender to touch, and they presented a kind of cystic feel. In fact, they were evidently enlarged and inflamed, or at least swollen and congested ovaries ; so that here again the facts corroborated the theory contended for, especially as the uterus itself was perfectly healthy.

Lastly, as to treatment. Thirty grains of the bromide of potassium and one drachm of the syrupus ferri bromidi were given three times a day. Locally, a pessary containing one grain of the alkaloid conia, and one-twelfth of a grain of atropine was ordered to be inserted.

into the vagina every night. Under this treatment, steadily persevered with for three months, with occasional slight modification, and sometimes suspending it altogether when constitutional symptoms supervened, the patient vastly improved; the ovaries assumed nearly their normal size, the catamenial discharge greatly diminished, and, instead of menstruation recurring every three weeks, the intervals became fully three and a half weeks, while all pain disappeared. Thus, also, in treatment, unmistakable proof was afforded of the soundness of the pathology; and where this is the case, if it be also based on an accurate appreciation of physiological action, success in treatment is, I would almost venture to say, a moral certainty.

Let me now say a few words as to the treatment of these cases of ovarian menorrhagia, as exemplified in the foregoing illustration. I do not think I at all exaggerate when I say that, in ninety-nine out of every hundred cases of menorrhagia which come before the practitioner for treatment, his first thought is, what form of astringent shall I give? And the answer probably in most cases will be, an astringent chalybeate—either the perchloride or the pernitrate, or some similar preparation of iron, will be almost certainly prescribed. No wonder that such routine practice frequently fails; for as I stated at the beginning of my paper, a very considerable number of cases of menorrhagia which come up for treatment are of the kind which we have been considering, and for such as these, the persalts of iron are worse than useless; their only effect will probably be to still further force on ovulation, and thus to aggravate the complaint. Indeed, if the pathology which I have sought to enforce in this paper has any basis in reason and fact, then to administer astringents in any form is surely unscientific; it is, as it were, beginning at the wrong end; it seeks to curtail capillary action at the uterine end of the pole as it were, whereas in reality, the mischief is being wrought at the ovarian end; and our treatment, therefore, ought to be directed to this point. In other words, we should disregard the result—the menorrhagia, and we should concentrate our attention upon the cause—the ovulation. Hence

the remedies ordered in the above mentioned case, and hence the successful issue.

Of all drugs in the *Pharmacopœia*, I know of none which possesses such great power as the bromide of potassium in controlling this particular form of menorrhagia. I ought rather to say, for that better expresses my meaning, that no other drug possesses in a like degree the power of limiting ovulation. I believe, indeed, that we may absolutely suspend the function altogether, and produce in time an atrophy of the ovary by the prolonged administration of this drug in large doses. I have seen cases again and again in which menstruation, and therefore ovulation, has been delayed for weeks from apparently no other cause than this; and I have successfully arrested and cured scores of cases of this form of menorrhagia without ever giving any kind of astringent, but merely administering the bromide of potassium. Occasionally, but by no means always, I combine with it the bromide of iron. This drug seems to me to possess a somewhat similar action; certainly it does not act in any way as the other salts of iron. It seems to favour the absorption of certain glandular swellings, which cannot be said at least of any persalt of iron. Sometimes I give the iodide of potassium, and sometimes the iodide of iron, in conjunction with the bromides. I believe that they all act very much in the same manner; but certainly none are so efficacious as the bromide of potassium. Indeed, I may say it is my sheet anchor in these cases, and I regard it as almost, if not quite, a specific in ovarian menorrhagia. What its special mode of action may be, I fear I cannot with certainty divine; there is, indeed, nothing more difficult to define than the exact *modus operandi* of drugs; but I would at least venture to state my conviction that this drug acts directly through the nervous system, and especially upon the nerves of the blood-vessels. In this way it is, I believe, that it exerts so beneficial an influence in cases of epilepsy; and it seems to me not unlikely that the good results wrought in those cases of epilepsy in women, which occur so frequently in connection with menstruation, are due directly to the influence of the bromide in controlling ovulation and so diminishing this form of reflex irritation.

In connection with the hypothesis here stated as to the *modus operandi* of bromide of potassium upon the nerves of the ovaries, let me refer to the other part of the prescription given in the case above detailed. The two alkaloids—conia and atropia—were ordered to be used *per vaginam*. You will remember that pain became a prominent symptom in this case after the patient married; and I have just stated my belief that the bromide acts beneficially upon the local nervous system. It would seem, then, if this be therapeutically sound, that we ought to seek to influence nervous action in order to control ovulation. And this would appear to be specially necessary where pain was also a prominent feature. Now, of all the anodynes we possess, none, I think, can compare with conium as an anodyne to the generative or sexual organs; and its influence upon the ovarian nerves is quite remarkable. I have even thought, from observations I have made, that it not only allays pain, but that it also calms vascular excitement, and so exercises a controlling and moderating influence even upon ovulation itself. Nor does this seem unreasonable or unscientific, when we consider how much vascular activity is influenced by nervous excitement. At all events, I am satisfied that it does exercise a most beneficial effect in the class of cases we are considering. Atropia or belladonna seems also to possess similar powers, but by no means to the same extent; and it has the disadvantage of causing sometimes serious constitutional disturbance even in small doses. Moreover, with an agent so efficacious, and I may add so uniform, in its results as conium, we need not multiply our resources. I may say that I always use the alkaloid *conia* in one-grain doses for a pessary, just as I prefer atropia to belladonna, because the alkaloids are cleaner in use, do not create any dirty-coloured discharge, are smaller in bulk, and are certainly not less effective.—*British Medical Journal*.

SIGN OF DEATH.—Three hours after death, every trace of faradic muscular irritability is found to have disappeared, and the most powerful current will remain absolutely ineffectual; in suspended animation the muscles respond freely to a current of moderate force.

Original Communications.

SMALL-POX IN ONTARIO.

FROM 25TH OCT. LAST TO DATE.

BY A. A. RIDDEL, M.D.

[Read before the Toronto Medical Society, June 26th, 1879.]

(Concluded.)

24. Nov. 30. The keeper of the boarding-house in which No. 1 had boarded. He was under homœopathic treatment, medicinally and otherwise, except with respect to the face. He was 64 years of age; said he had been vaccinated when young, and had had the small-pox while in the army. The room in which he lay was not more than 7 by 11, dark, close and filthy. He had diffuse varioloid. In order to prevent pitting of the face of this grey-headed old man a mixture of lard and charcoal was thickly smeared over it. To my surprise, I saw a notice of his death in the papers a few days after, and feel satisfied that his death was not caused by small-pox, but by the poisoned atmosphere of his room, and the want of proper care, cleanliness and suitable nourishment.

25. Same date. Called to visit a girl of 17 on Osgoode Street. She had been servant in the family of Nos. 16 and 18, and had simple varioloid. Vaccinated.

26. Same date. A sturdy man of 28, a street-car conductor, admitted from Yorkville, in third day of semi-confluent varioloid. He was a constant visitor at the house of No. 5, already notorious. Vaccinated, but cicatrix not well marked.

27. Dec. 12. A girl aged 11, on Richmond Street East, with diffuse varioloid. Vaccinated, a sister of 39.

28. Same date. A young married woman in same house, with mild varioloid. She had given birth to a puny child at eight months, twenty days before. Vaccinated. I vaccinated the infant, and it escaped the disease.

The source of their infection will be shown in No. 39.

