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Selections: Medicine.

CLINICAL REMARKS ON INCARCERATION OF THE EPIGLOTTIS, AS A LITTLE-KNOWN FACTOR IN THE MECHANISM OF SUFFOCATION IN FATAL CASES OF SPASM OF THE LARYNX (LARYNGISMUS STRIDULUS) IN CHILDREN.

BY J. SOLIS COHEN, M.D.,

The purpose of this communication is to direct attention to a mechanical factor in infantile spasm of the larynx, which was the immediate cause of death in two cases under my care, and which I am inclined to believe may have been the cause of death in other cases.

In the summer of 1867 I had under professional care a scrofulous male infant, between two and three years of age, with protracted laryngismus stridulus; the suffocative paroxysms, as described by the mother, being unusually intense. On one occasion an intense paroxysm occurred in my presence, and as it failed to yield to cold water dashed upon the face and neck, or to ammonia held in front of the nostrils, I plunged my forefinger deep into the child's throat and felt the epiglottis so forcibly drawn down by the spasmodic action of the aryteno-epiglottid muscles that its free edge had become wedged between the posterior face of the larynx and the wall of the pharynx, occluding the larynx completely. Carrying the finger to the left side of the larynx, I found it comparatively easy to free the epiglottis from its incarcerated position; and with the ensuing deep inspiration of air, the impending asphyxia was averted. The nature of the difficulty was explained to the mother, who was instructed in the manipulation necessary to overcome it. The constitutional remedies and other measures instituted in the hope of subduing the disposition to spasm were unavailing; and the child finally died, some weeks later, in a paroxysm similar to the one described.

The second case occurred during the spring of 1877, in a scrofulous male infant, nineteen months of age. I had the opportunity of verifying the same sort of incarceration of the epiglottis from spasmodic action, on several occasions, one of which was in the presence of an esteemed colleague during a consultation held as to the propriety of performing tracheotomy, in view of the frequent recurrence of the paroxysms. Unfortunately it was determined to defer the decision for twenty-four hours, in order to test the efficacy of large doses of bromide of potassium; and shortly before the early hour fixed for the visit on the following morning, the child died in a paroxysm which the mother was unable to overcome by manipulation, although she had previously succeeded in elevating the epiglottis in several paroxysms.

I am inclined to believe, therefore, that the spasm of laryngismus affects the aryteno-epiglottic muscles, in some instances at least, as well as those muscles which close the glottis; and that the incarceration of the epiglottis, continuing after relaxation of the spasm, may be an immediate cause of death. In undoubted cases of this kind, tracheotomy may be absolutely indicated as necessary to avert asphyxia in a recurring paroxysm of spasm.—*Med. & Surg. Reporter.*

ON CALCIFICATION OF ADIPOSE TISSUE.

Dr. Edward H. Bennett, Professor of Surgery in the University of Dublin, records (*Dublin Journ. of Med. Sciences*, Jan. 1878) an account of calcification of adipose tissue, which it is believed has not hitherto been noticed. The change is seated in the connective basis of the tissue and not in the contents of the cells. Dr. Bennett describes the condition as follows: In the subcutaneous tissue of the anterior aspect of the leg in elderly women, small hard bodies may be often observed—flattened on the superficial and deep aspects, circular in outline, the largest about one-fifth of an inch in diameter, the smallest mere grains. These bodies are freely moveable on the deeper tissues and beneath the skin, and are arranged with a rough symmetry in the two limbs; if there be but one or two in a limb, the finger carried over the corresponding part of the opposite limb readily detects even the single specimen. When they are numerous, their symmetry is similar to that of cutaneous eruptions, not absolutely exact, but very nearly so. They occur in thin-skinned, pale bodies, and so can generally be seen before their detection by the hand. I have never seen them associated with varicose veins, or with skin eruptions, or ephelitic markings on the legs. They are most commonly seen in the limbs of the pauper subjects in our dissecting-rooms; but I have seen them in the living also in hospital. They are not the seat of any trouble or pain to the patient, and pass unnoticed by them until attention is directed to them by the surgeon. I have never seen them in the male. In my early examinations of them, I sought for small veins, or varices, as their seat, under the impression that they were phleboliths. I next searched for a lymphatic vessel passing into or connected to them, being still impressed with the idea that they were the result of some vascular obstruction, but I failed to find any anatomical support for such idea.

Adopting the ordinary process for hard, brittle substances, I polished a flat surface on one face of a section made with a fine saw through the centre of the body, and cemented it to a glass slide with old Canada balsam; I then ground away the structure until I obtained a fine transparent section. In this process I learned that the densest part of the structure was at the circumference—the most open and friable at the centre. Examined, after completing the mounting with fluid Damar varnish, the pattern of the thin circumferential part was clearly seen to be that of ordinary condensed connective tissue, forming a capsule for the body, calcified. In it the usual irregular lacunæ, dark by transmitted light due to gaps in the structure, were readily seen; septa from the capsule passed irregularly through the structure, themselves calcified and showing lacunæ similar to the outer layer. The arrangement of these parts was such as every one familiar with the microscopic appearances of the compound tissues would recognize as that of the envelopes and septa of subcutaneous fat. In the intervals inclosed by these calcified envelopes and septa the mass of the structure appeared arranged strictly in the pattern of the fat cells, the intercellular substance being calcified and breaking with a brittle, glassy fracture. Fearing error in a single observation, I repeated the process with several specimens, and obtained results exactly similar. I next macerated a fresh specimen in a week picric acid solution, to which a minute quantity of hydrochloric acid was added. I established in this way the fact that the earth salts were deposited in the connective tissue forming the capsule and septa of adipose tissue, and in the intercellular structure of the fat cells. The decalcified tissue presents the pattern of ordinary fat, with only the exception that the structures out of which the earth salts have been dissolved are thicker than in the healthy tissue. One point further only remains to be stated—the position of the calcified body in the fat lobule; this I have always found to be marginal, never central. I have never seen any such alteration as I have described in lipomata or in any part of the body except that mentioned above.—*Monthly Abstract.*

At the Matriculation Examination of the London University in January, 1878, 495 candidates presented themselves, of whom 169 passed, and 326 were rejected.

MEMBRANOUS LARYNGITIS, OR CROUP, AS A RESULT OF A "DEFINITE EXPOSURE TO COLD."

BY GEORGE JOHNSON, M.D., F.R.S.,
Professor of Clinical Medicine, Senior Physician to King's College Hospital.

* * * * * * *

A delicate youth who had often suffered from catarrhal tonsillitis, had lately an attack of his old malady. The inflammation, pain, and swelling were less severe than they had been on several former occasions, but there was now the new feature of a distinct, though soft, membranous exudation on the surface of each tonsil. The disease did not extend to the air-passages, and it soon yielded to treatment. The question arose, what was the pathology of the exudation on the tonsil? Was it a result solely of catarrhal inflammation excited by exposure to cold? The house was on high ground near Henley, and no expense had been spared by its wealthy and most intelligent owner to render it not only beautiful and comfortable, but wholesome. There was no reason to suppose that the patient had come in contact with any sufferer from diphtheria. I therefore expressed to the father my conviction that sewer poison was the cause of the peculiar condition of throat. And I heard subsequently that a very offensive smell had repeatedly emanated from one closet at the foot of a staircase, and, later still, that it had been found that, in consequence of some defect in the ventilation of the drains, sewer gas escaped into every closet when the water was rushing down. Here then, I take it, was the explanation of the membranous exudation, which in this case had "followed a definite exposure to cold."

The second case was that of a healthy infant, whose foreskin had to be partially removed in consequence of congenital phimosis. The wound, made by an eminent surgeon, did not heal, and in a few days it was covered by a diphtheritic membrane. The child was the son of a wealthy man, whose spacious house stands on the eastern border of Hyde-park. The two gentlemen in attendance upon the child, feeling sure that the unhealthy condition of the wound was the result of some insanitary surroundings, removed the patient to another house, where I met them in consultation, and where the wound soon assumed a healthy appearance and healed. With some difficulty I persuaded the father to have his house thoroughly inspected, when grave sanitary defects were discovered and corrected. Now, if this child, instead of undergoing a surgical operation, had been exposed to cold, and had thus got a catarrhal inflammation of the larynx, he would very probably have had a membranous exudation on the inflamed mucous surface, and the case might have been reported as one in which "the formation of false membrane in the air-passages had succeeded upon a definite exposure to cold."

The result of my own investigations has been the conclusion that, in the absence of direct contagion, the occurrence of membranous pharyngitis or laryngitis affords conclusive evidence of infection by sewage-poison conveyed through either air or water. It will scarcely be denied that if this doctrine is true, it is of immense practical importance.—*London Lancet.*

TREATMENT OF DELIRIUM TREMENS.—Surgeon-Major Willis's note on the treatment of this disease with thirty-grain doses of powdered capsicum is interesting and of much practical value. But on what therapeutic principle are we to account for the capsicum having so powerful an effect? I have recently had similar effects with less than five-drop doses of the tincture of capsicum. Can it be that in both cases the capsicum, as an acceptable and innocent substitute for alcohol, merely put the long splint, so to speak, on the patient's stomach and nervous system, thus securing his quiet acquiescence in what was for the time the *rest of total abstinence?* I confess it was with this impression that I administered the drug; but some special features of the case, and a desire to present to the patient a palatable beverage as nearly as possible in the form of his accustomed tipple, suggested the following prescription:—

℞ Sodæ phosphatis ʒj; syrupi ferri phosphatis, syrupi limonis, āā ʒiss; mucilaginis acaciæ ʒij; tincturæ cardamom. co. ʒj; aquæ ad ʒxxiv. M.

Sig.—*The wine of capsicum.* A wineglassful as required. This was put in a common wine bottle, and was much relished by the patient, who took it at once, and next day passed into a refreshing unbroken sleep of nearly twenty-four hours duration.—D. TOLMY MASSON, M.D., Edinburgh.

THE DETECTION OF SUGAR IN URINE.

BY THOMAS BIRT, M.D.

The employment of the fermentation-test for the detection of sugar in the urine is, I am afraid, not so frequently used as it should be. This arises from some little difficulty in the manipulation. To obviate this, I have devised a simple and inexpensive apparatus, which is very easy to use, and gives trustworthy results. It consists of a couple of ounce-and-a-half vials, with their corks, and an empty used sardine tin. The lid of the tin is bent at right angles with its cavity, and affords a support to the two vials, an elastic band or two being used to retain them in their proper vertical position, while the cavity of the tin receives a portion of the urine under examination sufficient to cover the inverted ends of the bottles, thus forming an extemporaneous pneumatic trough, allowing the whole concern to be put in any situation where the required temperature can be maintained. The vials are two of the ordinary "long series" ounce-and-a-half size. The corks are of unequal length, and each has a triangular notch, about one-twelfth of a inch deep, cut through the entire length of one of its sides. This constitutes the whole of the mechanism. In using, the bottles are to be filled to the very brim with the suspected urine. To the vial which takes the longer cork, a little yeast is to be added; the cork is then forced in level with the neck of the bottle. The notch in the cork allows the superfluous urine to escape. The bottle can then be inverted without a particle of air entering, and placed mouth downwards in the stratum of urine contained in the hollow of the tin. The other bottle is to be treated in the same way; but no yeast is to be put in it, and it is to be placed side by side with the other. The bottle containing the yeast is recognized by its longer cork; and if sugar be present, at a sufficient temperature fermentation soon commences. Gas is evolved, and is retained in the upper part of the bottle, while an equal bulk of urine is expelled through the slit in the cork. The bottle with the shorter cork having no ferment added to its contents remains full and unaffected, affording a striking means of comparison. By always using the longer cork for the bottle to which the yeast is added, no mistake can occur. The whole affair, being bound together by the elastic bands, can be safely carried about and exposed to the requisite temperature. The thing is thus done as easily as the copper or other tests. A little modification would afford a quantitative result.—*Brit. Med. Journal.*

(Translated for the CANADIAN JOURNAL OF MEDICAL SCIENCE.)

THE RENAL FORM OF TYPHOID FEVER.

BY DR. CHARLES ANOT.

1. "The typhic process affects the kidney in the same manner as the other organs (brain, medulla, lungs); hence the necessity of admitting a renal form, alongside of the cerebral, cerebro-spinal, and thoracic forms.

2. Recognized by M. Gubler, remarked by M. Albert Robin, and confirmed by M. Hardy, this form has not yet been the subject of a complete description.

3. It possesses a special symptomatology (slight diarrhœa, considerable prostration, extreme adynamia, earthy paleness of the integuments, abundant epistaxis, precocious delirium, very elevated temperature, and but slight exanthematous eruption) and a special urological syndrome (bloody colouration of urine, odour of boiled bread, constant sediment formed by reduced white globules, and casts; albuminuria in considerable quantity).

4. The ordinary form is differentiated from the renal form by a greater intensity of the abdominal phenomena, by a more abundant diarrhœa, by a less precocious delirium, by less elevated temperatures, and by a more confluent exanthematous eruption. The urine is of an orange colouration, sediment is not constant, and is chiefly composed of urates, fat, and phosphates. Albuminuria is not abundant and is transient.

5. The isolated and agminated follicles of the intestine are affected in small number. The kidneys, although voluminous, present the alterations of interstitial nephritis.

6. The renal form may be mistaken for an ordinary typhoid, and, in certain cases, for a primary renal affection.

7. The course and duration of the disease vary; the termination is generally fatal.

8. Variations occurring in the quantity and in the composition of the urine render the prognosis favourable or the reverse.

9. The patient should be placed upon a milk diet, and above all things the use of cold baths must be interdicted."—*L'Union Médicale.*

Surgery.

ON THE MEANS OF PREVENTING THE FORMATION OF CYSTO-PHOSPHATIC DEPOSITS.

BY SIR HENRY THOMPSON, F.R.C.S.,

The operation of lithotrity is occasionally followed by chronic cystitis with painful symptoms, and by frequently recurring production of the cysto-phosphatic deposits previously described. This condition may persist for a long period, and it may sometimes never wholly disappear. The numerical proportion of these unsatisfactory cases to those which are wholly successful is happily small; and even that may probably be diminished by the exercise of judgment on the part of the operator, and by his conformity to certain rules in operating. There are two points to which it is necessary to pay special attention in order to avoid the unfortunate results in question. The first is, not to apply the crushing operation to any stone of a size beyond that which may be termed strictly moderate, a term which it is difficult to define, but which is designed as a caution against regarding lithotrity as desirable for calculi of large size; the second is, not to delay unnecessarily subsequent repetitions of the sitting when the stone has been attacked by the lithotrite.