29. Dec. 13. Was called to attend a woman on Coatsworth Street, in labor with her second child. She was a sister of No. 26. Child born and placenta extruded before arrival. The child was at about eight months. She had had a comparatively painless and quick labor. As on a former occasion I brought this case before the Society in detail, it need not be much dwelt upon here, still, some few points may bear repetition, especially as some of the members present this evening may not have been at the meeting at which the case was read. The woman's face was flushed, eyes suffused, the pulse 120 and small, with

great restlessness. Knowing that her brother was in the Small-pox Hospital, I thought it probable that she might have seen him before his admission, although their residences were some three miles apart. This suspicion, coupled with the fact that I had seen at least two similar cases in epidemics of small-pox, led me to ask if she had visited her brother during his illness. She replied that she had spent a quarter of an hour with him on the 29th of November, the day before his conveyance to hospital. Grounded upon these circumstances, malignant small-pox, with a fatal termination, was diagnosed; and the following mixture was prescribed: R. Acid salicylic gr. xv., ammon carbon. and sodæ bicarb. aa. gr. v., glycerini. M. xv., in half an ounce of water, every four hours. The child died that night. Before leaving I informed her husband of my opinion. Next morning she upbraided me for having said that she had small-pox; and stated that she had been vaccinated when young, and had had the disease in the old country. There were a few miliary papules on the cheeks and forehead, flushed face, pain in head and back; pulse same. On the 15th the face was still flushed, but the papulæ had almost disappeared from the face. They were plentiful, however, on the legs; and the neck and upper part of chest were the color of cherry wood, with some vesicles along the borders. Pulse 128, and very small; delirium at times, violent jactitation. By the 17th all the eruption had disappeared; but the low delirium, small and frequent pulse, jactitation, and odor of the body and breath, indicated too plainly what the result would be. She died next day.

30. Dec. 23. Application for the admission of a young woman, aged 20, from Sackville Street. The van was sent for her, but it being an open one, and the day one of the coldest of the winter, her father would not allow her to be removed. She was taken to the hospital, however, on the 6th of January following, with a sister. She had confluent over the entire body. Vaccinated.

31. 1879, Jan. 3. Admission asked for a sister of the above, aged 7; but when the van reached the house, some two hours after, she was already dead. She had first complained less than forty-eight hours before; and it is probable that passive congestion of the lungs had early set in, as it was stated that "she could hardly get her breath." Vaccinated.

32. Jan. 3. A young man, aged 24, died of confluent about this date, on Spadina Avenue. He was not seen by me. The day of his death I was requested to visit him, but declined unless in company with his medical attendant.

33. Jan. 6. A girl aged 18, admitted from the house on Sackville Street referred to in 30

and 31, with diffuse varioloid. Vaccinated. As No. 30 was still in a critical condition she was removed to hospital with her

34. Jan. 13. A brother of above, aged 16, in first day of what promised to be simple varioloid. It proved, however, a case of confluent. Vaccinated.

35. Same day. A brother of above, aged 14, admitted with fever, pain in back and head, vomiting, small and irregular pulse of 120, and a few fine papillæ on forehead. Next day the papillæ covered the entire body, and they were of the to-be-dreaded lead-like color, becoming purple by the following day. He was very ill till the 17th, when the alarming symptoms abated, and he gradually convalesced. Vaccinated.

36. Same day. Another brother, aged 9, with a light form of varioloid. Vaccinated when young, and re-vaccinated three weeks ago

37. Same day. Another sister, aged 4, with simple varioloid. Had not been successfully vaccinated.

This really afflicted family was motherless, and consisted of the father and seven children. One child died at home, and the six others were removed to hospital. It was not known how they had contracted the disease.

38. Jan. 18. A married woman, aged 29, admitted from York Street. Pulse small and 100. A tickling, irritating cough, caused by the back part of mouth being studded with papillæ. The face was covered with purplish papillæ; and the arms and legs with ordinary ones. Insomnolent. Nausea. Menstruating two weeks before her regular time. 20th. Delirious, the eruption becoming more general, and assuming a darker purple. Malignant. Same day, 7 p.m., sent for. She had been furious and unmanageable, but was then sleeping, a $\frac{1}{4}$ gr. morphia having been given at 3, and another at 6. 21st. Pulse small, and 108. Two more $\frac{1}{4}$ gr. morphia powders had been given during the night; and quiet, refreshing sleep had resulted. Stimulants, carbonate of ammonia, and milk were freely given. 22nd. Pulse 130, small. Had had two motions, from a purgative taken last night. Did not sleep; is drowsy, and delirious at times. The dark purple color is fading. A number of dark blood bullæ on different parts of the body. This is not unusual in such cases. 23rd. Speaks with difficulty, and in a whisper. 24th. In about same condition. Jactitation. Had a bath at 104° Fah. From this time forward she improved; but was troublesome, fretful, and hysterical, and had an attack of diarrhœa. She left hospital on 1st March.

39. Jan. 21. A girl aged 13, sister of No. 27, admitted in fourth day of confluent. On

the 23rd the pulse was 124, and very feeble, the eruption coalesced, flattened without filling, and the depressions were of that leaden hue noticed in bad cases of confluent. There was another unfavourable symptom here, which has not been previously referred to; and which, though not always a sure precursor of death, is sufficiently alarming; and in most cases of severe confluent is of evil omen. I allude to the cracking and peeling off of the cuticle in large patches, exposing an angry, raw-looking and bleeding surface. She had toward the end that difficult and painful deglutition thought to depend upon, ulceration of the fauces and contiguous parts, and died on the 26th. Vaccinated when young.

40. Feb. 12. A man aged 32, a tramp, from Brampton gaol. He was carried twenty-four miles in an open sleigh on the most bitter day of the winter. He had confluent in the fourth day, of that purple color indicative of the malignant type, and the respiration was of that short character implying broncho-pneumonia. Pulse 130, and small. He was placed in a warm bed in a room of 75°, and stimulants plied without stint. Next day his symptoms were not so alarming, his condition on entering hospital having been doubtless aggravated by the long cold journey. He nevertheless exhibited during his illness many of the worst symptoms noticed in such cases. In addition to the broncho-pneumonia, there was delirium for ten days at least; he was at times morbidly melancholy; at others, wild and unmanageable; passed his feces in bed; and by the ninth day after admission a mass of apparent putridity. The prognosis was from the first unfavourable. Even after he had been allowed to get up the bronchial affection was exceedingly annoying. He continued frail and unpromising for some weeks; but finally left the hospital on the 14th of April, at his own request, and a month earlier than he should have left it. Not vaccinated.

41. March 18. A widow, aged 32, admitted from Yorkville in fourth day of semi-confluent. This case might in truth be designated confluent, as it really was in many parts of the body. But the ripening of the pustules on the nose on the sixth day after the appearance of the papillae, and those on other portions following a somewhat similar abortive course, showed that her vaccination still protected her to a great extent. It was well that such was the case, as her frail constitution, coupled with a fretful, melancholy temperament, greatly aggravated her condition; and, had the attack been a really serious one, she would in all likelihood have fallen a victim. Vaccinated.

42. May 6. A female child, aged 19 months, admitted from Bathurst Street, in the

third day of confluent. She was recently from Montreal, where she had been exposed to the contagion. It was a favourable case throughout, without complication of any kind. Not vaccinated.

Of these forty-two cases two were from Yorkville. One (26) of these was known to have contracted the disease in Toronto, and the other (41) may reasonably be supposed to have done so too, as there was no small-pox otherwise than as above stated in that village during the winter, and her residence was not thirty feet from the north side of Bloor Street. A third (40) was from Brampton, and it was not known where he had been exposed. Deducting these three, leaves but thirty-nine in the city proper, from the 25th of October last to date. It is not altogether improbable that there may have been a few others whose true character escaped notice, and some may have been designedly kept from the knowledge of the health officers.

Of the thirty-nine reported city cases twenty-five were removed to hospital, making, with the two from Yorkville and one from Brampton, twenty-eight, with five deaths. Of these twenty-eight, after deducting those that might be considered in any way as doubtful, there were at least eleven genuine confluent, in a few of which there were some symptoms of malignancy; and two (19 and 38) may be fairly claimed as malignant.

Of the fourteen cases not removed to hospital, three (11, 18, 32) were confluent, and two (29, 31) malignant. All five died, but one (31) had no medical attendance whatever.

It is exceedingly difficult to trace out historical facts in diseases like small-pox, where the period of incubation is so prolonged. No one can imagine the trouble and labour it has cost me to elicit the few relating to the introduction of that disease into, and its spread in, our city during the recent quasi-epidemic that are now laid before you; and no one can regret more than I do that the information now offered is so scanty. In addition to the transmissions traced out, many whose history could not be ascertained were doubtless smitten by the original introducers of the *contagium*, or their immediate descendants.

In going over this report it will be noticed that No. 1 gave the disease to Nos. 9, 14 and 24; No. 4, directly and indirectly, to Nos. 5, 6, 7, 8, 10, 15, 17, 20, 23, 26, 29; No. 11, to Nos. 12 and 21; No. 13 to 16, 18 and 25; and No. 26 directly to 29.

One more case of transmission I have reserved to the last, because it is the only instance known where a patient leaving the small-pox hospital completely cured, and with his clothes and person well washed and disinfected, has

conveyed the disease to outside parties. It will be remembered how positively No. 8 was accused of having given the disease to numerous persons at the house on Richmond Street West, kept by No. 5 as a boarding-house, when he was certainly innocent. It will be conceded after what I am about to state, that he richly merited all the abuse bestowed upon him, it having proved but punishment in advance for offences committed by him subsequently. He had but mere rags of clothes when he entered the hospital, and I tried to obtain a new suit for him from the Board of Health when he was leaving, but in vain. On being discharged from hospital he is said to have carried away infected articles of apparel of trifling value, and with these in his possession went to board at the house in which the cases 27, 28 and 39 subsequently presented.

On the 8th December last I was called to attend a little girl of about five years, on Don Mount, with confluent. She had not been vaccinated. There were three other children in the family, all of whom I at once vaccinated, as up to that time they had been neglected. The little girl had a hard time of it, broncho-pneumonia complicating the case. She recovered. On the 20th a brother, aged 7, took ill, and had confluent of a mild type, the vaccination having most likely been serviceable.

On the 16th of same month I was summoned to visit a young man at Flesherton, with confluent. He recovered. Vaccinated when young.

In not one of the above three cases could the history be obtained.

On the 18th of February last I was called to attend a young woman, aged 16, with confluent, at Weston; and on the 20th an elder brother was taken ill with the same type. Both died. Not vaccinated. The family consisted of the father and mother, a daughter of about 20, and an adopted female infant. I vaccinated the father, healthy daughter and infant. The mother had had the disease. The infant subsequently had a very light form of varioloid, and so also had the old lady. The disease was supposed to have originated in the shoddy mill, where those first attacked worked, especially as it was somewhat widespread among those employed at the mill about two years before. Rags from all parts of Lower and Upper Canada are sent to this mill, and it would not be at all strange if remnants of articles of clothing worn by small-pox patients were sometimes consigned to it.

CONGENITAL ABSENCE OF THE SPLEEN.—Dr. Koch in *Berliner Klin. Wochen.*, reports that at the autopsy of a man aged 49, the spleen was found to be entirely wanting.

CYSTOCELE — SUCCESSFUL OPERATION BY THOMAS'S METHOD.

BY G. W. EMERY, M.D.

Physician to "Bethany Home," Minneapolis, Minn.

History.—Mrs. E. M. C., aged 55 years, widow, had, at the age of 15 years, while jumping, fallen upon a knotty chunk of wood, a prominent part of which entered the genital organs per vaginam, producing an internal wound which bled very freely, leaving what the patient described as a mass of flesh protruding from the vagina which she cut off with a pair of scissors. She was then residing in a rural district in Central New York, and at such a distance from a physician that the family neglected to summon any aid. She was confined to her bed for two or three weeks, and from the description of her suffering, as now given, I incline to the opinion that she ran through an attack of cellulitis, from which she slowly recovered and became enabled to work at domestic duties, but says she always suffered more or less with difficult and painful urination. She married at the age of thirty-eight years, a farmer, with whom she lived to the time of his death without issue, a period of ten years. She was employed nearly two years ago as matron of the Bethany Home Institution, but after a few months her physical condition compelled her resignation. In January last she placed herself under preparatory treatment for an operation. She had complained of *falling of the womb*, and had been informed that this was her condition by a number of physicians with whom she had consulted.

Upon my first examination, 11th January last, the following conditions were present: Bladder projecting through vulva, and distended to nearly the size of a tea-cup, this upon the patient taking the prone position could, with difficulty, be returned into vagina by taxis, and upon assuming the erect posture the organ would immediately become dislocated and protrude. Urine accumulated and increased the deformity, and micturition was only performed after the patient would press the organ up into the vaginal canal, and then was always accompanied by intense tenesmus. The uterus was atrophied and seemed to be about

the size of an English walnut, and high up in the pelvic cavity. Examined patient the next day with Dr. Mary G. Hood, and found a sinus about three inches, posterior to or above the meatus urinarius, leading into a prolonged membranous canal, about two inches in length, up to the above described uterus, which was entered with considerable difficulty, as the axis was completely opposite to the normal condition, and required the applicator to assume the shape of a fish-hook, a condition never before met with in my practice, and which I considered was produced by an amputation of the neck of the organ when the injury was received, and which was completely removed by the patient with the scissors, it (the tissue) hanging externally soon after the injury as detailed in the history of the case. The preparatory treatment consisted of ferruginous tonics, generous diet, and anodynes, to allay a troublesome and old standing cough, the result of chronic bronchitis. The patient was also removed from the Home to the Cottage hospital for operation; where, on the 28th of February, assisted by Drs. Hood, Hutchins and Kelly, I performed Thomas's operation, using the clamp and separator, removing a triangular fold of the vagina two and a-half inches long and one and a-half inches in width at base. The tissue removed was one and one half lines in thickness, and was separated from the bladder with great difficulty, which I concluded was due to the cellulitis. The time of operation was one hour and ten minutes. The anesthetic used Squibb's ether. The operation was followed by severe and continuous emesis for thirty-six hours. Patient much depressed; pulse 136; tongue temp. 100. Used catheter three times daily till the 8th March, when patient took the normal attitude and urinated without pain or difficulty for the first time in thirty-seven years. The clamp was removed in forty-eight hours, and the sutures in eight days. Patient was then changed to another and colder apartment; and a severe change of temperature occurring on the same night of removal she was attacked with double pneumonia, which increased the cough and thereby produced such straining as to tear open the wound near the os, and necessitated an additional operation

which consisted in paring the edges of former wounds, and inserting fresh sutures. This operation was performed on the 26th March, with the assistance of Drs. Hutchins, Dunsmore and Myers, the patient being placed in Sims' position. The difficulty of the operation consisted in the hemorrhage, which was quite severe, and for which hot water 110° was used freely. One inch of additional tissue was dissected from the vaginal wall at the separated sides of the former wound, and the lips of the wound were brought in apposition with four sutures. The patient rallied rapidly and was enabled to leave the hospital about the middle of April. Soon after she was prostrated by an attack of rubeola, with its accompanying pulmonary irritation, and I feared my patient must succumb; but under the assiduous care of my partner, Dr. Lamb, she rallied, and is now up and enabled to walk several blocks, and is entirely free from cough, and the cystocele radically cured.

ANTISEPTIC SURGERY — COMPOUND FRACTURE OF TIBIA WITH DISLOCATION AT ANKLE, AND COLLES'S FRACTURE OF RADIUS.

BY JOHN A. MULLIN, M.D., HAMILTON.

C. M., aged 28, carpenter, robust, and has generally enjoyed good health; family history good, except that a brother died from Bright's disease; patient fell from a building from the height of 24 feet, May 26th, 1879; the tibia was fractured two inches above the ankle-joint, obliquely, the line of fracture downwards and outwards. Immediately after the injury the foot was found displaced inwards, with a transverse wound of the integuments an inch and a-half in length just below the internal malleolus; the ligaments were ruptured permitting the malleolus to protrude through the wound to the extent of an inch. The finger was passed through this wound into the ankle-joint. There was emphysematous crackling about the ankle and half way up the leg over the tibia, the soft parts having been lacerated by the lower end of the upper fragment of the tibia, permitting the entrance of air to the seat of the tibial fracture. Parts about the

ankle bruised and swollen. The fractured radius pressed against the integuments almost rupturing the skin immediately above the wrist; there were marks of bruises about the pelvis though no fracture except of the bones mentioned. The injuries were received at mid-day, and the fractures dressed temporarily by two surgeons, so as to allow the patient to be taken to his house. In the afternoon I took charge of the case, and at five o'clock, assisted by Drs. Malloch and James White, the patient was chloroformed and the following treatment adopted: A soft rubber catheter was passed through the wound below the fibula upwards and inwards to the seat of fracture of the tibia, and a watery solution of carbolic acid, one to twenty was injected through the lacerated structures, being pressed as far as possible in the direction where the crackling was felt; a counter opening was made over the tibial fracture, and the water injected pressed through this wound. The foot and leg, half way up to the knee, were wrapped in antiseptic gauze, and spirits applied, a spray of watery solution of carbolic acid from a steam spray apparatus having been used during the time of dressing. A good deal of bleeding had occurred; pulse 80, temperature normal. Vomited in the evening.