These rules are established by practical experience of the operation; but the correctness of the principles enforced is also exemplified by the pathological observations described in the preceding paper. That which has happened to patients who are troubled long after the operation with recurring concretions is, without doubt, a serious injury to mucous membrane of the bladder, permitting a phosphatic deposit to adhere to some portion of its surface. This deposit increases by aggregation, and is detached in some form as a concretion, which produces symptoms relieved only by its removal. The process is repeated periodically, sometimes with lengthening intervals of time, and with a tendency to cease, if due care be taken, although the term of recovery is often a long one. In other cases, the tendency steadily increases, and the opposite condition follows.

In speaking of injury to the mucous membrane, I by no means imply injury through the use of instruments. Little harm occurs from the modern lithotrite in delicate and careful hands, a remark which does not apply to instruments of early construction. With the latter, injury was often inflicted on the bladder, and strong objections were long entertained to the operation on that account, and very justly so. The causes of injury to the membrane already described as resulting in loss of polish and in roughness, which attracts phosphatic precipitate, are threefold.

First: This morbid change may be caused by the long residence in the bladder of any calculus, particularly one with harsh, uneven surface, and so may have already taken place before the patient seeks relief from the surgeon. In this stage, whatever may be the composition of the stone, the enveloping crust is phosphatic, and the symptoms are severe. Such a condition is no doubt best met by lithotomy, under almost any circumstances.

Secondly: The bladder being healthy, an operator may crush a stone, say of uric acid, but of a size which, although quite within the mechanical power of the lithotrite to crush safely, is still too large to be disposed of in four or even five sittings. There is then some risk that from much contact between the sharp angles of broken stone and the mucous membrane of the bladder, which must take place, abrasions commence, all of which do not heal, and the inner coat is left, at the conclusion of the process, bruised, sore, and slow to recover the natural condition. This might probably have been regained after two or three sittings; but four, five, or six have been more than the membrane could sustain with impunity. With a stone of this size also it is probable that lithotomy would offer equal, if not better, chances of a successful result.

Thirdly: The bladder being healthy at the outset, and the stone not necessarily being large, but one well adapted for successful treatment by lithotrity, the operator may permit considerable intervals of time to elapse between each sitting. He may do this in the hope of diminishing irritation or inflammation resulting from the previous sitting, desiring not to arouse more disturbance, as he may think, by again applying

the lithotrite; and many days may be allowed to elapse in an attempt to combat the existing troubles by rest, medicine, baths, &c. Meantime there is prolonged contact between the rough fragments and the mucous membrane, and damage to the latter is surely taking place. The best remedy in such circumstances is again to crush and so reduce the irritating fragments to fine débris, which, moreover, is largely removed at the same time. I have often seen urine which had been purulent and bloody for days become almost clear within four hours after the use of the lithotrite. At every point of contact between the numerous sharp angles of broken fragments and the delicate lining of the bladder, a minute ulceration commences, and gives issue to a little blood; no sooner are the fragments crushed than the wounded points rapidly heal, and the bleeding ceases. But if the intervals between each crushing are prolonged, dangerous contact is prolonged also, and by repetitions of this error the bladder is brought into a condition in which more or less permanent mischief is sustained, and the phosphatic trouble commences its chronic course. In order to avoid this, then, I repeat that it is essential not to prolong the intervals between each sitting beyond two or three days, unless there is some more important reason for doing so than the presence of cystitis, which is, on the contrary, a ground not for delay but for action. Indeed, no occurrence except repeated attacks of fever or severe orchitis should postpone the use of the lithotrite when the operation has once been commenced.

The next practical question for consideration is the treatment of the bladder itself when phosphatic deposits and concretions are formed there, and show a tendency to remain, or, after expulsion, to be again produced.

The first condition indisputably necessary to success is that the organ, if incapable of emptying itself, should be artificially emptied by the patient in the easiest manner, as often in the twenty-four hours as his comfort demands, and never less than twice a day, however small the quantity left behind. Next, as organs thus affected are by no means always quite emptied, even by the catheter, a small quantity of warm water should be injected once, twice, or thrice daily after catheterism, to wash out the remaining urine if any such there be, and the phosphatic precipitate, which will be certainly found therein. For this purpose the four-ounce indiarubber bottle with brass nozzle and stopcock is the best instrument; one-third only of its contents is to be injected at a time, and this quantity is to run out before the succeeding third is introduced. To the water should be always added either carbolic acid in the proportion of one grain to the ounce, or the solution of permanganate of potash (Condy's), six or eight minims to the ounce. Either of these disinfectant solutions, the first-named being perhaps mostly preferable, should be employed as preliminary to all other injections; they are not in the slightest degree irritant to the bladder and they deodorise and cleanse the interior. Further, and this is a fact of some importance, carbolic acid does not decompose any solution of metallic salts which it may be desirable to inject immediately afterwards. It ought not to be necessary to add, in passing, that all instruments should be placed, before and after use, in a bath of carbolic acid solution, but double the strength of that mentioned above. This, of course, relates to all instruments which are at any time or for any purpose to be introduced into the urinary passages.

The bladder being thus kept in good sanitary condition, the next consideration is, what agents are to be employed to promote healing action in the diseased mucous membrane? The best are salts of silver, copper, and lead, very weak solutions of which should be used at the first occasion of applying them, watching carefully the result before augmenting their strength, and doing so very gradually. The nitrate of silver should at first not exceed in strength the proportion of one grain to four ounces of distilled water; even one to six ounces is preferable if a patient is more than usually susceptible. It should always be preceded by a cleansing or deodorising injection, to remove from the surface to be acted upon the muco-pus which is coagulated by the solution of silver, and tends to hinder contact with the agent. This injection is to be employed in the gentle manner directed above for the first application. If very little inconvenience follows, a slightly stronger solu-

tion should be used after an interval of two or three days, always avoiding an increase in strength sufficient to produce any severe or long-continued pain.

Sulphate of copper should be applied in the same proportion—viz., one grain to six or four ounces of distilled water. An acetate of lead solution of the same strength is a valuable agent, to be used daily, or even twice a day, by the patient himself; but the sulphate of copper, like the nitrate of silver, is to be repeated only every alternate or third day, according to results. It may be remarked here that in the treatment of chronic vesical hæmorrhage by astringent injections, such as the solution of matico, or of perchloride of iron, the same rule in relation to the carbolic acid solution, and to the manner of injecting, should be followed. In the last named condition, also, the temperature of the injection may be lowered to 40° or 50° F., while, in relation to the subject under consideration, the temperature should not differ greatly from that of the body.

For the removal of small concretions, the eight-ounce elastic bottle, with a large brass nozzle overlapping a No. 10 or 11 gum catheter (described in *The Lancet* of Jan. 8th, 1876,) produces an excellent current, not only inwards but outwards, by expansion of the bottle; and Mr. Clover's aspirator, so useful for débris in lithotrity, or for removing last fragments, is equally valuable here. But the object of the injections above described is not to remove deposits from the bladder, but solely for the purpose of acting on the mucous membrane, so as to hinder their formation, and aid in producing a healthy surface, to which they will no longer adhere. By systematically carrying out the plan laid down as soon as they appear, whether after lithotrity or in connection with chronic disease of the bladder and prostate, the complaint can generally be greatly mitigated, and sometimes it is effectually cured. — *London Lancet.*

Old Corks Made New.—Soak in hot water for a day, wash repeatedly and soak in a mixture of hydrochloric acid one part, and water fifteen parts. After a few hours soaking wash well and dry.

FOREIGN BODIES IN THE ŒSOPHAGUS.

* * * * * * *

The following is the substance of a paper read by Professor B. von Langenbeck to the Berlin Medical Society on "Foreign Bodies in the Œsophagus and Œsophagotomy:—Surgeons before administering chloroform to elderly people should ascertain with certainty the existence of false teeth, and insist upon their removal. In the removal of large foreign bodies the finger is the instrument to be resorted to before all others; and if they are too firmly fixed to be removed by it, then forceps or levers should be used. Tracheotomy is always too late in such cases. When, also, small-pointed foreign bodies—as needles, fish-bones, &c.—are detained in the pharynx, and especially in the sacculi formed by the ligamenta glosso-epiglottica, the finger should never be omitted to be introduced, in the hope of bringing the body into the mouth, or at all events to ascertain its exact position before employing the forceps.

A peasant applied to the lecturer for relief, having thirty hours before attempted to swallow a huge piece of sinewy meat, which, being retained, almost induced suffocation. Repeated attempts were made to remove the foreign body by means of a slightly curved, strong forceps, but it proved immovable, only some of the fleshy fibres coming away. Œsophagotomy was contemplated, as during the attempts at removal the difficulty of respiration was so greatly increased; but the projecting tumour having been seized by the fingers in the neck, raised from the larynx and compressed for some minutes, the respiration became much more free. The foreign body, although not moving from the spot, had assumed through this manipulation, a more elongated form, and was removed by means of the forceps with some exertion of force. Another man applied on account of the obstruction to respiration and swallowing caused by a pretty large piece of tough meat which had for twenty-four hours obstructed the same part of the œsophagus. Violent retching, caused by tickling the fauces and attempts with the forceps to withdraw or thrust it down, failed to dislodge the body

which was placed as in a diverticulum of the left side of the œsophagus. The tumour which it formed in the neck was then seized with the fingers and squeezed so powerfully that the body slid down into the stomach. Dupuytren dealt with a potato in the same way, which had resisted all attempts to withdraw it or force it into the stomach. The general and almost traditional practice of employing the probang, either for the withdrawal or for the thrusting down of the foreign body, cannot be too earnestly deprecated. A more irrational practice can scarcely be imagined, and no other instrument has done so much mischief in proportion to the number of cases in which it has been employed. By it we are able to ascertain neither the situation nor the condition of the foreign body; and, in place of its withdrawal or propulsion, it sometimes becomes only forced deeper into the œsophagus, and even (as in two cases which the lecturer has met with) is thrust through the wall of the œsophagus into the mediastinum. When soft bodies obstruct the œsophagus, the forcing of which into the stomach is desirable, the probang may be used; but in all cases when the condition and position of these are unknown, or their extraction seems possible, catheterism must first be performed. For this purpose Professor von Langenbeck uses a whalebone staff, to the lower end of which is attached a smooth polished iron ball. This, when well oiled, slides readily down the œsophagus by its own weight, is easily movable to and fro, and enables us to detect with certainty hard bodies, such as coins, needles, and pieces of bone. If the object is to force into the stomach a harmless substance, the nature of which is known, he employs an elastic œsophageal sound; this acts upon the foreign body as efficaciously as the probang, but slides down the œsophagus far more easily, and renders injury much less possible. Foreign bodies which may wound the œsophagus, or become dangerous in the intestinal canal—such as bone, fragments of glass, coins, needles, etc.,—should, in Professor von Langenbeck's opinion, be always extracted, their extraction being a far more certain and less dangerous procedure than forcing them into the stomach. In a great number of such operations he has never met with any accident. The instrument which he exclusively employs for this purpose is Von Graefe's coin-extractor. This passes with facility, and without any injury, into the œsophagus beside the foreign body, and during its withdrawal seizes it with a certainty that leaves nothing to be desired. Prior to its introduction, some oil should be introduced into the œsophagus, and then the end of the instrument should be guided by the left forefinger over the root of the tongue and epiglottis against the back of the pharynx, and thence into the tube. On withdrawing it very carefully, if the least resistance is encountered we must desist, and move it gently to and fro in order to disengage it from any possible entanglement in the mucous membrane. When the instrument with the foreign body has arrived opposite the cricoid cartilage, difficulty in completing the extraction is caused by the cartilage springing backwards; but this may be obviated by pressing the end of the instrument, which has now become visible, against the posterior wall of the pharynx. When the isthmus faucium has been reached, we should always, and especially with restless children, have the left forefinger in readiness, in order to seize hold of the foreign body, which might otherwise escape. A pair of firmly grasped pharyngeal forceps, and this coin-extractor, constitute all the apparatus required.

There is, however, one inconvenience attending the coin-extractor that must be noticed, viz., when the foreign body becomes so firmly wedged into the extractor that this cannot be loosened from it and withdrawn. Professor Adelmann relates a case in which the extractor, thus embracing the foreign body, could not be removed during two days. In the case of a girl who had swallowed a shawl-pin, which occurred to the lecturer, its position at the lower end of the œsophagus having been detected by means of the sound armed with the iron knob, it was seized by the coin-extractor. So firmly, however, had it penetrated the œsophagus that it could not be withdrawn; and, after repeated efforts, when the attempt was abandoned, the instrument could not be separated from the pin until after half an hour, when the pin slipped into the stomach. Bloody stools followed, and the patient complained of great pain in the

stomach for a month after the accident, but the pin has never been found.

When the removal cannot be accomplished, and the nature of the body does not admit of its being thrust into the stomach, when the cervical œsophagus is the part of the tube concerned, we should perform œsophagotomy. It is a comparatively rare operation, for, according to König, from the time of its first performance by Goursault in 1738 to 1872, it has only been executed twenty-six times for the removal of foreign bodies. Its indication has been generally believed only rarely to occur, while its danger and difficulty have been exaggerated; and an examination of recorded cases of foreign bodies in the œsophagus shows that it should have been performed much more frequently, and that, without doubt, many lives might have been saved by it. The twenty-six operations referred to by König, and two now related by the lecturer, were followed by twenty-three recoveries and five deaths, some of the latter being due to the too prolonged residence of the body; so that the operation must be regarded as one attended with very little danger. Almost all living surgeons agree that the mode of making the incisions recommended by Guattani is the best, the skin on the left side of the neck being divided from the middle of the thyroid cartilage to the anterior edge of the sterno-cleido-mastoid, and to about five centimetres above the manubrium sterni. After the superficial fascia has been divided, the sterno-cleido is drawn outwards and backwards by means of double hooks, and the common carotid then becomes visible through the middle cervical fascia. The fascia is to be divided in the direction of the long axis of the wound, and drawn outwards and backwards by means of strong hooks, the carotid being kept out of the operation-field. It must not be forgotten that this artery lies more superficially than the œsophagus, and that the latter only becomes visible after the deep cervical fascia has been divided. This is done at the outer edge of the sterno-thyroid muscle, after having drawn the larynx by means of a hook to the right side. The muscle being now drawn towards the median line, the œsophagus becomes visible. Before opening it an œsophageal sound, made of gum-elastic or pliable metal, should be introduced for the purpose of projecting the œsophagus more to the left, and rendering its opening more easy and certain. The separation of the fascia in order to expose the œsophagus is best accomplished by raising it by means of two hook-forceps and dividing it between them, allowing the knife to act more by its pressure, thus avoiding injury to the inferior thyroid artery and inferior laryngeal nerve. Injury to the recurrent nerve is not much to be feared, as this passes upwards between the trachea and œsophagus, and is with the former organ drawn towards the right; it is only in question when a foreign body of large circumference thrusts the œsophagus far towards the left. One circumstance may render the access to the œsophagus exceedingly difficult, and is of the more importance, inasmuch as it is not noticed in any of the descriptions of the operation. This is the tumefaction of the thyroid gland. If a large foreign body be detained for several days opposite the cricoid cartilage, causing difficulty of respiration by pressure on the larynx, swelling of the thyroid due to a stasis of the blood in the veins is always present. The tumefied gland lies so much over the œsophagus that this may be entirely covered by it; and in order that the gland may be raised from the œsophagus its enveloping fascia must be divided.