May 23rd. Pulse 100, temperature $99\frac{1}{2}$; vomited once this morning; rested well; leg gave very little pain; dressings removed under the protection of the carbolic acid spray from the steam spray apparatus. There had been a good deal of discharge, bloody, but free from signs of decomposition. Dressings were re-applied, using the same antiseptic precautions as on the day before.

May 24th. Pulse 100, temperature $99\frac{3}{4}$; dressings removed from leg; less discharge, and no fetor. The parts about the injury show no signs of unfavourable irritation. The patient rests very well; complains of pain and uneasiness about the pelvis and loins, but the fractures appear to give him little trouble.

May 25th. Pulse 100, temperature $99\frac{3}{4}$; a little discharge; serous and slightly bloody, without signs of decomposition.

May 26th. Pulse 90, temperature $99\frac{3}{4}$; discharge scanty and no fetor—serous.

May 27th. Pulse 84, temperature $99\frac{1}{2}$; dressings not removed.

May 28th. Pulse 90, temperature $99\frac{3}{4}$; tongue furred; complains of pain in the pelvic regions on account of which the sleep has been disturbed. No pain at the seat of fracture, nor appearance of discharge having passed through gauze. Dressings not removed.

A tonic mixture of quinine and dilute muriatic acid given.

May 29th. Pulse 90, temperature $99\frac{3}{4}$.

" 30th. Pulse 96, temperature $99\frac{1}{2}$.

" 31st. Pulse 86, temperature $99\frac{1}{2}$.

June 1st. Pulse 90, temperature 99.

The dressings not removed from the leg since May 27th, as there was no pain or uneasiness, and the discharge had not passed through the gauze. Tongue clean, appetite improved, less pain about the pelvis, and sleeps better.

June 2nd. Pulse 84, temperature $98\frac{3}{4}$: injured parts present favourable appearance; slight discharge which has not passed through the gauze; the wounds seem superficial.

June 6th. Pulse 80, temperature $98\frac{1}{2}$; no pain since last report; dressings removed with the usual antiseptic precautions and reapplied.

June 13th. Pulse 72, temperature normal; dressings removed; the parts appear favourable; no swelling, and but slight discharge, the wounds closing; lint, charged with boracic acid, applied.

June 20th. Patient allowed to leave his bed; wound over tibia closed; pasteboard splints were applied.

August 12th. The patient, since the first of July, has been going about with the assistance of crutches; the stiffness at ankle-joint is passing away; he is now able to support his weight partly on the injured limb; a small superficial ulcer remains below the malleolus, the healing of which has been delayed through moving about too much.

With reference to the fracture of the radius I need only remark that pine splints extending from the elbow to the base of the phalanges, well padded with cotton batting were applied, and excellent union resulted.

Professor E. Neubauer, the celebrated chemist, died Wiesbaden on June 2nd.

Translations.

THE TREATMENT OF HÆMOPHYSTIS IN TUBERCULAR INDIVIDUALS.

When the hæmorrhage is moderate good effects are obtained by a method proposed by Dr. Gibert (of Cannes) and tried with success by Professor Peter. It consists in the association of the sulphate of quinine with the ergot of rye; for example fifty centigrammes ($7\frac{1}{2}$ grains) of sulphate of quinine, and two grammes (30 grains) of ergot divided into ten packets to be taken by the patient in the course of the day.—*Bull. de Therap. Lyon Médical.*

TREATMENT OF VESICAL ATONY BY ERGOTINE INJECTIONS.—LANGENBECK.

In three cases of vesical atony observed in old patients, Professor Langenbeck has obtained the best results from hypodermic injections of ergotine. Immediately after the injection the contractile power of the bladder was augmented and the patients micturated more abundantly. At the end of some days the bladder emptied itself almost entirely. In an old man, sixty-two years of age, who three or four times per day expelled about thirty grammes of urine when his bladder contained more than half a litre, the very same day on which a hypodermic of twelve centigrammes of Boujean's ergotine was employed, micturition was accomplished most satisfactorily. The prostate soon diminished in volume and after four injections the cure was complete.—*L'Union Médicale.*

BLOOD EFFUSIONS INTO THE KNEE FROM SPRAIN.

We append the conclusion of a long article on this subject running through several numbers of *Le Progrès Médical* by Paul Seynod, Anatomical Assistant to the Faculty of Paris.

"1. Sprain of the knee may be complicated by an intra-articular effusion consisting of *pure blood.*

2. This intra-articular hæmorrhage is due either to communication of the spongy areole of the femur or tibia with the interior of the articular cavity, or to rupture of branches of

the middle articular, and of the small vessels contained in the adipose ligament.

3. It is not correct to say, with Bonnet, that exaggeration of the motions of rotation of the knee always leaves the articulation intact, and necessarily produces fracture of both bones of the leg. Exaggeration of rotation, on the contrary, produces very characteristic lesions in the knee joint and plays an etiological part in the very great majority of sprains of this articulation.

4. The abundance of the effusion, the rapidity of its production and the often excessive slowness of its resorption are the principal clinical features of hæmarthrosis of the knee.

5. In the diagnosis of blood effusions into the knee, the considerations drawn from their abundance and the time of their appearance have a considerable value and are, so to speak, pathognomonic. A pasty, or a crepitant character of the fluctuation, and early periarticular ecchymoses are exceptional signs, and their absence should not in the least modify the diagnosis of hæmarthrosis in the presence of a very abundant and very rapid traumatic effusion. Methodical exploration of the joint, and the search for painful points and abnormal movements may, in certain cases furnish valuable information of the exact nature of articular lesions, but it should be known that very often the diagnosis of the sources of the hæmorrhage can be made only by exclusion and has no other basis than the data of experimentation.

6. In the majority of cases immediate puncture of the joint followed by immobilization and methodical compression of the limb, constitutes the surest and best treatment of blood effusions into the knee from sprain."

ON THE PHYSIOLOGICAL EFFECTS OF SALICYLATE OF SODA UPON THE CIRCULATION, AND ON ITS MODE OF ACTION IN RHEUMATISM.—(SOCIÉTÉ DE BIOLOGIE).

M. Oltramare, a pupil of Prof. Chauveau, has made a large number of experiments upon animals with the view of studying the physiological action of salicylate of soda. Introduced directly into the veins it constantly increases the pressure, the number of pulsations and the sys-

tolic force of the heart; the transient effect is due to a direct excitation of the heart and probably also of its motor centres. At the same time the quickness of the blood current, estimated by the hæmodromographe of Prof. Chauveau, gradually increases; this second effect, due to vascular dilatation is much more lasting. Under the influence of repeated injections, the excitability of the heart diminishes, then, when a toxic dose is reached, (which is about one gramme per kilogramme of the animal's weight for the dog, ass, and horse), irregularities of the pulse, intermittence, a sudden lowering of the pressure and lastly arrest of the heart, occur. It is by paralysis of this organ that the animal dies, and not by asphyxia as has been pretended. At the autopsy there is found intense congestion of the abdominal viscera agreeing with the vascular phenomena observed during life. If the bulb be divided a very pronounced anæmic condition succeeds to the hyperæmia; it seems evident therefore, to M. Ultramare, that the salicylate of soda acts upon the bulbar vaso motor centres. If now we establish a parallel between the anatomopathological processes of acute articular rheumatism, the physiological effects and the incontestable therapeutic properties of the salicylate of soda, M. Ultramare believes that we must admit this remedy acts by substituting for a localised hyperæmia a general capillary dilatation. In proportion as the rheumatic lesions are of a purely vascular character the salicylate will have a therapeutic action, but when trophic troubles supervene it will necessarily prove inefficacious. Thus is explained its insuccess in the subacute or chronic forms, an insuccess which in its turn seems to lend support to the theory."—*Le Progrès Médical*.

FIBRINOUS SYNOVITIS AND ITS RELATION TO WHITE SWELLING.

BY H. DURET, ANATOMICAL ASSISTANT TO THE FACULTY OF MEDICINE OF PARIS.

We append the conclusions of this work taken from *Le Progrès Médical*.

1. There exists a fibrinous synovitis as there exists a fibrinous pleurisy.

2. This affection should be separated clinically from hydrarthrosis, for this latter term should

be exclusively restricted to purely serous effusions, similar to those of hydrothorax, hydropericardium, ascites, hydrocele, &c. A rational nomenclature demands this distinction.

3. This synovitis recognises probably as its principal cause the influence of cold, as does also fibrinous pleurisy.

4. It announces its presence by the existence of a phase *more or less acute* with elevation of the local temperature to a degree not met with in simple serous hydrarthrosis. The joint capsule is greatly distended and its walls are thickened by fibrinous infiltration. On palpitation a sensation of resilience, of elasticity, or of pseudo fluctuation is experienced, analogous to that produced by the presence of articular fungosities, and which is the result of interstitial fibrinous exudation, of effused fluid, and intraarticular fibrinous clots.

5. It sometimes ends in the production of false membranes, of fibrous bands, or by ankylosis. Sometimes there is a production of fleshy granulations, of fungosities beneath the fibrinous false membrane, and in the last place the process becomes similar to that which has been described as white swelling of the joints.

6. Fibrinous synovitis is in the majority of cases the point of departure of white swellings in the adult (35 to 45 years). In this case the general condition is not that of scrofula, but rather of rheumatism. The lesions remain for a long time superficial. If suppuration occur there is no caries, or other osseous lesion so pronounced as in scrofulous children. Perhaps, however, an analogous process may be discovered in the beginning of certain varieties of *tumor albus* in children. It is also probable that fungosities of the synovial sheaths, in adults, have likewise their point of departure in an inflammation with fibrinous exudation."

HÆMOSTASIS IN AMPUTATION OF THE THIGH.

—In a case at the Westminster Hospital, Mr. George Cowell recently amputated the thigh, using Davy's lever to control the iliac artery through the rectum. Under one ounce of blood was lost, Mr. Davy has records of seven cases treated by this method, in which the total amount of blood lost did not amount to 14 ounces.

Formularies.

EFFERVESCING DRAUGHT.

Seventeen grs. of citric acid or half an ounce of fresh lemon juice will neutralize 25 grs. of pot. bicarb.; 20 of pot. carb., 20 of sodæ bicarb.; 35 of sodæ carb.; 15 of ammoniæ carb.; 13 of magnes. carb.

FOR CHRONIC ECZEMA.

Sulphate of iron one [in] ten of distilled water applied by means of wet compresses to chronic eczema is highly spoken of in the *Revista Medica de Chili* by Dr. Mariana, quoting from Prof. Percy.

KUMYS.

Take five quarts of fresh cow's milk, half a pound of white sugar, and heat to 86° to 90° F, then add two drachms of compressed yeast and stir for a few minutes. Bottle in champagne bottles, but do not fill them to the cork. Shake a few times during the next three or four days.

ICE CREAM AND BEEF JUICE.—As an excellent dietary article, this is praised by Dr. J. J. Tucker in the *Chicago Journal*. His formula is—

R. Cream,	120 grams
Sugar,	30 "
Extract of vanilla,	8 "
Beef juice,	8 "

Any confectioner can make it, or it may readily be prepared at home, with a freezer. Its uses are obvious.

SALICYLIC ACID MIXTURE.

R. Acid salicylic	ʒi.
Spts. ætheris nit	ʒvi.
Soda bicarb. gr.	ʒo.
Spts. lavandulæ co.	ʒii.
Aquæ	ʒii.
Syrup aurant cort. ad.	ʒvi.

M.—Sig.

A teaspoonful every three or four hours. The acid and the spirits of ether should be mixed in a bottle, then add the soda, and afterward the water gradually till the effervescence ceases, and then the lavender and syrup.

Correspondence.

(To the Editor of the CANADIAN JOURNAL OF MEDICAL SCIENCE.)

THE HAMILTON MEDICAL AND SURGICAL SOCIETY.

The regular meeting of the above society was held at the Royal Hotel on 2nd July. The Vice-President, Dr. Malloch, in the chair. There was a large attendance of the members. After the minutes were read, a resolution of condolence was passed, expressing regret at the death of Dr. J. B. Laing, an old member of the Society.

Dr. Mullin presented a patient who had fallen from a scaffold six weeks previously and sustained a compound fracture of the left tibia, opening into the ankle joint, also a Colles' fracture of the left forearm. The bones were found to be firmly united, and the wounds almost entirely healed, except to a small extent superficially. The fractures were treated antiseptically under a Lister's spray. The temperature never rose above 100° F.; the patient suffered neither pain nor swelling in the affected parts. The result was considered very satisfactory by all present.

Dr. Malloch presented a patient on whom he performed Symes' operation nine months previously. The patient had a very useful stump.

Dr. Ryall presented the subject of vomiting in pregnancy, and then at times more or less failure of controlling it by the usual remedies. The members present discussed the subject and their various modes of treatment.

Dr. Mills presented pathological specimens of fatty liver and kidney, and enlarged bronchial glands; a portion of nutmeg liver where the inter-cellular veins were very much enlarged; also a portion of an ovarian cyst. The meeting then adjourned.

A. WOLVERTON, Sec. H.M. & S.S.

CINCHONA AND ITS ALKALOIDS.—"Quinetum," "quinquine," "cinchoquinine," "subsulphate of quinine," are equally good medicines. Quinine is costly; cinchoquinine is about half the price of quinine but double that of quinetum; quinquine is about midway in price between quinetum and cinchoquinine.

THE CANADIAN
Journal of Medical Science,

A Monthly Journal of British and Foreign Medical Science, Criticism, and News.

TO CORRESPONDENTS.—*We shall be glad to receive from our friends everywhere, current medical news of general interest. Secretaries of County or Territorial medical associations will oblige by sending reports of the proceedings of their Associations to the corresponding editor.*

TORONTO, SEPTEMBER, 1879.

THE OLD ORGAN AND THE NEW.

The old organ of Trinity is sorely exercised by our strictures on the conduct of the Medical Council at its late meeting, but not more so than ourselves by the occurrence which called them forth. A due sense of our responsibility to the profession for the conduct of a body we did so much to create, compels us to use every effort to maintain the purity of the Council chamber, and whenever we find the rules of propriety outraged as on the occasion referred to, we shall not hesitate to hold the offenders up to the gaze of their constituents.

We wrote advisedly, after due deliberation, and with a full knowledge of all the facts, and now, only regret, that time has not developed one extenuating circumstance which would justify us in recalling a single word of what was then written. It is very amusing to see the old organ of the new school assume such an interest in its new protégé, but the duties of chaperon do not fit well, and the profession will rate at its true value its new found zeal. There are men living who know that the conductors of this journal spent their time and money freely to obtain for the profession even the present modicum of justice, while our cotem. was in swaddling clothes and its older colleagues were button-holeing M.P's in order to prevent the passage of the Medical Act which recognizes the right of the profession to manage its own affairs.

How the old organ doth spread its wings in defence of other peoples' progeny!!

It is really too bad for the old organ to poke fun at its new friends in their extremity in the

way it does when it says "territorial members at their last meeting showed more than the usual amount of independence and refused to be led by the nose at the instance of a few manipulators." If Artemus Ward were alive he would have written "that is sarcasm," but the great showman's point is not required by any one who is conversant with their vacillation in regard to the curriculum and the annual examinations. There never was a body of men so much under the button-hole influence of at least one manipulator, and there is no man living who would be rash enough to guess what the curriculum might be next year if the present council should survive the impending election. The Council may have "ceased to be obsequious" but only to resign its freedom into the hands of an obsequious wirepuller, and that's all the difference. All the old organ's enthusiasm in behalf of territorial representation is but a shallow piece of by-play, to divert attention from the peccadilloes of its friends in the council and on the examining Board.