Professor von Langenbeck terminates his communication by the narration of two cases in which he performed œsophagotomy with success for the removal of false teeth.—*Summarized from Medical Times and Gazette.*

A Successful Gastrotomy.—Dr. F. Trendelenburg reports in the *Wiener Med. Presse* another successful case of gastrotomy to be added to the hitherto unique case of Verneuil. A boy aged seven years, the subject of impassable stricture of the œsophagus from swallowing caustic potash, had fallen into extreme marasmus. Gastrotomy was performed without bad effects, and two days afterwards nourishment could be introduced into the stomach through the small resulting gastric fistula. A small drainage-tube of the thickness of the little finger was introduced into the fistula, into which was passed a thicker glass tube having attached to it an elastic gum catcher reaching to the mouth. When the boy wants to eat, he chews his food and expels the mastigated mass through the tube into the stomach. Four months after the operation, the boy's weight had increased by a fourth.

(Translated for the CANADIAN JOURNAL OF MEDICAL SCIENCE.)

ON FOREIGN BODIES IN THE URETHRA AND BLADDER.

BY PROFESSOR WEINLECHNER.

[From the *Wiener Med. Wochenschrift.*]

Cases in which foreign bodies are found in the urethra and bladder are by no means rare. Scarcely a year passes without the surgeon of extensive practice meeting with one. They are of great interest not only on account of the danger incurred but also on account of the amount of skill required for their successful treatment.

A very great variety of foreign bodies has been found in the urethra and bladder. They may be divided into two classes, those which are introduced from without and those which are formed in the bladder itself. Of the first class, the most common are, needles, needle cases, lead pencils, quills, stalks, charpie, straws, fruits and fruit stones, pieces of wood, catheters bougies, sounds, ear spoons, and similar instruments, pieces of sealing wax, pieces of wax, pebble stones, pearls, bullets, glass drops, splinters of bone, pipe stems, small brushes, glass tubes, forks, pieces of leather, &c. They are introduced in various ways.

They are often introduced in play or in order to lessen the difficulty of passing water, but most frequently in order to produce sexual excitement. Denucé ascribed to the latter cause 258 cases out of 351. Men and women participated in this form of sexual abuse in about equal numbers, and the articles they use generally vary with their particular employments. Males generally use lead pencils and penholders: with women, needles and needle cases are the favourites.

Cases also frequently arise from surgical manipulation in which instruments or parts of them are allowed to remain in the urethra or bladder. Sometimes the instrument used breaks off in the urethra and sometimes it slips from the hand of the operator and is drawn in, owing to a peculiar power which that canal apparently possesses of taking up anything which may happen to pass into it. The substances in this class of cases are found much more frequently in the bladder than in the urethra. Out of 225 reported cases, in 208 they were found in the bladder and in 17 in the urethra.

Less frequently cases are found in which foreign bodies are introduced by wounding of the surrounding tissues, as in sword wounds, those from bullets, &c.

A case is reported in which Schule removed from the bladder of a peasant a small piece of linen, which the patient asserted was a piece of his pants. He had some time before fallen on a wood paling and a piece had been driven into the bladder.

Patients, however, are very willing to ascribe to accidents what really has happened through their own bad deeds. Frequently the patient does not come for advice until after the foreign body has been some time in the bladder or urethra and has become encrusted by excretions. Sometimes nothing is said about the presence of any foreign body at all until the surgeon meets with it in the operation. Prof. Wesser of Prague has shown me a piece of steel about the size of the largest catheter, rounded at the end, which an iron worker had put up his urethra.

The patient allowed the lithotrity operation to be quietly proceeded with when the hard substance was come in contact with, and afterward removed by cutting into the bladder. The same operator has kindly shown me a glass bead which he had removed by section. The possessor suffered from self-abuse, slept over night with a clergyman and put the bead up the urethra, as he said, to prevent the bed from becoming soiled by the emission of semen. When once the foreign body has reached the bladder it may remain a long time without giving much trouble. There is one instance reported in in which a needle had been removed from the prostate after it had been sixteen years there.

Finally, foreign bodies find their way into the bladder by pathological processes. A case is related in which Watson of Baltimore removed shot grains from the bladder of a woman who had previously eaten game. The grains having remained in the game passed into the bowels and found their way by ulceration from the rectum into the bladder. Other instances are given in which foreign bodies have thus passed into the bladder. The bladder may become the resting place of the remains of a fœtus in cases of extra-uterine

pregnancy, of necrosed bone in disease of the plevis, also of parasites, and finally, calculi.

As we have before stated, foreign bodies may exist in the bladder for a long time without causing much injury, but in some cases they immediately set up diseased processes which destroy life. In 21 out of 420 reported cases death resulted from inflammation, extravasation of urine, &c. In many cases after a time catarrh of the bladder, inflammation, formation of stone, &c., lead to a fatal end.

As a general rule, it is not difficult to determine the presence of foreign bodies, one examination with the sound being sufficient. Sometimes, however, owing to the smallness or lightness of the body, the diagnosis is more difficult. In these cases it is better to examine carefully when the bladder is empty. This is especially of use in cases where the substance, owing to its lightness, swims on the surface of the fluid. Pascal mentions a case in which a piece of wadding had been discovered when the bladder was empty which could not be found when it was full. It is not difficult to find foreign bodies in the urethra unless they are very small.

When the presence of the substance is positively made out it is of great importance to diagnose the form and the exact position of it. In order to proceed rationally the surgeon ought to satisfy himself whether the body is large or small, hard or soft, long or round—if it is long, in which diameter it lies ; whether it is free or fast, and whether there be one or more. These facts may be made out by the sound, by examination through the rectum and by the lithotrite. With the latter instrument one may find out the different diameters, the consistence and the brittleness of the substance.

After the diagnosis has thus been determined, the next and most difficult part is the removal. The operation should be undertaken after full deliberation and carried out with great care.

I will here relate a case of my own experience :

E. N., aged seventy, suffered for some years from enlarged prostate and had frequently to pass the catheter on himself. On the 10th May, 1872, while he was using a gum-elastic one, it broke off in the centre, leaving a part in the urethra and bladder.

Two specialists were called in: the one recommended cutting into the urethra and thus removing, whereas the other advised removing with the urethral forceps. The latter plan was adopted, and after a good deal of trouble, the piece was removed. During the operation needles were passed through the corpus spongiosum and urethra in order to fix the catheter.

Soon after the removal of the foreign body a swelling appeared in the corpus spongiosum and in the left corpus cavernosum, accompanied by severe chills and fever. On May 14, I was called to see the patient: found the penis very much swollen, fluctuation and crepitation over the swelling. An incision was made and some ichor appeared. The patient could not urinate. A catheter was passed. Afterwards some urine passed through the wound. On May 15th, the corpora cavernosa appeared to be inflamed and filled with ichor. On the next day, the patient, who was before a strong, healthy man, died comatose.

An old gum-elastic catheter should not be used unless it has been specially examined. When one is used and unfortunately breaks in the urethra it would appear from the case given above that it would be better at once to cut into the urethra than attempt to remove it with the forceps unless the latter operation can be easily performed.

[In connection with this subject the translator might mention a case reported in this journal about two years ago. Some companions of the patient, while he was in a state of intoxication, introduced a pipe stem into his urethra: it then found its way into the bladder. Some months afterwards he came into the Toronto General Hospital, when Dr. Aikins performed lateral lithotomy and removed the pipe-stem thickly encrusted with urinary salts. The patient made a good recovery. Another case is also illustrative of this subject. An old man who had suffered for some years with enlarged prostate and occasional difficulty in urinating came to me, having a needle about four inches long, with a glass bead on the end, in the urethra. He had passed it himself in order to facilitate the passage of urine. The sharp end of the needle could be distinctly felt in the urethra immediately in front of the scrotum, the beaded end being in the bladder. An incision was made into the urethra and the foreign body removed. The wound healed rapidly.]

SPONTANEOUS AMPUTATION OF A GANGRENOUS LEG AT THE KNEE-JOINT, UNDER THE HOT WATER TREATMENT.

December 18, 1877, John Meagher, aged about 25 years, a switchman on the Long Island Railroad, was run over by two platform cars. During three days, he remained under the care of a physician at Hunter's Point, refusing to submit to amputation.

December 21, he was admitted to my wards, Bellevue Hospital. My House-Surgeon, Dr. W. S. Halsted, who examined him at once, and who was throughout in immediate charge of him reported to me that he was, on admission, pale, and a little bronzed—his breath had a slight saccharine odor, the surface of his body was cold, his pulse weak, thready, and rapid. He was delirious, talking in a low voice and incoherently.

The right thigh had suffered a severe laceration just above the knee; the wound being about ten inches long, and closed by sutures. It was emitting a strong gangrenous odor. On removing the sutures, the underlying structures were found extensively contused, the bone bare, and the wound filled with masses of undetached gangrenous tissue.

His left thigh was broken about three inches above the knee-joint, the upper fragment penetrating the joint. The whole limb was cold, swollen, discoloured, emphysematous and pulseless.

His condition did not warrant an amputation. In this opinion, Dr. Wood and the House Staff concurred. A long splint was laid beside the broken limb and secured by bandages, heat applied to the extremities, a weak solution of carbolic acid was employed to correct the fœtor, and nourishment was stimulants were administered. Speedy death was anticipated.

On the following day, his mind was more clear, but he was still very feeble, and the gangrene was extending in both limbs. Amputation was advised, but the parents refused their consent.

December 23.—Gangrene still extending; in the left leg involving the whole limb as high as the knee, and a discolouration existing as high as the groin.

The entire left leg and thigh were now enveloped in cotton batting, saturated with hot water—water at about the temperature of one hundred and ten degrees of Fahrenheit—and the laceration on the right thigh was treated in the same manner. Outside of the cotton batting, each limb was enclosed in oiled silk, and the patient was made to repose on a sheet of oil-cloth.

From this time, December 23, to when the left leg was removed at the knee-joint, the hot water was renewed every twenty or thirty minutes, day and night.

December 25, the discolouration, suspected to indicate approaching gangrene, has nearly disappeared from the left thigh, above the fracture. A line of demarcation is forming at the knee-joint. Delirium abating. He begins to take food. Rests well.

December 29, no delirium. Says he feels well.

January 6, 1878, nineteen days after the receipt of the injury, and thirteen days after the commencement of the hot water treatment, the separation at the left knee-joint was so nearly completed that with my scissors I cut the remaining sloughy bands, and removed the leg, without inflicting pain or causing the loss of more than a few drops of blood.

The gangrenous slough had already separated from the opposite thigh.

January 7, removed to a water bed, being threatened with a bed sore.

January 15, right knee painful and swollen, but on the following day a profuse discharge occurred from the wound above the knee—probably from the joint—and the patient was relieved.

January 22 to 31, three or four small abscesses appeared on right limb and were opened.

February 8, last report, patient gaining in strength; wounds healing on right limb. Lower fragment of femur, (left limb,) projecting, and the necrosed extremity of bone gradually separating from the shaft. The lower fragment, about four inches, including the joint surface, dead, but still hanging by two bands of living soft tissue. Granulations healthy and cicatrization progressing; water dressings discontinued when the leg separated; balsam of Peru being substituted. His final and complete recovery is now assured. Possibly after a time resection of the bone may be required to make a good stump, but probably not. The lower fragment might be removed at any time with the loss of a little blood, but it has been deemed advisable to wait until the patient's strength is better established.—*Hospital Gazette.*

MR. MESSENGER BRADLEY'S ANTISEPTIC TREATMENT OF WOUNDS.

* * * * *

It is unnecessary for me to say there is nothing original about my plan; it is necessary, however, that I describe it. In the first place I thoroughly cleanse the skin with carbolic soap, even rubbing off the outer layer of cuticle, thus removing all clinging germs. I take care that all instruments, etc., are perfectly clean. After performing the operation I fill the wound with some antiseptic, generally selecting No 20 solution of carbolic acid, although many other preparations, such as chloride of zinc, or sulphate of iron, or nitrate of silver, seem to possess equal germicidal powers. I then take pains to render the wound as dry as possible, after which the sutures are introduced and the wound dressed with four or five folds of lint thoroughly well saturated in a mixture of carbolic acid and glycerine. Over all I place either a pledget of carbolised tow, or dry lint, or cotton-wool. If the subsequent discharge be abundant, I at once liberate some of the sutures, to give free vent to the discharge, and have the wound dressed at least twice a day, otherwise the wound is dressed once a day. I carefully avoid using water in any shape or form, squeezing the matter out, not syringing it out, and wiping with dry, not with wet, lint. It will easily be understood that there are cases where the position of the pus, etc., renders it impossible to remove it altogether by pressure; this, for instance, is the case when the knee-joint, or indeed any joint except the hip-joint, is opened; then it becomes necessary to wash out the discharge with the syringe. When this has to be done, I am in the habit of using a solution of permanganate of potash in preference to carbolic acid, and take care that the syringing is thorough, and performed twice in the twenty-four hours, so as to give little time for decomposition to take place. Irrigation in this case is good; indeed, it is excellent; but it is somewhat messy and involves some exposure to cold, which is not always desirable or safe. There are two other conditions where the syringe comes into play, which I may take this opportunity of alluding to; I refer to the treatment of sinuses and abscesses. Speaking of the first, and supposing that all dead bone, etc., is removed from the bottom of the sinus, and that the granulation-tissue round the orifice is removed with the knife or scissors, I believe the best plan to secure closure of the entire sinus is to thoroughly flush it every day with a mixture of tincture of iodine and water (one to seven). Abscesses are, in my opinion, much better and more successfully treated on Callender's plan of superdistension, especially if pressure be exercised afterwards, than by the method of Lister. This at least is my experience, which in this respect, I believe, is in accord with that of some of my colleagues. You, of course, will ask me what proof I have that such a plan as the one I have detailed merits the term antiseptic equally with Lister's, and my answer is: I have given you my statistics, which, I think, will bear comparison with those of his followers; but I chiefly rely upon experimental proof.