With reference to the treasurer, Dr. Aikens, we may safely leave that gentleman to take care of himself, for although *efforts were made* in an underhand way to asperse his character, yet his traducers had not the manliness to repeat them in open council, and although Dr. Berryman was put forward to entrap the Council into an implied censure, those who spoke, bore ample testimony to the faithfulness and impartiality with which he discharges the duties of his office and the resolution was voted down.

JOURNALISTIC.—*The American Journal of Electrology and Neurology*, edited by John Butler, M.D., 102 E. 22nd Street, New York. Published quarterly. Subscription, \$2.00. Contains, No. 1 vol., good original matter and fair selections. It is well "got up" typographically, and we wish it success.

CANADIANS IN ENGLAND.—J. C. C. Cleaver, W. F. Cleaver, and W. H. Henderson, of Kingston, and T. D. Hockridge, J. B. Lawford, of McGill Medical College, have passed their primary examination at the Royal College of Surgeons, London, England.

MEDICINAL FLUID EXTRACTS.

We have, on various occasions, borne testimony to the elegant pharmaceutical preparations of the well known firm of John Wyeth & Bro., Philadelphia, and we now, with much pleasure, draw attention to these medicinal fluid extracts, which the firm are now introducing to the profession. The use of medicine in this concentrated form is, without doubt, a valuable mode of administration, and one which would be largely extended, were it not for the unreliable character of many of the so-called fluid extracts put upon the market (many of them no stronger than ordinary tinctures) and medical men have long felt the want of a line of genuine fluid extracts that they could confidently rely upon. We have, therefore, much pleasure in recommending to the profession the extracts manufactured by the above reliable firm, believing that they will fully meet the expectations of physicians. They are guaranteed to be of full and uniform standard and true to their representation, every extract representing absolutely the activity (grain for grain) of the drug. Physicians can therefore confidently rely upon getting the results anticipated from using these extracts, and we ask for them a full and thorough trial. Samples are being distributed largely among the profession, thus giving them an opportunity of testing the superiority claimed for them. They have in many cases been tested, and their superiority proved beyond question. These extracts can be had from all respectable chemists.

In noticing the above preparations we would take the opportunity of referring to the great success attending the introduction by Messrs. Wyeth & Bro., of their dialysed iron, the original and only preparation that has borne out all the claims made for it. If physicians have not in all cases obtained the results they anticipated, it has been more than likely due to the use of inferior preparations that have been substituted. In our own experience we have obtained the best results from the use of Wyeth's preparation; and as an article published in the *Boston Medical Record*, of April 3rd, by Dr. R. Amory, of Longwood, Mass., after showing the advantages obtained from the

use of dialysed iron concludes by saying if physicians use weak and inferior preparations imposed upon them they cannot expect to obtain the results looked for.

Other preparations of this firm are worthy of notice. Their compressed powders are a real advance in pharmacy, they being so beautiful in form and free from all excipients (their greater solubility being thus ensured) are fast taking the lead in the minds of all lovers of pure drugs. Wyeth's elixirs also comprise a list of most valuable combinations, elegant in form and palatable to the taste, thus affording the physician the advantage of being able to administer nauseous drugs in an agreeable form, and with better results than can be obtained by the same medicines compounded by the druggist extemporaneously.

Wyeth's beef iron and wine, cod-liver oil and hypophosphites, chlorate potash tablets and peptonic pills, have all been submitted to the most severe tests.

Physicians having used some of these preparations and found them satisfactory, will find that all the preparations made by this firm are equally valuable, and that the success which has attended the introduction of their elixirs, compressed pills, dialysed iron, &c., will, in a greater measure, attend the introduction of their fluid extracts. We commend them with all confidence believing that they will, like Messrs. Wyeth's other preparations, prove all they profess.

ALEXIS ST. MARTIN.—From a recent letter to Dr. B. V. Hoagland, of West Union, Ohio, we learn that Alexis St. Martin, famous in physiological works for the experiments of Dr. Dr. Beaumont, is still alive, and at present a resident of St. Thomas, Joliette county, Province of Quebec, Canada, and is seventy-eight years old. The wound in his stomach has never closed, and at present the opening in his side is nearly an inch in diameter. His general health appears not to have been in any way affected by the curious wound in his side, but has always been excellent. For his age he is now quite strong and hearty. He has also been the father of twenty or more children, of whom four are now living. Has also been a hard worker, and never suffered from lack of digestion.

Book Notices.

Method for Performing Post-mortem Examinations. North Carolina Board of Health, Raleigh, N.C.

First Annual Announcement of the Homœopathic College of Physicians and Surgeons of Buffalo. Session 1879-80.

Transactions of the Medical Society of the State of Tennessee, at its 46th Annual Meeting, 1879, Nashville, Tenn. We intend to refer to these transactions in a future issue.

History of the Discovery of Anæsthesia, by J. MARION SIMS, M.D., M.A., LL.D. From *Virginia Med. Monthly*, May, 1877; Richmond, 1877; New York, 1879.

The Treatment of Epithelioma of the Cervix Uteri. By J. MARION SIMS, M.D., (reprint from *Am. Jour. of Obstet.*) July, 1879. New York: William Wood & Co.

A New Removable Paper Brace for the Treatment of Caries of the Spine, and of Lateral Curvature, by the Insertion of a Rubber Band to Exert Continuous Pressure over the Deformity, by AP. MORGAN VANCE, M.D., Junior Assistant, Hospital for Ruptured and Crippled, New York.

Pocket Therapeutics and Dose Book. By MORSE STEWART, jun., B.A., M.D. Second edition; revised and enlarged. Detroit: George D. Stewart 1878. Cloth, \$1; morocco, \$1 30. Contains doses, tables of weights and measures, metric weights and doses. Abbreviation, classification and action of medicines. Formulæ for spray vapor, and hypodermic medication. Tables of solubilities, incompatibles. Index of diseases and remedies; signs of pregnancy; poisons and antidotes, symptomatology, &c., &c. This is a *multum in parvo* of a kind that we do not think much of. Most of the contents should be carried in the head of the physician and not in his pocket. Such ready remembrancers, are apt to engender habits of laziness. The book is good of its kind.

Man's Moral Nature—An Essay. By DR. R. M. BUCKE, Medical Superintendent of the Asylum for the Insane, London, Ont.

It is often necessary at the outset in the review of new books on scientific subjects, to ascertain the exact meaning authors attach to their phrases and words. This often saves a good deal of controversy. This is the more necessary in a book, said by the author, in the announcement, to "deal with the deepest problems of man's life," "to contain by implication a philosophy of art, and a philosophy of religion, and supplies a new key to universal history." It is said to be for the "use and interest of all men who are desirous of some explanation of the meaning of themselves and of the universe in which they live." It is quite evident that a book which can do this in even a faint degree is no ordinary production. Some writers are fond of adopting a nomenclature of their own, and of coining words to suit their ideas of correct meaning. Others use phrases well understood, and in common use, but wrest them from the accepted standard of interpretation, and others often do injustice to themselves by leading the reader to suppose that they are either wilful in oddity, or ignorant of the exact definitions unanimously agreed upon by the literary world. We feel impelled to make these remarks, after reading this book of Dr. Bucke, upon "Man's Moral Nature." There are a number of novel ideas put forth in this excellently got-up book, and couched in such unusual language, that, in justice to the author it is necessary to know what is meant by many of the expressions used. The title of the book is an evidence of this. The author says: (page 13,) "that moral nature is a bundle of faculties, and that the most of these faculties are called passions and emotions, —and that love, faith, hate, fear, are the most prominent functions of the moral nature, if they are not indeed the whole of it." If there be any meaning in words, it is hard to see how any of these passions and emotions can be the sum total of our moral nature, or even any part of it. Our moral nature refers solely to *moral judgments*. It is our sense of right and wrong,—simply this and nothing more. We can love, have faith, hate and fear, yet not ex-

ercise a moral judgment in any accepted sense. The brute creation do this down to a very low scale of being, without having a moral nature properly so-called. Unless there is a violent wrenching of the term from its universal interpretation, this term must mean the capacity we have to exercise intellectual judgments on ethical subjects. There can be no moral nature without intellect in a normal condition. Society does not hold the idiot, the lunatic, or the brute capable of exercising moral judgments, and hence responsible, just because of the dethronement of the intellect, or because of its existence on a low scale. Passion, desire and emotion necessarily need no such judgments to allow their exercise, but without intellect there can be no moral nature. It is well, however, to keep in mind what the author means when he uses this term, and only hold him to his own definition, even when he uses it in this unusual way.