You will please to bear in mind the two mutually supporting evidences we have of putrefaction: the presence of bacteria and the exhalation of ammonia. I make no mention of such questionable evidence as the smell or colour of the discharge.

Well, gentlemen, submitting my cases to this double test, I believe I am entitled to say that I practise antiseptic surgery; *e.g.*, among several similar experiments, permit me to mention the following:—A fortnight ago, I took the first four operation cases in the female wards, and, with two of my dressers (Mr. Challinor and Mr. Pownall), examined the discharges by the double test of the microscope and Nessler's solution. The cases chanced to be an amputation of the thigh performed three weeks before, a carcinoma on the chest, a lipoma of the neck, and an excision of the elbow, all operated on ten days prior to the examination. Besides these, we examined a case of ligature of the subclavian artery with another of my dressers, Mr. Williams, in the men's wards, of a week's standing. In none of these were bacteria to be found, and in none was ammonia to be detected. But understand my position: I do not claim for this plan that it will certainly prevent putrefaction; for I know that, in some cases, putrefaction does

occur, and, in my opinion, do what we will, ever will occur from time to time. What I allege of it is, that it is just as efficient as the more costly and cumbersome plan of Lister; and, in my opinion, this is no small boon. To the army surgeon, toiling in such a terrible war as is now raging, the simpler method I advocate is surely incomparably better, inasmuch as it is practicable, while the other is not. But even to the surgeon engaged in hospital and general practice, the advantage of simplifying Lister's plan is considerable; for I am daily more and more convinced that such matters as the mysterious spray, and the patent character of the dressings, act as a real hindrance to the comprehension and general adoption of the true principles of antiseptic surgery.—*Brit. Med. Jour.*

ON THE COLD-SOUND (PSYCHROPHOR).

Dr. Winternitz of Vienna (*Berliner Klin. Wochenschrift,*) has designed an instrument, by means of which he secures the advantages of mechanical irritation of the urethral mucous membrane by the metallic sound, combined with the anæsthetic and tonic influence of cold. It consists of a double-current catheter without eyes, the two canals communicating with one another near the point of the instrument. The instrument is introduced into the urethra until its point has passed the prostatic portion, and it is then attached by India-rubber tubing to a reservoir containing water at the desired temperature. On turning a stopcock, the water flows into one canal and out through the other, whence it is conducted away by another piece of tubing. In this way the caput gallinaginis and the entire urethral mucous membrane are exposed to the mechanical action of pressure, and to the sedative action of cold. The success obtained by Dr. Winternitz, by the use of this instrument, was so encouraging from the very beginning, that he has employed it constantly for over a year.

He has treated with it twenty-two cases of pollution. Of these two did not return after the first application; one was improved at first, but soon became as bad as before, and the treatment was discontinued after the cold-sound had been used sixty-five times; twelve are still under observation, and have been somewhat improved by the treatment, the pollutions occur very rarely, and the secondary symptoms, hypochondria, etc., have entirely disappeared. In three cases the improvement was marked when the patients withdrew from observation; in two others the pollutions became less frequent, but the secondary symptoms remained unchanged.

At the first sitting Dr. Winternitz sometimes uses water at a temperature of 64° or even 66° F., and at a later period sometimes goes as low as 54½° F. Besides the above, he has treated nine cases of spermatorrhœa with the cold-sound. In four of these cases he obtained very favourable results; two cases were very markedly improved, while in the other three the treatment was without special results. In the cases of spermatorrhœa as well as in those of pollution, in which the treatment proved successful, general relaxation of the genitals and loss of muscular tone in the scrotum were marked symptoms. The cold-sound was also used in five cases of too rapid ejaculation during coitus, and in two cases of obstinate chronic gonorrhœa. In the former, its use was followed by at least temporary improvement, and both of the latter, one of which had lasted three years and the other six months, were cured.

APPARATUS FOR THE TREATMENT OF TRANSVERSE FRACTURE OF THE PATELLA.—The President brought before the Society a patient fitted with this apparatus, which he had employed for some time past at St. Bartholomew's Hospital. It consisted essentially of a sheet of plaster fitting to the thigh and extending to the upper margin of the patella, with loops on each side of that bone, and of a canvas slipper, between which, acting from the sole of the foot, and the loops in the plaster, such extension was made by means of pulleys as sufficed to draw the upper fragment down to the lower portion of the broken bone. It was easy to regulate the tension; and, when it was thought well for the patient to get up, the apparatus was left on, as it acted just as well when the man was walking about as it did whilst he was recumbent in bed. Practically the appliance had been found to insure very good results.

Midwifery.

[Translated for the CANADIAN JOURNAL OF MEDICAL SCIENCE.]

Hôpital de la Pitié.

PHLEGMON OF THE BROAD LIGAMENT.

BY M. DUMONTPALLIER.

In bed No. 23, of Ward Sainte Eugénie, there has been lying for some days a patient who is worth your observation for a moment. Here is her history in a few words. She had been admitted into the Hôpital Saint Louis for her confinement, and had left it on the ninth day after delivery in a satisfactory condition; she had scarcely returned home when, after some excessive exertions, she was seized with sharp pains in the belly, in consequence of which she sought admission to our wards. Upon examination we recognised the existence of a phlegmon of the broad ligament. The following are the symptoms upon which we based this diagnosis.

There was found to the right of the median line of the abdomen, a little below and to the inner side of the region occupied by the ovary, a hard tumour of triangular form, the base of which was in contact with the uterus and the apex directed towards the anterior superior iliac spine. On vaginal touch it was remarked that the cervix was carried backwards, and that the whole of the space which forms the anterior vaginal *cul-de-sac* was filled by another tumour presenting the same hardness as that of the anterior abdominal region, continuous with it, and forming one body with the uterus. An important fact from a differential diagnostic point of view was this, that the retro-uterine *cul-de-sac* was absolutely free, and that whether the vaginal touch was practised, or the finger was introduced into the rectum, no trace of a tumour continuous with the others could be found in this part. It was not then the peritoneum, but the broad ligament, which was the seat of the lesion, which extended throughout the cellular tissue, and pressed the anterior surface of the inflamed broad ligament into contact with the corresponding part of the abdominal parietes. Thus was to be explained the displacement of the cervix backwards whilst the body of the uterus maintained its normal situation.

Phlegmon of the broad ligament when it occurs in the puerperal state has a very great tendency to terminate in suppuration. It has its point of departure in the uterine veins, or in the lymphatic vessels, or sometimes in the ganglions of this region. The first are most frequently affected, then come, in order of frequency, the lymphatics, and lastly the ganglions. But up to the present but little has been known of these last. So we shall leave them on one side, and only occupy ourselves with those perfectly characteristic cases in which the disease begins in one or other of the sets of vessels which we have just named.

When we reflect upon the anatomo-pathological alterations of which the uterus is often the seat after delivery, we cannot help being astonished that women, and especially those of the working class, are not oftener the subject of accidents after parturition. In fact, after *accouchement* there is a wound, corresponding to the insertion of the placenta, and generally occupying the fundus uteri. When we observe this wound, we always find in the veins, already partly retracted upon themselves, a demi-fibrinous, demi-cruoric clot, fibrinous on the side of the central circulation, cruoric on the side of the wound, on the surface of which small projections are observed which are only vestiges of these clots. But, it very often happens that in consequence of certain puerperal conditions, under the influence of a variable cause, there occurs an inflammation of the uterine walls in the region of the solution of continuity. Under these circumstances the veins themselves become inflamed, and if the phlebitis, (which is moreover, as Cruveilhier has well shown, almost always obliterative) be for any reason of a suppurative nature, and if the formation of a clot above the inflamed point do not occur to prevent the penetration of the pus into the current of the circulation, there results that peculiar form of fever to which the name of purulent infection of lying in women has been given.

At other times it is the lymphatic vessels which are diseased. But in any case the alteration is localized in a special ground, to which we should always pay the greatest attention. I mean the lateral borders of the uterus. It

is, in fact, within the thickness of the internal border of the broad ligament that the alteration is situated, for it is there that the vessels, arteries, veins, and lymphatics, converge, which have kept up the placental circulation, a very active physiological circulation as gestation required. There is found the point of departure of phlegmons of the broad ligament whose origin has been in inflammation of the lymphatics or of the veins. It was under such conditions that this woman came into our wards. The placental wound was in process of cure, when 10 or 12 days after delivery in consequence of over exertion she presented herself to us with all the signs I have just described, and which enabled me to diagnose a phlegmon of the broad ligament. The most absolute rest, the application of cataplasms over the abdomen, and freedom of the bowels secured every day or every other day by means of a purgative, suffice in the majority of cases to enable these patients to get well, and the phlegmon is thus rather easily prevented from being transformed into an abscess, the grave consequences of which you well know. You will not therefore be astonished that I have with so much insistance opposed this woman's going out. I am, in fact, convinced that she goes out merely to return in a few days with an abscess of the broad ligament, the consequence of an uncured phlegmon.

What will be the course of this abscess?

When abscesses of the broad ligament are formed they are commonly announced by symptoms of considerable gravity: the woman is seized with repeated chills, fever is set up, the temperature rises, and sharp pains occur within the belly.

Later, when the suppuration has become established, it is not rare to observe the pus open into neighbouring organs, such as the bladder, rectum, and peritoneum. In the last case, the presence of pus in the peritoneal cavity gives rise to acute complications which rapidly carry the patient off. In certain cases, on the other hand, the disease assumes a slower course, but the termination of which, as would be expected, is not less fatal, for it is rare that a woman, struggling against the hectic fever which consumes her, does not in the end succumb to the most complete marasmus. At other times the abscess points in the inguinal region, and opens here spontaneously at the end of 10, 15 or 20 days. But the tendency of these purulent collections to invade the cellular tissue which surrounds them is so great that most frequently a similar process occurs simultaneously in connection with the vagina, so that, even after the inguinal abscess has been opened either spontaneously or by surgical intervention, it is not rare to observe that some days afterwards the vagina becomes perforated in turn and gives issue to a purulent liquid. Therefore the prognosis should always be exceedingly reserved.

You will understand, from what I have just said, how serious this woman's affection is, and how dangerous it is for her to leave the hospital in her present state. Her imprudence may be attended with serious consequences, whilst rest in the hospital would in all probability suffice to obtain a cure of her peri-uterine phlegmon.

THE VOMITING OF PREGNANCY.—The *Presse Med. Belge* notices a method proposed by Dr. Labelski, a physician attached to the Warsaw hospitals, at the Brussels Academy of Medicine, for arresting the incoercible vomiting of pregnancy. As soon as this appears, or even the nausea which usually precedes it, a douche of pulverised ether should be directed by Richardson's spray-producer against the epigastric region and the corresponding part of the vertebral column. The douche should be prolonged for from three to five minutes, or even longer, and repeated every three hours. In obstinate cases it should be alternated with douches of chloroform.—*Dublin Medical Press.*

DIAGNOSIS OF PREGNANCY.—Dr. Goodell, of Philadelphia, says, "You should adopt this general rule of diagnosis: when the neck of the uterus appears to you as hard as the end of your nose, pregnancy should not exist; if it appear to you as soft as your lips, the uterus probably contains a fœtus."

A case is reported in the *Maryland Medical Journal* in which labour was retarded by the presence of a ring pessary.

Materia Medica.

THYMOL AS A REMEDY IN SKIN-DISEASES.

BY H. RADCLIFFE CROCKER, M.D.,

Asistant Medical Officer to the Skin Department, University College Hospital, etc.

Thymol is obtained from the essential oil of thyme, which is found in several plants—*Thymus vulgaris*, *Thymus serpyllum*, *Mentha sylvestris*, and *Ptychotis ajowan*, the last a very common plant in India, which would probably be the main source if much demand arose for it. Oil of thyme consists of two bodies; one a liquid hydrocarbon, thymene, and the other oxidised, thymol ($C_{10}H_{14}O$). It is placed by chemists in the camphor group, and is homologous to phenol, forming thymolates and sulphothymolates with alkalies. As imported into this country, it is a white solid, crystallising in oblique rhombic prisms, though from weak solutions it may be obtained in the form of needles, with the odour of oil of thyme, and is obtained in the solid form by freezing the essential oil or by distillation; but when made by acting on the oil with caustic alkali, with which it combines, and separating it from the alkali by an acid, it occurs as a liquid which cannot be made to crystallise. In water it is only permanently soluble about one part in a thousand, but readily soluble in alcohol, ether, glacial acetic acid, vaseline, and fatty substances generally. Still better as solvents, both on account of the quantity taken up and because so dissolved it can be diluted to any required extent, are the caustic alkalies, thymolates being formed, I believe.

Five grains of thymol dissolved in an ounce of rectified spirit will not be precipitated on the addition of an equal bulk of water; but some will be thrown out when diluted to four ounces to be redissolved when the proportion of six ounces of water to one ounce of spirit is reached. In the proportion of two grains to the ounce of spirit, it is miscible with water in any proportion. A solution of seven grains of caustic potash in a drachm and a half of water will take up fifteen grains of thymol. A solution of ten grains of caustic soda in a drachm of water takes up thirty grains of thymol. Glycerine only increases the solubility in water very slightly. Further details may be found in Mr. Gerrard's paper in the *Pharmaceutical Journal*.

As an outcome of the above, I have used the following formulæ.

1. An ointment, consisting of one ounce of vaseline and from five to thirty grains of thymol; the thymol being dissolved in the vaseline.