The same might be said of the expression, "Lines of Cleavage," when applied to the relationship of man to his surroundings. This term is scarcely applicable because of the necessary intimacy and interdependence of a living being including its immediate apposition to the nearest existences. There is no analogy between that and the cleavage of crystalization, or of the fibres of muscles.

So also on page 6, we are told that memory is a registering function of the intellect, (so says Maudsley.) Now, there is no proof that memory is a function in any sense, and if it were, it cannot register for the simple reason that registration must have taken place before a remembrance can have an existence. If there is nothing received, there can be nothing to remember. So the reception (or registration) of mental or physical impressions must, necessarily, antedate memory.

On page 7 it is said, "we know, and can know, nothing about force, and nothing about qualities." We presume it is meant that we do not know them absolutely as distinct and separate entities, because it is equally true that in this sense we know of nothing in the universe. All that we are immediately cognizant of in the wide world is *consciousness*. Relatively the statement is not physiologically

correct, as doubtless the author will know the first time a lunatic knocks him down. Force will then become an experience of consciousness, and it will also be a *striking* illustration of the chronological order in which the registration of an event, and the memory of it stand to one another.

On page 4 it is written that "certain forces, such as motion, heat and light, are correlative with man's receptive faculties." If this sentence means anything it must be that these faculties can conversely be changed into motion, heat and light. It is difficult to see how a faculty, function or act of anything can be changed in the way indicated. There is no proof given of this unknown conversion of a faculty.

The author also has the gravest doubts as to the existence of the *statical* or material part of man, at least he says we have no knowledge of its existence. This is a deplorable condition for humanity to be in, and it is a matter for regret that we are not informed whether our ignorance of it is absolute, and thus beyond inferential hypothesis of its existence or not.

On page 3 we are told that "man reacts upon and towards the external universe in three ways: namely, by his active nature, by his intellectual nature, and by his moral nature. It is natural to ask how it happens that we know of the external universe (meaning the whole system of created things) and its relations, seeing there are "the gravest doubts" as to its existence? A *nothing* can have no relations. Take this for granted, however, these divisions are scarcely apprehended because the first includes the other two. No one will deny that volition is active, and our moral judgments are no less so. We would have no evidence of their existence were it otherwise. We do not speak of right and wrong, and moral judgments in a theological sense, but we define them in the sense which Herbert Spencer has recently done in his "Data of Ethics" as the greater or less efficiency of the adjustment of acts to ends; in other words, it means the whole of human conduct in relation to itself and its surroundings. It is possible that either our stupidity or mental incapacity may have a good deal to do with

our obtuseness in not catching the meanings of these definitions.

The second part discusses metaphysical distinctions, and it must be confessed that some of them are novel. The whole enigma of human experience and knowledge through the agency of the moral nature is said to be simplified by reducing this nature to functions, and calling these ultimate elements, faith, love, fear and hate. Add to this quartette intellectual concepts and we have the complete psychical man. It is said this emotional state may exist in a simple form without being associated with any idea. That must mean that we may possess faith, love, fear, hate, without knowing it; but can there be knowledge without ideality? In other words, if this were true, these mental radicals may exist, and may *not* at the same time, although we have no proof of their existence but by a conception of them. The theology of this section shows that all the creeds of Christendom need reconstructing, and the sooner the dogmatists go about it the better, if we are to know our true relation to all existences. Even the Bible does not give an entirely satisfactory definition of faith, (see page 24) and the accepted meaning of "belief" is at fault. Our old fashioned faith has been considerably shaken on reading the following on page 26: "The gods of the heathens are demons. The God of the better samples of Christians is a Being in whom goodness greatly preponderates over evil. The one believes as firmly in his God or gods as does the other, and one has as much and as little evidence upon which to base his belief as the other has." The proof of this statement is not forthcoming except by other opinions of the same nature, but refuge must be taken in what is said at the outset of the essay, and which ought to be an end of all controversy, viz.: "I do not propose to prove anything in this book; proof never convinces." We will let the mathematicians join issue on this dogma of proof, but we are curious to know what proportion of goodness and of evil is in the Christian's God, and what class of Christians state or imply that this God has any evil in His nature. If such be the case their idea of His perfection must come to an end. It is possible that

this certificate of character is subjective, and not objective, and that this conception of evil is not in this Christian God, but in His followers and believers. Either dilemma is bad enough to startle us.

On page 38 we are told that the higher emotions, and of course the great sympathetic as their source, cause the "higher races" to face death much more readily than those not thus endowed. Does the history of our race say so? The wild untutored Macedonians thrashed the highly emotional Greeks. The savage and stoical Gauls conquered the well organized and cultivated Romans. The Mamelukes, whose moral nature was of a low type, swept over Spain like an incoming tide, notwithstanding the superior sympathetic system of the Spaniards. The painted Picts and Scots were more than a match in individual bravery for the Romans. No one will deny that the wild Indian and the naked Zulu are as brave as their white, emotional, moral natured, civilized Christian foes. The author's two models of the higher emotional, viz., the Jews and women show no paramount evidence of personal bravery over the Gentiles or the male sex. In fact the contrary is true.

The balance of the book contains the fulcrum idea of the whole. It endeavours to prove that the great sympathetic system is the seat of the moral nature, as already defined. It has been a mistake to locate it in the cerebrum, when a system in which is seen physical cause and psychical effect can be consistently explained on the assumption that this nervous system, whose chief seat is among the organs of the trunk, is the functional cause of the moral nature. This is an old doctrine revived. Among the ancients the signs of the Zodiac were associated with mental states in different parts of the body, especially with the lower parts. This was a crude idea of the same kind and can be seen to-day on the title page of quack almanacs. This supposition existed long before the Christian era among the Magi of the East. In fact the doctrine of localization of mind in the cerebrum is a comparatively modern idea. The notion of scattering all our mental states to every part of the body had been orthodox down to a recent period in

medical history. Within this century the celebrated Bichat contended that the passions were located in the organs of organic life. He adopted very much the same arguments which are found in this book, and had a considerable following among members of the medical profession. The language of every day life led to this nomenclature. The poor heart was the seat of all goodness and badness; we had bowels of compassion; we are not supposed to stomach disagreeable duties; the origin of the word melancholy means *black bile*; a passionate man is *choleric*—he is bilious; a hypochondriac has something the matter with the organs under his short ribs, so the word indicates; a splenetic man is supposed to have the system in bad order, and any one who possesses sufficient of the *suaviter in modo* to extract spleen from such afflicted, indicates a power of mental surgery of a high order. Numbers of such every-day phrases are used in common speech, but all know they were only employed in a symbolical way. To establish a physiological doctrine analogous to this it was necessary to show that the organs of the trunk were largely supplied with nerves from the great sympathetic ganglia, and that the existence, power, and intensity of the so-called moral nature, depended on this system for its existence. The moral nature may be called a secretion of this material organization.

So many great minds have been led away by this view that it is not to be wondered at their copyists are many. Of course if the great sympathetic is the origin of our moral nature it follows that its existence is a necessary condition of the production of the moral nature. Is it not a fact that several of the lower creation do not possess a sympathetic system at all and others in a very rudimentary state; yet, such do exhibit the greatest anger, the intensest fear, and even love and hate? If this system be the cause of emotions, affections and desires, how comes it no equation can be found between its quantity, tonicity, and the nature which is said to flow from its operations? The reason is not far to seek when it is seen that the nervous system is only a medium of psychical manifestations, and not their exciting cause. The cart is put before the horse. Car-

pen-ter, although one of his school of thinkers is forced to admit in his "Mental Physiology," when writing about the sympathetic in the lower animals. "An analogy has even been drawn between the chain of *prevertebral* ganglia of the sympathetic, and the ventral cord of articulated animals. But this analogy entirely fails when we look at the distribution of the two sets of nerves, and the functions to which they respectively minister. Since it is perfectly clear from such comparison, that it is the spinal cord of vertebrata which really represents the ventral cord of articulata, as a series of locomotive or pedal ganglia." (See page 126 Am. Ed., 1874.) What is true of this series of ganglia is also true of those which are in nervous relation to them, not only is this similarity based on their functions, but also on their physiological structure. Here are countless myriads of creatures with no sympathetic system similar to ours, but being possessed of the moral nature defined by the author. On the other hand the whole scope of physical research goes to show that the direct medium of all the mental phenomena called the unit-man, is the cerebro-spinal system. The sympathetic is a valuable adjunct in giving nerve stimulus to organic life, but it does not solely perform the acts of a moral nature.