2. A lotion, consisting of thymol, five grains; rectified spirit and glycerine, each one ounce; water, sufficient for eight ounces. The glycerine is added to correct the desiccating effect of the spirit alone.

3. A solution of five to eighty grains of thymolate of potash* in eight ounces of water.

The disease in which I first prescribed it and have had the greatest success, is psoriasis

In my early cases, I used the ointment of a strength of twenty-five grains to the ounce, to be rubbed into the seat of eruption after the removal of the scales, night and morning; but I soon found that it was a powerful stimulant, and that 5 per cent. was too strong for many cases. I found it better to begin with a weaker ointment, namely, ten grains to the ounce; and then, if the remedy were suitable, to continue as long as improvement was manifested, and if it became stationary, to increase the strength by five grains to the ounce until, in some cases, thirty grains to the ounce was reached. In the majority of cases, the weaker ointment was sufficient to cure the case; and another advantage is that it can be more continuously applied than the stronger forms, a method to be preferred, as a rule, to intermittent applications. Many cases treated with thymol showed rapid improvement, and some very chronic cases, which had resisted other treatment, including tarry applications, improved and were finally cured by it.

If the disease were limited or nearly so to its usual situations on the extensor surfaces of the forearms and legs, I usually ordered the ointment; but when the diseased surface was

* Since writing the above, Mr. Gerrard has found that the alkali merely dissolves the thymol, and that when the vaseline ointment is stronger than twenty grains to the ounce, the thymol should be first dissolved in alcohol, in the proportion of one minim to the grain.

of considerable extent, a lotion was prescribed to be applied with soft rag several times a day, lotions being generally more convenient in the daytime to people following their usual avocations. In some people it produces tingling and occasionally smarting when first applied, but this only lasts a few minutes. Like all stimulant remedies, it does not suit every case, and must not be applied, or at least very dilute, when, on removing the scales, the parts are much hotter to the touch than the surrounding skin and very red; in short, whenever the hyperæmia is considerable. This must be first subdued by soothing astringent measures externally, and appropriate internal medication, and then thymol applications will materially hasten the cure. In fact, it is most successful in that class of cases in which tar is usually prescribed, and while quite as efficacious and in some cases succeeding where tar fails, it is cleaner, colourless, and hence can be used on the face without producing the brown discolouration of oil of cade and other preparations of tar, while the odour is rather pleasant than otherwise.

In the later stages of eczema it is also extremely useful; some cases of very long standing, which had been submitted to other treatment of various kinds, rapidly yielded to thymol. It was necessary in eczema to use a weaker ointment of only three to five grains to the ounce; and I have not met with any case of eczema that required a stronger application than that, and unctuous are generally better than watery applications in this disease.

As might be anticipated, it is adapted to a smaller proportion of cases than psoriasis, and must be restricted to cases in the dry stage or where the amount of discharge is diminishing, *i.e.*, not until the activity of the inflammation has subsided; hence it happens that even in the same patient it would cure one part, and be too stimulating for another part where the inflammation was still active. If, however, due discrimination be employed, the duration of the disease may be much curtailed. Smarting when first put on is rather more frequent than in psoriasis. With similar precautions, it also rapidly completes the cure in so-called lichen agrius; but usually a preliminary soothing treatment is required for some time before thymol is prescribed.

Lewin and Bucholtz have shown that thymol is about eight times as powerful as carbolic acid as a destroyer of the lower forms of life, and hence its usefulness in vegetable parasitic diseases was suggested. Accordingly, I have treated cases of tinea versicolor, tinea tonsurans, and tinea circinata. In the last two I have not yet used it sufficiently to warrant an opinion as to its merits, but in tinea versicolor I have used an ointment of ten grains to the ounce and the thymolate of potash lotion of ten grains to eight ounces. The ointment was effectual, but slow in its action; but the lotion cured cases where a large surface was affected in a few days. I cannot, however, claim for it any great advantage over sulphurous acid and the hyposulphites. I may also mention, for what it is worth, that a case of lichen planus which has lasted five years, after a fortnight's treatment with thymolate of potash, shows more improvement than I have ever seen in so short a time; the itching is gone, and the eruption is less prominent.

I think we may conclude from the above facts that thymol is a valuable addition to the list of stimulant remedies for diseases of the skin, and probably also as a parasiticide for diseases of fungous origin; but, like all stimulants, it must not be used wherever there is much hyperæmia, as it will be more likely to aggravate than benefit such active cases; judiciously employed, however, it gives results which cannot fail to be gratifying to prescriber and patient, while its pleasant appearance and odour, as compared with preparations of tar, with the avoidance of the discolouration of the hair and skin produced by chrysophanic acid, are not the least of its claims to attention.—*British Med. Journal.*

An Easy Mode of Plugging the Posterior Nares.—Cut off the ends containing the eyelet holes of two soft catheters; then by means of a long needle, thread each with a double ligature. Pass one through each nostril well into the pharynx. Dangling loosely there, it is easily drawn through the mouth by passing the forefinger around it. Remove the catheters, attach the plugs and draw them into place.

NOTE ON SOME OF THE THERAPEUTIC VIRTUES OF EUCALYPTUS GLOBULUS.

BY BENJAMIN BELL, F.R.C.S.E.

Rather more than a year ago my attention was first drawn to this remedy by an interesting reference to it in Sir John Rose Cormack's *Clinical Studies*. In a postscript to a case of cauliflower excrescence of the uterus, he mentions that latterly he has used, as an injection, an infusion of the leaves of the *eucalyptus*, or a mixture of from one to four drachms of a tincture in eight ounces of tepid water. Besides being refreshing and comforting to patients so affected, these applications have, in his experience, a remarkable power of destroying the fœtid odour of morbid discharges, *without the substitution of another unpleasant smell*. He extends the remark, after much experience, to the offensive discharges attendant upon cases of ozœna, cancer of the tongue and throat, cancer of the uterus, gangrene, and other affections accompanied by fœtor. In the same postscript he mentions that in simple uterine catarrh he knows of no remedy equal in value to the *eucalyptus globulus*. In these cases he has met with the most satisfactory results, when it was simultaneously administered by the stomach and in the form of injection. He adds: "As Gubler has shown, the anti-catarrhal virtues of *eucalyptus* are most remarkable. With increasing experience of its power, I more and more use it in bronchial, vesical, and uterine catarrh, in gonorrhœa and in gleet." These representations of Sir John Rose Cormack, and the circumstance, which he also mentions, that a preparation of the essential oil in capsules is a favourite prescription with many leading physicians in Paris, led me to make trial of the remedy in a variety of cases during the past year. The only preparation which I have used has been the tincture prepared by several of our most eminent chemists in Edinburgh, and I have seldom prescribed more than a teaspoonful, mixed with a wine-glassful of water, twice a day. In several cases of bronchitis with profuse expectoration, I have witnessed remarkable benefits after a very brief use of the remedy, evinced by a rapid diminution of the discharge, and also by a corresponding improvement in the general condition of the patient. But my object in writing this note is to recommend the internal use of *eucalyptus* in a class of cases to which, as far as I know, it has not hitherto been considered applicable. . . . It occurred to me that owing to its valuable properties as a disinfectant, deodorant, and astringent, it might prove useful in certain forms of disease in the stomach and bowels. . . . A gentleman of seventy-five had suffered from formidable disease of the stomach for eight or ten years, and on several occasions, had seemed very near his end, with every symptom of malignant ulceration. Great quantities of blood had been vomited from time to time, and at short intervals, seldom exceeding a fortnight, the stomach after becoming painfully distended with a sour *barmy* fluid, was relieved by repeated vomiting, while life itself seemed possible only with extreme lightness of diet and most vigorous self-denial. . . . . He has taken the tincture of *eucalyptus* twice daily for many months, and during all that time has scarcely had even a threatening of those painful and exhausting attacks which had latterly occurred almost every week.

Another old gentleman, a retired medical man of eminence, who for some years has laboured under symptoms which indicate disease of the stomach and possibly the colon, is so sensible of benefit from the use of the medicine, that he can seldom abandon it for even a few days without being reminded of its importance and eagerly resuming it.

Another case in which ulceration, or some other organic disease of the stomach, seemed the only reasonable diagnosis, the patient made an unexpected recovery from extreme attenuation and weakness under similar treatment.

I have tried it repeatedly in a class of cases which are usually regarded as ulcers of the stomach threatening perforation, and with complete success. . . . . Of course, no one will think of using the medicine as *a specific* in any case where it may seem to be indicated. All the details as to diet and general regimen, which would be deemed necessary without it, must be carefully attended to. In conclusion, I may say, that it seemed to me of manifest use lately in a case of diphtheria commencing in the gullet and ascending to the fauces; and my belief is that it might be prescribed with advantage in some cases of typhoid fever.—*Edinburgh Medical Journal.*

Hospital Reports.

(Translated for the CANADIAN JOURNAL OF MEDICAL SCIENCE.)

HOPITAL NECKER.

OPERATION OF LITHOTOMY. REASONS FOR PREFERRING IT IN THIS CASE TO LITHOTRITY.

BY M. GUYON.

We are about to practise in a few minutes the operation of lithotomy upon a young man under our care, who is at present lying in Bed No. 27, Saint Vincent Ward. But, before doing the operation, I desire to make known to you the reasons which have decided me to choose this mode of treatment for this patient. At the present time, indeed, the operation of cutting is no longer done by surgeons except for certain grave reasons, and it may be said that, in the immense majority of cases, the treatment of stone consists in lithotrity, the efficacy of which you have many times been able to appreciate for yourselves in this service where not a day passes in which it is not practised.

We have to do with a young man 21 years of age, who entered the hospital on the 21st of December last. His history is almost entirely pathological, for since two or three years old he has always suffered more or less in micturition. When 7 years old he even passed some blood, but these emissions of blood were not at all abundant, and have never since reappeared.

From this time up till lately the patient suffered but little, and, according to his own statement, he was, on the whole, tolerably well: playing, running, and entering, without excessive difficulty, into all the exercises of his age. From time to time, however, he experienced in the bladder certain recurrences of the pain making itself felt at the end of micturition. Matters went on thus up to last year, when he began again to suffer, not only during and after micturition but more constantly. The very sharp pains which he experienced were characterized by being considerably aggravated by the slightest movements of the patient, so that not only could he not ride in a carriage or railway train but it became absolutely impossible for him to move about. Along with this his urine was purulent but not alkaline; lastly, and it was on account of this infirmity that he entered the hospital, this young man presented an incontinence of urine, with which, indeed, he had been affected since his infancy.

On his entrance we found him to be a rather large man, almost completely developed, but thin, pale and debilitated.

In view of his history we were naturally led to proceed immediately to a local examination, and, as is our invariable custom, commenced with an exploration of the rectum. We found the prostate slightly bosselated, but not at all increased in volume; on the part of the vesiculæ seminales nothing particular was presented, the epididymis itself appeared perfectly healthy, so that there was no reason for delaying over the idea of a generalized tuberculization as might at first have been supposed. We then explored the canal of the urethra. As usual this examination was at first made with a soft instrument, that is to say with an *explorateur à tête* with a soft and supple stem, and afterwards with a silver sound.

The former afforded us valuable information: chiefly, it showed us, as is moreover the rule whenever patients suffer from the bladder, that the membranous portion of the urethra was contractured. The passage of the instrument into the prostatic portion was also a little painful, but nevertheless it did not amount to much, and it was only at the moment of entry into the bladder that we gained information of prime importance, for scarcely had the bougie cleared the neck of the bladder when we felt a sensation of a peculiar, raspy grating which was nothing else than the contact of the instrument with the calculus. It should be known, indeed, that soft instruments are perfectly capable of detecting a stone in their path, and of transmitting the sensation of it to the surgeon who is exploring.

We then examined the bladder with a silver sound. The introduction of the instrument was necessarily painful, as is always the case whenever the patients have suffered long. But, although painful, it was done under the simplest conditions, without bleeding, and without consecutive reaction. By this means we soon found the stone, and seeking to ascertain its dimensions, we discovered that it measured 3 to 4

centimetres ($1\frac{1}{3}$-$1\frac{3}{8}$ inch) in one of its diameters. Moreover, the sensation of contact was rather soft, as if we had to do with a phosphatic calculus, but it is probable that in the middle of this deposit of phosphates there is a very hard nucleus.

The sound has, moreover, shown us that, although the stone can be easily felt, it is nevertheless necessary to look for it at a considerable depth. This latter fact induced us to renew the exploration per rectum while the catheter remained in the bladder. We then felt that the calculus was in fact situated considerably below the sound, and that consequently it was a pretty large one, unless indeed it had in some manner hollowed out a lodgment for itself in the *bas fond* of the bladder. I do not mean to say that it was encysted; for this phenomenon is so rare, however much it may be talked about, that we should only accept with reserve those observations in which the stone enveloped in a pouch of the mucous membrane only communicates with the bladder by a more or less narrow orifice.

This *ensemble* of signs furnished by the local examination led us to conclude that the stone was large. As for determining more precisely what its dimensions were it was a matter of utter impossibility. All that we could say was that it was about the size of a small hen's-egg or of a large nut.

But there was another question to be discussed. Was the stone of old or of recent formation? It was difficult to pronounce upon this point, for we had nothing to enlighten us except the statements of the patient, and they were not of a nature to enable us to solve the difficulty. Examination of the stone alone will determine this; and if, after its extraction, we find in its centre, as I expect we shall, one of those hard nuclei of Oxalate of Lime, which so often constitute the calculi met with in children, we shall be in possession of material proof that it dates back to the earliest days of his disease, and that, far from being the consequence, it has been the cause of the cystitis which we have observed. Whatever may be the fact, taking things as we actually find them, we have to do with a patient of extreme sensibility, who is suffering from a stone probably over the average size, and who above all is young. Under these circumstances, I have not hesitated to propose the cutting operation to him, and his age is the chief reason which has determined me in doing so. In fact a patient of 21 years is still within the period in which lithotomy may be done under satisfactory conditions almost as well as during childhood, for, at this epoch, the neck of the bladder is still sufficiently pliable to allow even a voluminous calculus to pass without determining any of those rents which render extraction of the stone so serious in persons of a more advanced age.

Then again this young man has considerable pus in his bladder, perhaps, too, he already has pyelitis; so that to do lithotrity with the necessity of going through a number of longer or shorter sittings, together with the extreme sensibility of the patient, we would run the risk of setting up a reaction which might become exceedingly grave, and later when we should be obliged to resort to this extremity (cutting), we should no longer be in a position to do lithotomy except under unfavourable conditions. At present, on the contrary, we are in a position to perform a relatively simple operation, and by this means we can assure to this boy greater chances of cure than by lithotrity. It is, therefore, on account of his age, the size of his stone, the special sensibility of his organs, and of the individual himself, and lastly on account of the state of his bladder and the probable alteration of his kidneys, that I have decided, in this case, to practise lithotomy. You may perhaps object that we would arrive at the same end by doing lithotrity under chloroform. To that I should reply that, in themselves, the sittings of lithotrity are a small matter, and that what is important is what takes place between the sittings. During the interval, in fact, the patient voids the fragments: but, we cannot keep giving chloroform to prevent the bladder contracting and expelling the *débris* it contains. This boy would therefore be exposed, between the sittings, to suffer the pains resulting from the propulsion of the fragments towards the neck of the bladder, and we should thus see renewed, after each sitting, a cause of danger which we shall certainly avoid by cutting. I shall not here enter into the details of the operation, for they are well known to you; but shall rest content with having pointed out to you the reasons which have determined me to practise lithotomy in this case.—*Gazette des Hôpitaux.*

Original Communications.

FOUR CASES OF PLEURAL EFFUSION —IN TWO OF WHICH, THE FLUID WAS REMOVED BY PARACENTESIS AND IN THE OTHER TWO BY THE FORMATION OF AN EXTERNAL ABSCESS, COMMUNICATING WITH THE PLEURAL CAVITY.

BY THOMAS B. PEACOCK, M.D., F.R.C.P.,

Honorary Consulting Physician to St. Thomas's Hospital.

Case 1.—Large serous effusion resulting from subacute pleurisy in a boy, aspiration, rapid and complete recovery.

Henry Spearing, aged ten, admitted into the Victoria Park Hospital, November 28th, 1877, having been ill for two weeks. He ascribed his illness to having gone out into the yard without his coat; the attack commenced with pain in the left side, extending across the epigastrium, which was increased on drawing a full breath, and these symptoms continued till he was admitted into the hospital. He had not been confined to bed, but had not been able to leave the house. When admitted, the left side was much expanded and its movements were abolished. There was marked dullness over the whole side and the respiratory sounds were inaudible everywhere except above and below the clavicle and at the lower cervical region. The heart was felt to beat over a large space between the right nipple and the lower portion of the sternum. The respiratory sounds on the right side were loud and compensatory. From his feeble infantile voice it was impossible to test the vocal fremitus.

It was decided at once to remove the fluid, and this was done the following morning by the aspirator by Mr. Bark, the Resident Medical Officer. The needle was inserted between the sixth and seventh ribs, in the line of the posterior border of the axilla, and forty-seven ounces of greenish-coloured serum were removed. Soon after the operation, the heart could be felt beating on the left side, rather below and to the left of the nipple. He passed a good night, and the following morning had a temperature of 99.5°. The left side of the chest was less expanded than before and the resonance on percussion was improved especially at the upper part posteriorly; there was more movement and the respiratory sounds were now distinctly audible, anteriorly and posteriorly, and in the axillary region. The heart could be felt to beat in the fifth interspace, about midway between the line of the nipple and the sternum.

On the 19th of December he had steadily improved, but there was still dulness on percussion in the lower anterior and posterior regions, and in the middle and lower lateral regions, but the respiratory sounds were distinctly audible in other parts of the side and feebly in the lower dorsal region. He was bright and cheerful and took his food well. On Jan. 2nd, 1878, the two sides of the chest were nearly equally expanded, though perhaps the left side was a little fuller behind; the movements were equally free on both sides. He could draw a full breath without having any pain in the side. The mark of the puncture was scarcely traceable. There was still some impairment of the resonance on percussion at the lower parts of the side all round, but the breath sounds could be heard everywhere, though somewhat feebly below. The heart occupied its natural position.

Case 2.—Empyema of left side in a young man; suspicion of lung disease; aspiration, followed by abscess in the seat of puncture; pleural cavity freely opened; recovery.

Richard Gammon, aged seventeen, a warehouse man, admitted into the Victoria Park Hospital, October 8th, 1877, having been ill for two months. He was first taken with pain at the lower part of the right side, after which he had pain on the left side, with cough and expectoration, but he had never spat any blood. He stated that his father died of pleurisy at thirty-three, and that he had lost several brothers in infancy, but his mother and a brother and sister were still living and healthy.

The left side of the chest was everywhere imperfectly resonant, and it was entirely dull in the lower dorsal region. The breath sounds were only feebly heard over the whole side, and were entirely inaudible in the lower dorsal and in the middle and lower lateral regions, where also the vocal fremitus could not be felt. There

was an œgophonic twang with the voice about the lower angle of the left scapula. The apex of the heart beat below and to the right of the right nipple. The right side of the chest was very flat under the clavicle, and the resonance on percussion was impaired, and the respiratory sounds very harsh. He was much prostrated and had the aspect of a person suffering from serious disease. It was obvious that there was some effusion in the left pleural cavity, and it was thought probable that this might be purulent; it was therefore decided to puncture the chest; this was done by Mr. Bark on the 10th, when twenty-four ounces of pus were removed by the aspirator.

On the 17th he had been relieved by the operation and the heart soon after returned to its normal position. There was still a marked dulness on percussion and absence of vocal fremitus in the left dorsal region and the œgophonic twang was still heard. There was somewhat abnormally clear resonance on percussion in the left mammary region when he lay upon his back; where also there was a metallic echo with the cough; and these signs changed their situation with changes in his position. He had a troublesome cough and expectoration, did not sleep well and perspired much at night; but he took his food well and was upon the whole better. On the 22nd he suffered from diarrhœa and this continued till the 29th, on that day a small abscess formed in the seat of puncture, and on being opened, a few drops of pus escaped; on the 3rd of November a fluctuating swelling had formed a little above the seat of the final abscess and on the 4th an unsuccessful attempt was made to pass a probe from the former opening into the abscess, an incision was therefore made from the seat of puncture into the pleural cavity and forty-four ounces of pus were removed. A drainage tube was then inserted and during the afternoon and evening fourteen ounces of pus flowed through it. After this discharge the fluctuating swelling disappeared. On the 10th, though there had been considerable discharge through the tube, at intervals it had entirely ceased, the tube was therefore removed and the opening immediately closed.

On the 21st his condition was very much improved. There was still dulness on percussion in the lower parts of the side, but the breath sounds were audible over nearly the whole side. On the 19th he had continued steadily to improve and had very little cough or expectoration and there had been no return of discharge from the opening which was indeed quite healed.

On January 2nd 1878, he had scarcely any remains of cough or expectoration, his breathing was better, he took his food well and was gaining strength and was altogether going on favourably. The cicatrix of the puncture and incision is situated in a line with the posterior border of the axilla, at the lower margin of the eighth rib. The chest is still very flat on both sides in the infra clavicular regions, the movement is imperfect, and the dullness is still marked in the lower dorsal and lateral regions; but the respiratory sounds are audible over the whole side, though feebly in the lower dorsal and especially in the lateral regions. The resonance on percussion is impaired at the upper part of the right side and the breathing is somewhat bronchial and there is some increase of the cough and vocal resonance. The heart beats in the left side between the nipple and lower end of the sternum.

Case 3.—Empyema in a child opening externally; recovery.

This and the following case occurred in two children, a brother and sister. The symptoms appeared very much at the same time and were very similar in their character. It seems therefore not improbable that the suppuration in the pleural cavity occurred in connection with some septic poisoning—such as scarlet-fever, though no history of such an illness was obtained.

Albert Edward Davies, aged seven, admitted into Victoria Ward, St. Thomas's Hospital, July 14th, 1875, labouring under an empyema of the left side of eight weeks' duration. It was reported that he had never had any of the diseases of childhood, and was indeed in good health till he began to suffer from pain in the left side, followed by feverishness, sickness and delirium, and he had got gradually worse till his admission into the hospital.

The left side of the chest was much expanded

and dull on percussion. The movement was abolished and the breath sounds everywhere very indistinctly audible, while on the right side the movement was very free and the respiratory sounds loud. There was a fluctuating tumour below and to the left of the left nipple. This was at once punctured and an ounce and a half of pus was evacuated. The puncture was made over the fifth inter-costal space below and in the line of the nipple.

On the third of August, he was reported to have steadily improved since the abscess had been opened. He was able to lie in different positions, though for the first fortnight he would only lie on the left side. There had been some discharge from the opening each day but it had gradually diminished. The side continued dull on percussion posteriorly, but the breath sounds were distinctly audible everywhere, except in the lower anterior, lateral and posterior regions where the dulness was still very marked.

On the sixth the discharge from the opening had entirely ceased; the side was somewhat contracted, the resonance on percussion was still impaired and the respiratory sounds were only feebly heard at the lower parts. When he lay upon his back there was an abnormally tympanitic sound in the upper mammary region, with feeble respiratory sound, no doubt indicating the presence of some air in the pleural cavity. He was discharged cured on the 17th.

Case 4.—Empyema opening externally in a child; disease of lung; death.

Marion Davies, aged five and a half, the sister of the subject of the last case; admitted into St. Thomas's Hospital, July 19th, 1875. She had been taken ill with feverishness and sickness two weeks before her admission, and three days after her brother was attacked. A few days after she was troubled with a very severe cough and her breath was very offensive and she brought up much expectoration, and on admission it was evident that there was considerable effusion in the right pleural cavity. Three days before admission a swelling made its appearance at the lower part of the right side. This was evidently an abscess and was at once opened and about three drachms of offensive pus were let out, and a probe being introduced, passed entirely across the pleural cavity and its point could be felt under the skin at the back. The day after, the child had a violent fit of coughing and brought up with a gulp some fetid purulent matter. The opening into the abscess was over the seventh inter-costal space, in the line of the anterior fold of the axilla. She did not improve after the operation. She had a troublesome cough but not generally any expectoration and her breathing was very much embarrassed. She had diarrhœa and in one of the stools passed some pus. She had marked hectic symptoms and died exhausted on the 4th of August.

On examination the right lung was found entirely collapsed. The middle and lower lobe adhered firmly to the parietes and diaphragm. In the upper lobe there were several foci of softened lung tissue like breaking down masses of broncho-pulmonary consolidation. Openings in the 6th and 7th inter-costal spaces led obliquely from the external abscess into the cavity of the pleura. There was also an abscess behind the sternum opposite the fifth costal cartilage, which however had no communication with the pleura. No communication could be found between the right pleural cavity and the bronchi, but the bronchial mucous membrane everywhere in the right lung was much inflamed. The left lung was free from disease, except that it was slightly emphysematous in front, and there were some recent adhesions between the pleural surfaces at the base. The heart and other organs were healthy, but there was recent peritonitis and turbid serum in the peritonal cavity.

It is, I think, rarely necessary to puncture the chest in cases of acute pleurisy and I have never had recourse to the operation in such cases, unless when the dyspnœa was so urgent as to imperil the patient. In the subacute cases also, if the effusion has not been of long duration, it is usually readily absorbed under appropriate treatment. In the first case which I have related, which was one of this kind, the effusion had not long existed, and the child was fairly healthy, it would therefore probably have soon been got rid of under treatment, but as the amount was apparently large, it was thought safer not to lose time and the fluid was there-

fore removed by the aspirator, and probably the cure was so effected more rapidly and completely than would otherwise have been the case.

In cases where there is reason to suppose that the effusion is purulent, and it generally is so when it occurs in connection with scarlet fever or erysipelas, and often where the lung is diseased, it is better at once to remove it. In the second case it was thought most probable that the effusion was purulent from the coexistence of pulmonary disease, the probably long duration of the effusion and the severe constitutional disturbance, and the pleura was therefore punctured without delay. The suspicion as to the nature of the effusion proved correct and considerable improvement in the condition of the patient immediately followed its removal. In both these cases the fluid was removed by aspiration, the instrument employed being one constructed on Potain's principle, in which the cavity is evacuated, by atmospheric pressure into a bottle from which the air has been exhausted by an air-pump. I have however more frequently seen the operation performed with the common trocar and canula. There is, however, great danger of the entrance of air into the pleural cavity when the common trocar is used, and this I should certainly prefer to avoid, though I have many times known it occur without any serious evil resulting. Whatever be, however, the means adopted for the removal of the fluid, it is, I think, desirable that the cavity should be emptied somewhat slowly, in order to allow the lung gradually to expand, and the heart, if displaced, to return gradually to its normal position.

The effect which follows the removal of the fluid where paracentesis has been practised varies with the time during which the effusion has existed in the pleural cavity and the nature of the effused fluid. If it has followed acute or subacute pleurisy of only short duration, there is an immediate improvement in the condition of the affected side. The movement returns to a more or less marked degree, and if the heart or liver has been displaced, they resume very much their normal positions. The entire dulness on percussion sinks to a lower level, and the vocal fremitus is again to be felt in the more resonant parts, and the respiratory sounds become audible over a larger portion of the chest, extending from above downwards and from within outwards, but the resonance on percussion still remains impaired and there is more marked dulness at the lower parts of the side; the side also is usually somewhat contracted; but these signs disappear as the portion of fluid remaining becomes absorbed and the lung becomes more completely expanded, though they do not generally disappear entirely till a considerable time has elapsed. It is rare that after the fluid is removed there is any marked friction to be heard, though when the cure is effected by absorption, there is usually very distinct friction to be heard, followed, as the cure progresses, by the modification which has been termed the stretching sound.

If, on the other hand, the effusion has been of long duration, the result of chronic disease and purulent in character, the amendment which follows the puncture of the chest is generally much less marked and rapid. There is usually more persistent dulness on percussion with defective respiration and imperfect movment and the decided dulness in the lower anterior, posterior and lateral regions only very slowly passes away. If the heart has been displaced it often does not return to the normal position and there is usually very decided contraction of the side and this may be of long duration, though even in cases of this kind, there is often great improvement in the state of the side after a considerable time has elapsed.