No one will deny that the actions of the different organs affect our minds. Although this is the case it does not necessarily follow that these mental operations are functions thereof. As well might the converse be held true, that because the emotions, desires and affections, excite the different organs to activity therefore these organs depend on them for sustenance and growth. Any student of natural philosophy can have suggested to him in the operations of light, heat and magnetism, many bodies in which are inherent certain powers and phenomena without such being functions of these bodies. The fact is, the two classes are inter-dependent on one another, but no reliable evidence goes to show that they are necessarily co-existent and causal of one another.

Space forbids us noticing other points in Dr. Bucke's book from which many must differ. The reader cannot, however, rise from reading

the book without being convinced that the author has honestly endeavoured to arrive at truth in his own way. He is not satisfied with the ways and means heretofore adopted to arrive at basal verities, and he has avoided the beaten road, taking to byways and lanes of thought not often trodden now-a-days, in the hopes that he may be able to reach into the unknowable beyond his fellow-searchers. Unfortunately this has not been done. Yet, the careful collation of isolated truths, and the earnestness seen throughout, commend it to the candid reader as a valuable contribution to Canadian medical literature. The book is worth reading, even should the peruser differ from the writer, and all must admire the ingenious way many facts are brought in to uphold this material theory of the origin of "man's moral nature." We have endeavoured to give the reader an idea of the scope of the work by criticizing some of the salient points, but nothing short of a perusal of it can do justice to the inventive hypothesis therein set forth in a forcible way. The building up of a higher nature, out of a lower, has not been proven, but the fault does not lie in the author, for nature denies the doctrine.

CHONDROSIS OF THE AURICLE.—An interesting case in veterinary pathology, and which has an important bearing on human physiology, is recorded by Mr. Hugues in the *Journal de Médecine de Bruxelles*. The right auricle of a horse aged six years, was found to be completely cartilaginous, being composed of three pieces of cartilage closely united to one another by fibrinous ligaments. The largest had the curvature of the corresponding ventricle, the outer surface being convex and the inner concave; it measured 14 centimetres by 9; the second piece measured 7 centimetres by 4. In no part could any trace of muscular fibres be discovered. The horse died of acute pleurisy, myocarditis, and pericarditis, consequent on a long drive after a journey, and until the commencement of the illness, a few days before its death, it appeared to be in perfect health. Mr. Hugues points out very pertinently that the case strikingly illustrates the passive rôle of the auricles in the action of the heart.—*Lancet*.

Miscellaneous.

A weak tartaric acid lemonade taken after quinine, accelerates solution and absorption, and relieves gastric irritability.

In St. Louis, ice is supplied free by subscription to the poor. This will promote the health and comfort and help the Temperance cause.

Iodide of potassium in $\frac{1}{3}$ grain doses every hour and a half is recommended for obstinate vomiting.

APPOINTMENTS.—Charles A. Jones, of the village of Mount Forest, Esq., M.D., to be an Associate Coroner, in and for the County of Wellington.

We regret to have to announce the death of another of London's celebrated surgeons, Mr. C. F. Maunder, who died rather suddenly last July, aged forty-seven.

SYPHILIDES.—Dr. Remont cured twelve invetrate cases that had long resisted specific treatment, by chrysophanic acid. He rubs in energetically an ointment of the strength of one to two parts of the acid to ten of vaseline.

OXALATE OF CERIUM IN PERTUSSIS.—Oxalate of cerium acts with astonishing promptness, reducing the frequency of the attacks, lessens their intensity, and invariably shortens the second and most severe state of the disease. No claim is made as to its action in the first or third stage. It is given in one single dose each day before breakfast. The rule was observed to continue the remedy one week longer than there was any tendency to whoop. The dose given was from one to two grains.—*New York Medical Record*.

ARSENIC IN UTERINE HÆMORRHAGE.—Dr. J. R. Humphrey in the *Virginia Medical Monthly* for May, directs the attention to the great benefit that follows the administration of arsenic in menorrhagia and metrorrhagia. After relieving the patient for the time by the use of hæmostatics, and, if necessary, the tampon he gives five to ten drops (not minims)

of Fowler's solution three times a day, beginning about ten days before the coming period in cases of hemorrhagia. In metrorrhagia he gives it in the same doses during two weeks out of every three, for at least two months. He claims better results from arsenic than from any other remedy or combination of remedies.

In the *Chicago Medical Journal and Examiner*, Dr. Andrews gives the following operation as that of a chiropodist, named Willard:—He neither extracts the nail nor slices off the overlapping flesh, but cuts out a narrow ellipse of tissue near the nail and parallel to its border, claiming that the border itself, where it rests against the edge of the nail, has its special structure adapted to its location, and ought not to be sacrificed. The removal of the strip of flesh being accomplished, he brings the edges of the wound together with fine sutures, thus drawing the border away from the nail and effecting a cure.

LACTOPEPTINE.—This is a preparation which is acquiring no little reputation in the profession. It is composed of pepsin, pancreatine, diastase or vegetable ptyalin, lactic and hydrochloric acids, and sugar of milk. It is said to digest three or four times more coagulated albumen than any preparation of pepsin in the market. It has been found to be an excellent remedy in gastritis, chronic dyspepsia, in the diarrhoea and dysentery of children, in the vomiting of pregnancy, etc. It has received much praise, indeed, in the wasting diseases of children, which are attended largely with improper digestion of food. We feel confident that our friends will be pleased by a fair trial of it, and we hope they will make such, and some of them furnish us with a report.—*Cincinnati Medical News*, February, 1878.

ON THROMBOSIS.—In some lectures given at the Hôpital des Enfants-Malades, M. Bouchut (*Gaz. des Hôpitaux*, March 13, 20, April 3, 1879) dwells on the subject of thrombosis of veins in cachectic and chronic maladies; a subject which he first wrote on in 1844. Instances of this are very numerous; not only do they

occur in the lower limbs, but in the iliac vein, the portal vein, the jugular, the pulmonary arteries, the sinuses of the dura mater, and the right cavities of the heart. The symptoms of this thrombosis of course differ with seat: thus, in the pelvis, it may cause swelling and pain in the lower limbs; in the vena cava intestinal hemorrhage; in the brachiocephalic and the jugular, hæmoptysis. So in the sinuses of the dura mater this cachectic thrombosis induces convulsions in the child and delirium in the adult. M. Bouchut gives a *résumé* of cases in illustration of this last statement, all of which *post-mortem* examinations were made. He admits with Lancereaux that these are thromboses of inflammatory origin, and not due to retarded circulation; but confines himself to those of the latter class, which he has had the opportunity of observing frequently and fully in children. The affection begins at the end of acute diseases, and in the course of chronic ones, with sudden convulsions of short duration, or with delirium of a more or less marked kind, announcing the approach of death. Convulsions are seen in these cases from the age of about 7 years; while delirium is met with only in older children and adults. In the 38 observations of final convulsions in children affected with different cachectic diseases, 13 had thrombosis of the sinuses, and three were filled with blood and encephalitis. They occurred under the following heads. Final convulsions from thrombosis of sinuses, 35; chronic enteritis, 5; measles (catarrhal pneumonia), 2; chronic pneumonia, 5; phthisis, 1; anasarca without albuminuria, 1; chronic albuminuria, 2; whooping-cough and pneumo-scrofulous cachexia and tubercle of the lungs, and intestine, 1; gangrene of the mouth, 1; diptheria, 2—35. Convulsions, 28; stases of blood in the sinuses without thrombosis; chronic pneumonia, 1; whooping-cough, 2—38.—*London Medical Record*.

Births, Marriages, and Deaths

BIRTHS.

At Toronto, on July 22nd, the wife of Dr. De Grassi, of a daughter.