In the third and fourth cases, an external abscess formed which communicated internally with the pleural cavity and being opened, afforded an outlet for the purulent accumulation. In one of them a rapid and complete cure followed. In the other, which was however, a very complicated one, there being serious lung disease and probably a communication between the pleura and bronchi, with other disease, the child died. When the effusion is not confined to a limited portion of the pleura, but involves the general cavity, the pus rarely penetrates the parietes or finds an outlet through the lungs till a considerable time has elapsed and the lung having been long bound down, or compressed, is incapable of being again expanded, and the cure can only be

effected by the side becoming greatly contracted, so as to allow of the obliteration of the pleural cavity, and this, though it may occur in children and young persons, takes place very slowly, if it be accomplished at all, in grown-up persons, under any circumstances however a cure thus effected is a very imperfect one, the chest is very much deformed, the heart permanently displaced and though the sound lung may become very much expanded, it yet very imperfectly supplies the place of the other lung which is permanently disorganized, and the patient is therefore very short-breathed and incapable of any active exertion. Cases are however on record in which, after the discharge of matter from the pleura by an external abscess, patients have entirely recovered and have enjoyed good health and great vigour for many years. I have myself seen a case of this kind in which a man had served on board a man-of-war for many years after the occurrence, and I have known several cases in which matter has been expectorated from the pleural cavity soon after the commencement of an attack of pleurisy, and the patient has rapidly and completely recovered, in some of them, so completely, that the chest displayed scarcely any traces of having ever been the seat of serious disease.

Often, however, when the matter is evacuated in either of these ways, though the patients recover from the immediate symptoms, fistulous communications remain between the pleura and bronchi and the patients ultimately die exhausted by the persistent discharge, or if the heart be permanently displaced, or compressed by the contraction of the side, it usually becomes after a time diseased.

When from the accummulation of fluid in the left pleural cavity the heart is displaced, it usually lies behind the lower end of the sternum, between the sternum and the right nipple, or below and to the right of the nipple, but I have seen it displaced both vertically and transversely so as to occupy the angle between the right clavicle and the sternum; and in a case in which there was effusion in the right pleural cavity, connected with intrathoracic growth, the heart was very much displaced to the left and upwards so that it was seen to beat behind the anterior border of the left axilla.

It has, I believe, been generally supposed, that, when the heart is displaced, it is swung over, so as to occupy a position on the right side, the reverse of the normal position on the left, the apex being directed obliquely to the right. Mr. Bark, the Resident Medical Officer of the Victoria Park Hospital, whose experience of cases of this kind is unusually large, informs me that this is not always, or perhaps usually, the case. He drew my attention at a *post mortem* examination, at which I was recently present, to the fact, that, though the heart lay to the right of the lower part of the sternum, the organ was not at all rotated, but that the right ventricle occupied the front, and the apex was directed obliquely to the left, and this he has noticed in four other cases which he has examined.

It appears, therefore, that the heart is pushed over in mass to the right side, the trachea and bifurcation of the bronchi with the large vessels arising from the heart being all equally displaced, while the apex of the heart being retained by the attachment of the pericardium to the left side of the diaphragm still has its usual direction. This accords with what I have frequently noticed, that though the heart may be seen beating to the right of the sterum, its sounds are distinctly audible on the left side though below and further to the right than when it occupies its normal position. It also explains the infrequency with which in such cases the sounds are accompanied by murmurs.

In the second case, notwithstanding the existence of very marked dulness on percussion, the breath sounds were still audible over a large part of the side, and even low down. It was therefore supposed that there could not be much fluid in the pleural cavity, yet forty-four ounces were removed by the aspirator, and much more escaped afterwards. I have not unfrequently noticed that though the breath sounds were extensively audible, the cavity has yet proved to contain much fluid, and I have sometimes been deterred from operating by the extent to which respiration was heard. The persistence of the respiratory sounds with considerable effusion in the pleural cavity is I believe, when it occurs in adults, generally due to the existence of entire adhesions between the lung and parietes, or to the lung being somewhat consolidated and so resisting compression. In children the sounds are very loudly conveyed to the healthy side.

HOLIDAY NOTES.

NEW YORK, April 21st, 1878.

Your correspondent arrived in New York and through the kindness of Dr. J. B. Hunter, (who, by the way, is a Toronto boy,) received an invitation to a meeting of the New York Academy of Medicine, where he had the pleasure of hearing Dr. Thomas read a long paper on the intravenous injection of milk as proposed and practised by the late Dr. Hodder of our own city.

Dr. Thomas thinks that milk being an animal fluid closely resembling chyle, it may successfully be substituted for blood in cases requiring transfusion, if we are only careful to obtain fresh milk directly from a healthy cow for the operation, as it has been found that even the best milk undergoes such a rapid change after it leaves the cow's udder that an interval of only a few minutes will at times make all the difference between a successful issue and an absolute failure. Indeed, it was shown by experiments on healthy dogs that milk injected into their partially emptied veins a few hours after it had left the cow, always proved fatal, while perfectly fresh milk injected into the veins of the human female, had saved life. Dr. Jacobi said that milk rapidly becomes acid to chemical tests after leaving the cow even in a few minutes and that any acid fluid injected into the animal vascular system proves rapidly fatal, and this is probably one reason why cow's milk so often disagrees with young children who are deprived of their mother's breast. Cow's milk should be either neutral or slightly alkaline when first drawn and Dr. J. suggested the addition of a little alkali to milk for transfusion in order to ensure that condition. Then as to the quantity to be injected, it was shown that while sixteen ounces had been injected at once without proving fatal the symptoms were such as to suggest the propriety of limiting the amount to five, six, or at the most eight ounces for one injection, and Dr. Thomas declared that he believed it would be safer to repeat the injection half a dozen times if required than to inject the larger quantity at once, and he had tried both plans. The injection often produces severe headache and is almost invariably followed by chill, but these soon pass off, and then the exalted temperature falls several degrees, the pulse, which previous to the operation has been extremely rapid and weak, becomes slower and more full, and in some cases the patient falls into a quiet slumber which lasts several hours and from which she awakes feeling much refreshed. The preparations made by the Doctor for the injection are very simple, but upon the faithfulness with which they are carried out much of the success of the operation will depend. He has a healthy cow driven as close to the door as possible, the milk drawn into a small *warm* pitcher through fine gauze which in some cases he has carbolized, and immediately, (within two minutes) slowly injects through a warm glass funnel attached to the arm by a simple glass tube and cannula, the milk flowing in by gravitation. He says, and I think he is right, that by this method there is far less danger of forcing air into the veins than by any of the arrangements hitherto proposed, however complex or simple. He believes that the intravenous injection of milk will be found far safer than blood, more practicable, and equally efficacious, and being so much easier of accomplishment may be resorted to very much oftener. He thinks it will yet become one of our most valuable therapeutic measures in cases of extreme prostration from disease or accident, and well worthy the regard of the profession. It was resorted to by him in one case where several days after ovariotomy, the woman began to sink from sheer exhaustion, as she could retain nothing given by either the stomach or rectum. Six and a half ounces of milk were introduced through the veins of the arm, and after the headache and chill (to which I have alluded) had subsided, she fell into a quiet slumber which lasted five or six hours, and then awoke much refreshed, and recovered rapidly. She was apparently *in articulo mortis* when the injection was made.

In a second case of ovariotomy, internal hæmorrhage continuing and peritonitis supervening several days after the operation, the woman became so prostrate that death seemed imminent, he injected five and a half ounces of milk, when the patient rallied for a couple of days, the vital powers then failed

again, he injected sixteen ounces which produced very severe headache but was followed by reaction and improvement for another day or two, and in this way the injections were repeated five or six times in smaller quantities, each time the patient improving for a while, till finally they failed, the vital powers gave way and death ensued. During the course of the case about two pints of blood were removed from the abdominal cavity, and at the autopsy a pint was still found there and a large portion of the peritoneum and colon were found in a state of gangrene.

This case was, before the operation, considered a very bad one for success, and although it terminated fatally, as feared from the beginning, yet it demonstrated the power of the milk injections to *prolong* life and is therefore none the less valuable.

A CASE OF GRANULAR KIDNEY.

BY WILLIAM OLDRIGHT, M.A., M.D.

SIR,--Believing that cases of granular kidneys in young persons are rare I send you the following notes:--

On the 19th February, Mr. —— asked me to call and see his wife, aged thirty. He stated that having gone a couple of weeks "over her time" they had thought there was a "little obstruction" and had first given some domestic homœopathic treatment, and then called in homœopathic advisers.

On calling I was at once struck with the expression of countenance: I had attended the patient in her last confinement two years ago, and had met her frequently since. Her countenance naturally intelligent and expressive, was now quite altered in that respect. The face was puffy, the right parotid region swollen. After a rigid sifting of her history I found that she had been suffering at times since the middle of December from oft-recurring headache, cloudiness of vision, and some loss of memory. Passive hæmorrhage from the bowels had been going on for some days. There had also been purging, which the husband attributed to the first homœopathic medication, and which had become checked after the advent of the second attendant, no passage of fæces having taken place for a day or two. Whether these results were *post* or *propter* I do not know. There being a little abatement of the hæmorrhage the friends were enabled to procure some urine free from any contamination, and this proved decidedly albuminous.

I at once placed the patient on stimulant and tonic treatment; but she sank and died in forty-eight hours from the time I first saw her. A sero-sanguineous fluid oozed from the mouth, and patches of dark lymph could be scraped from the tongue. The discharge from the bowels was almost continuous and became extremely offensive, having a smell of decomposition. Moist râle and percussion dulness occurred in part of upper anterior portion of right lung. The vacancy of countenance and manner, and the cloudiness of vision, increased and stupor supervened, from which, however, even on my last visit, seven hours before death, she could be aroused sufficiently to recognize and name a watch and a tumbler which I held before her face; and to help herself over a little in her bed.

Post mortem.—In company with Dr. I. H. Cameron, I examined the heart and lungs and abdominal viscera. A part of the upper anterior portion of right lung was congested. The left kidney was certainly not more than half the normal size,—perhaps not more than one-third: its capsule coat was unusually adherent, and after a portion was with difficulty peeled off, a distinctly granular appearance was presented. The right kidney was about, or nearly, the normal size, but the pelvis was very much dilated at the expense of the cortical portion. The dilated pelvis was divided into three fossæ by two trabecular bands, running across it and formed of reduplications of its membrane.

INDIGO RENAL CALCULUS.—Dr. W. M. Ord, of London, at a late meeting of the Pathological Society of London, exhibited a calculus, half the size of a walnut, which analysis showed to be largely composed of this substance. The indigo found in the human system is not identical with the indigo plant, according to Dr. Thudichum.

A CASE OF MOVABLE KIDNEY.

BY WM. BETTRIDGE, M.A., M.B., STRATHROY.

I first saw Mrs. T. on March 12th, 1878, in consultation. She is 22 years of age, and has two children aged three years and sixteen months respectively. She states that with the exception of great pain in her back and loss of motion in her lower extremities, from which she suffered six years ago, and which lasted a year, and from which she quite recovered, she has always been healthy. About one year ago she noticed a tumour about the size of a hen's egg, below her ribs on the right side. This came lower down, and got larger she says, until by degrees it got almost to her groin. She had some nausea if she manipulated the tumour much. Present condition: She is pale and emaciated, feels very weak, has no appetite or rather fears to eat on account of the nausea that follows. Menses regular but profuse. Urine normal. Bowels irregular. On examining the abdomen I found on the right side a tumour about 3½ inches along, and 2½ broad, which could be freely moved over a space of four inches or more. It could be pushed back under the ribs up into the loins, and also downward and across to the umbilicus. It descended when she took a long breath, was smooth and hard to the feel, and was not painful on pressure, but pressure caused a feeling of sickness and a sensation of weight. There was a depression in the right lumbar region, which was slightly tympanitic on percussion. There was dulness over the tumour. When she lay down the tumour fell back and could be pushed into place, and the resonance before elicited in the lumbar region was found to be absent, and the depression had disappeared. Mrs. T.'s medical attendants, Drs. Thompson and Hoare, concur in my diagnosis, that it is a case of movable kidney.

The conductive properties of water for the electric current vary rapidly according to its degree of purity, the resistance decreasing with the purity of the water. It is possible, it is said, in this manner to detect, with great ease the presence of small quantities of organic matter in the water.

Translations.

From *La France Médicale.*

TREATMENT OF MEGRIM (HEMICRANIA.)

BY DR. E. ORY.

The diversity of the causes which produce the various symptoms referred to megrim, at once explains the multiplicity of the remedies and the frequency of the insuccess daily met with in the treatment of megrim. It is for the physician to recognise in each case the point of departure of these nervous symptoms. The following are some formulæ which are frequently employed. Debout recommends the following pills:

Sulphate of Quinine	45 grains.
Powder of Digitalis	22½ grains.
Syrup	a sufficiency.

Divide into 30 pills, of which one should be taken at bedtime every night for at least three months. Cazenave (of Bordeaux) suggests a pomade composed of

Pure Chloroform	ʒiij.
Cyanide of Potash	ʒijss.
Fresh Lard	ʒij.

Wax q.s. to make a pomade.

Fomentations may also be prescribed with cloths dipped in

Cyanide of Potash	ʒi.
Distilled Water	℥vj.

For nervous headaches, Barrailler orders to be taken in 3 doses with an interval of half an hour the following potion:

Distilled Peppermint Water	℥ij.
Muriate of Ammonia	gr.xlv.
Syrup of Grange Peel	ʒvj.

You may also prescribe:

Extract of Stramonium.	
Extract of Opium, each	7½ grains.
Oxide of zinc	ʒij.

To be made into 40 pills of which 1 to 8 should be taken per day in increasing doses.

The bromide of potash has sometimes given good results. According to Lokridge:

℞ Bromide of Potash	900 grains.
Tincture of Aconite Root	75 drops.
Distilled Water	℥ij.
Simple Syrup	℥ij.

A dessertspoonful in a little pure water; to be repeated in two hours if no relief be ob-

tained (Journal de Lucas Championniere) Chastelleix gives ʒvijss-ʒiij. of syrup of guarana.

℞ Alcoholic Extract of Guarana . . 15 grains.
Simple Syrup . . . . . ʒiij.

Guarana pastilles have been made. Van Ermengen has recommended inhalations of nitrite of amyl. Four to ten drops to be inhaled from a little tampon of cotton wool. This remedy requires to be watched.

Beaumetz has studied the effects of gelseminum.

Tincture of Gelseminum . . . . . ʒxij.
Simple Syrup . . . . . ʒxxx.

A tablespoonful three or four times a day; each tablespoonful corresponds to five centigrammes of powdered gelseminum root.

You may also give five to twenty centigrammes in pills or powders.

Injections of morphia are often prescribed, especially in megrim of abdominal origin (Bourdon, Luton.)

Lastly, granules of the arseniate of caffeine of one milligramme, in the dose of four or five at the beginning of the attack, pearls of essence of turpentine, one to six, have also, it appears, produced cures.

Bouchut gives chloral hydrate fifteen to thirty grains in capsules or in syrup of gooseberries, and makes applications of tincture of iodine upon the scalp and temple, which latter may be replaced by frictions with Ward's essence.

From *La France Médicale.*

A Little Known Sign of Cancer of Stomach.

Dr. Henri Huchard in a communication to the Clinical Society of Paris upon certain diseases of the stomach narrates the following circumstances: "This man was cancerous; the loss of strength, the emaciation, the slightly cachetic tint, and the paleness of the integument justify this supposition. But what was the seat of the cancer? Doubtless in the stomach, since this patient had had some digestive symptoms, and he had also experienced pain, slight, it is true, but still persistent, in the pit of the stomach. What still further confirms this diagnosis is the presence of a sign to which Professor Peter, who assisted me in the examination, first directed my attention, and the correctness of which I have several times since been able to verify: when superficial percussion, *percussion en dèdolant*, is made over the stomachal region somewhat distended by gas, there is found at certain points, especially in the region of the greater curvature, a certain obscurity of the note alternating with zones of sonority. But this sign is absolutely wanting on deep percussion such as is ordinarily employed. Professor Peter, with his great medical skill, then diagnosed a cancer of the stomach situated at the posterior surface of the greater curvature, with some cancerous nodules probably disseminated through the epiploon below the splenic region and also in the hypogastric region. At this last point also superficial percussion gave the same results.

We insist upon this mode of percussion, which in obscure cases may prove of great utility in determining a doubtful diagnosis; and lately also in a patient affected with latent cancer of the intestine we were able by means of this sign to fix the exact seat of the disease.

From *Gazette des Hôpitaux.*

Ice in the Rectum to Combat Chloroform Narcosis.—According to Dr. Baillée there is no more active remedy in the narcosis caused by chloroform than the introduction of a piece of ice into the rectum. A moderate pressure suffices to overcome the resistance of the sphincter. The ice melts in the intestine and immediately a deep respiration is produced, the precursor of natural respiration and of the re-establishment of the cardiac functions. Mr. Baillée recommends the same means in cases of apparent death of the new-born.—*Revue Thér. Méd. Chir. et Arch. Méd. Bélges.*

For Sore Nipples.

℞ Borax . . . . . ʒii.
Chalk . . . . . ʒi.
Spirits of Wine . . . . . ʒii.
Water . . . . . ʒii. M.

Formula for Oil of Sandal Wood.

℞ Oil of Sandal . . . . . 1 ounce.
Mucilage of Acacia . . . . 1 ounce.
Simple Syrup . . . . . 2 ounces.
Essence of Gaultheria . . 2 drachms. M.

Dose—A teaspoonful three times a day.

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 their addresses to the corresponding editor.*

TORONTO, MAY, 1878.

QUIGILA (BRAZIL), GAFEIRA (PORTUGAL), LEPRA ANÆSTHETICA, *VEL DACTYLIANA* OF EUROPEAN AUTHORS.

Under the above heading we have found, in the October issue of the fortnightly *Medico Chirurgical Review* of Buenos Ayres, published under the able direction of Dr. Emillio Coni, a series of nine very interesting and instructive reports of cases of the above remarkable and destructive malady. Whether the disease here so graphically illustrated by our able cotemporary, is of generic affinity to the affection know as the leprosy of the Greeks, and that of various tropical regions, or stands in even closer relation with that Norwegian scourge which modern tourists, as well as native physicians, have depicted with thrilling fidelity, we are unqualified to suggest. We are gratified to learn, from a notification in the December number of Dr. Coni's *Review*, that he was then on the point of setting out on a tour of observation through the provinces in which the disease most largely prevailed, with the view of acquiring a fuller knowledge of its etiology and endemic prevalence, and we look forward with fond anticipation to the published results of his laudable exploration. We regret that our disposable space precludes the reproduction of the whole of the cases presented by Dr. Coni, for they are all deeply interesting, and have all been detailed with judicious exactitude. We have made a selection of the fifth case, as fairly illustrative of the more salient features of the disease in question. The following is a translation from the Spanish original :—

"Cipriana Vivas, an Argentine, female, aged 54, always engaged in domestic labours, of normal constitution, and highly lymphatic temperament, was examined by us at her residence, No. 585 Chili Street, 8th July, 1877."

Her progenitors and collaterals had been persons of good health, none having suffered from any nervous or skin affection. The patient had undergone small-pox, measles, scarlatina, cholera, yellow fever, and an hysteric attack. She was a native of Buenos Ayres, and had always resided there. In September, 1838, she gave birth to her first son, having up to this time enjoyed good health, saving the eruptive fevers above mentioned. Fifteen days after her confinement she was taken with a strong disgust, to which she ascribed the cause of her malady, which commenced in a formication, followed by insensibility, in the hands and feet, to such an extent as to render the former unfit for the discharge of her accustomed work. At the same time there was presented a tumefaction of the face, coincident with muscular prostration, which obliged her to keep her bed. An apothecary was called in; he prescribed mustard baths to the feet, rice, and orange leaves, and the application of sinapisms to the legs and feet. The rubefacient action of the mustard gave no uneasiness, and in consequence her mother continued the application throughout the night, the result of which was intense vesication. To this irrational medication the patient imputed her loss of power over the feet. A physician being called in, he prescribed two bleedings and some tisans and baths. She presently was restored to her former condition, but she found that the formication and insensibility persisted. Some time after there supervened intense pain in the lumbar region and the vertrebal column, with complete paraplegia. The physician ordered bleeding on three succeeding days, warm baths three times daily, spare diet, suspension of lactation of the child she was suckling. The first bleeding restored the movements of one leg, and the second those of the other. The attack kept her in bed fifteen days; on its subsidence she was able to perceive that the tactile sensibility had much improved, and her hands were not so torpid as before. Some time afterwards there began successively, at

considerable intervals, to appear on the fingers, some blisters, which she attributed to burns. These blisters were replaced by atonic ulcers, with copious fetid suppuration, terminating in slow cicatrization. The greater portion of the nails were enlarged and deformed, and all the phalanges were gradually eliminated. On asking the patient respecting the order of progression, she replied that she did not remember when the bones of the phalanges began to be lost, but merely that the third went first, and the second and first in succession; there had not been a loss of any in marked entirety; all the bones, to use her own words, "had rotted, or had been eaten away."

The actual condition is thus: The hands have for twenty years past been as we now find them. The period during which the destruction of the bones has been proceeding has not, as she says, been longer than four or five years.

The left hand. In this there remains only the first phalanx of the thumb, and the places of implantation of the other fingers are occupied by short stumps of greater or less thickness. In these stumps are observed callous cicatrices, the vestiges of old ulcers, which have destroyed the soft parts and eliminated the phalanges The skin of the palm is very callous, and that of the dorsum soft and smooth to the touch, having a parchment appearance, which makes one suspect that the skin has undergone a profound modification, and, as we think, a species of fibrous transformation.

The right hand. This hand has not a single finger remaining. It now shows merely the small stumps formed by the skin and the soft tissues. It presents, in like manner as the left hand, callous cicatrices at the points of implantation of the fingers. On the dorsal, and the inferior part of the forearm, there is seen a superficial ulceration, produced by a burn, rose-coloured on the base, with callous, indolent edges. The skin of the palm and back of this hand has the same characters as that of the left hand. The tactile sensibility, though greatly impaired, still persists in both hands; and the left which has yet a phalanx of the thumb, is the chief aid to the unfortunate creature in her domestic occupations. Both the thermal and the dolorous sensibilities have totally disappeared.

The right foot. The great toe has lost its second phalanx, and shows a deformed and thickened nail. Its form is changed, and on its inferior surface the skin has been replaced by a callous texture. The second toe has lost its second and third phalanges; the soft textures which cover them form a small stump, strangulated at its base, and separated from the first phalanx by a deep fissure. There is no nail. The third toe exists not. The fourth has remaining only the soft textures, constituting a little stump. The fifth is contracted backwards, but has all its phalanges.

The dorsal surfaces of both feet are slightly œdematous, and they have the same characters as that of the hands. The movements of flexion and extension are but little marked. The tactile sensibility, though diminished, persists. On the plantar, and the external and internal regions, two small ulcers, with callous borders, and giving out a little pus, are seen.

The left foot. Our space does not allow of the continuation of the details given by the writer of the article in the *Revista;* but our readers will be satisfied with the illustrative details submitted; as we may state that the condition of the left foot differed not essentially from that of the right. We should be very glad to be able to transfer to our columns the whole of Dr. Coni's valuable observations; but as the important subject treated of is now under the consideration of the medical societies of Paris, it must very soon find its way into the medical literature of Europe.

TORONTO MEDICAL SOCIETY.—A meeting of between forty and fifty members of the profession, resident in the city, took place in the Canadian Institute on the evening of the 18th ultimo, with the view of organizing a Toronto Medical Society. Dr. Workman was called to the chair, and Dr. J. E. Graham was elected secretary. A committee of seven was appointed to draft a constitution and by-laws and report in a fortnight. Pursuant to directions, the committee met at Dr. Graham's on the 25th, and drew up their report, which will be presented at the first meeting, to be held at the Canadian Institute on the 2nd inst.

JOURNALISTIC.—To be published quarterly, "Brain," a journal of Neurology, edited by Drs. Bucknill, Crichton-Browne, Ferrier, and Hughlings-Jackson. Macmillan & Co., 22 Bond Street, New York, American Publishers. The Original Articles will consist mainly of Clinical and Pathological Records, and Anatomical and Physiological Researches, Human and Comparative, on the Nervous System. Signed Critical Digests and Reviews of Clinical, Experimental, and other Researches in this department of science, both at home and abroad, will also be furnished by an able staff of contributors. Space will also be devoted to Foreign Corespondence on matters relating to Neurological Science in its theoretical and practical aspects. It will be the object of "Brain" to keep its readers well abreast of modern progress in Neurology, and to advance the knowledge of a class of diseases respecting which it is universally admitted that much has yet to be learnt.

We have received the following communication from Perry Davis, Son and Lawrence, of Montreal, agents for Wyeth's Dialysed Iron, whose advertisement appears elswhere. "We notice in the April number, the article headed 'The Hypodermic Injection of Dialysed Iron in Chlorosis' by Dr. Da Costa. The Dialysed Iron used by the Doctor was 'Wyeth's'; if he had used any of the several Canadian makes, the result would have been very different, as but few of them have any of the peculiarities of 'Dialysed Iron' and not one of them (*we have had them all tested*), could be used in the manner described by Dr. Da Costa without injury to the patient, and with the result obtained by the Doctor in this case."

We are glad to be able to insert in this issue an interesting original paper from one so well and favourably known to many Canadians as Dr. T. B. Peacock, Senior Consulting Physician to St. Thomas's Hospital. Our readers will be amply repaid by a perusal of the article.

APPOINTMENT.—I. T. Moore, of the town of Tilsonburg, M.D., to be an Associate Coroner in and for the County of Oxford.

Book Notices.

McGill University, Montreal, Faculty of Medicine Announcement, Summer Session, 1878.

Annual Announcement of the Medical College of the Pacific, Session of 1878. San Francisco: A. L. Bancroft & Co., Printers.

The Annual Medical Directory of Regular Physicians for the State of Illinois, for the year 1878. F. A. EMMONS, M.D., Editor.

Proceedings of the Louisiana State Medical Association, New Orleans. Medical and Surgical Print, 1878.

Observations in Practice, Surgery, Gynecology, and especially Obstetrics. By GEORGE B. WALKER, Professor of Obstetrics in the Medical College of Evansville, Chicago, Medical Press Association, 1878.

Vest Pocket Anatomist (founded upon Grey). By C. HENRI LEONARD, A.M., M.D., 2nd enlarged edition. Detroit, 1878. This is a small pamphlet of fifty pages, containing a synopsis of anatomical facts useful for a student on the eve of an examination.

"What am I?" A valedictory address to the Graduates, delivered at the close of the Forty-first Session of the Medical Department of the University of Louisville, Feb. 28th, 1878. By J. M. BODINE, M.D., Professor of Anatomy and Operative Surgery of Eye, and Dean of the Faculty.

Atlas of Skin Diseases. By LOUIS A. DUHRING, M.D., Professor of Skin Diseases in the University of Pennsylvania. Philadelphia: J. B. Lippincott & Co., 1878.

We have received Part III. of this valuable work, containing illustrations of Eczema (squamosum), Syphiloderma (erythematosum), Purpura (simplex), Syphiloderma (papulosum et pustulosum). It is evident from the successive excellence of each part that the words of commendation so justly merited by Parts I. and II. will be equally applicable to all. When

completed they will form a work that will be of invaluable assistance to the practitioner for reference, and to the teacher when clinical cases are wanting to illustrate his lectures. There are to be eight or ten parts issued quarterly at $2.50 each part.

Montreal General Hospital Pathological Report for the Year ending May 1st, 1877. By WILLIAM OSLER, M.D., of McGill University. Vol. I. Montreal: Dawson Brothers, Publishers, 1878.

We gladly welcome this first pathological report from a Canadian hospital. It contains interesting records of cases from the post-mortem book of the General Hospital, which throughout bear witness to the well-known industry of the talented author. Dr. Osler's reputation as a pathologist and physiologist, already so high both at home and abroad, gains additional lustre from every production of his active brain and pen. We regret that space does not allow us to give our readers some extracts from this admirable volume. The cases, (some of the more important of which have already appeared more in detail in the Canada Medical and Surgical Journal) are carefully reported, grouped on an anatomical basis, the system of inspection of Virchow at the Charité Berlin having been followed. The book is dedicated to Dr. James Bovell of Toronto.

A Guide to Therapeutics and Materia Medica. By ROBT. FARQUHARSON, M.D., Edin., F.R.C.P., London, Lecturer on Materia Medica at St. Mary's Hospital, Medical School, &c., enlarged and adapted to the U. S. Pharmacopœia by FRANK WOODBURY, M.D. Philadelphia: Henry C. Lea; Toronto: Hart & Rawlinson.

This is a convenient manual for reference, containing in moderate compass the physiological and therapeutical effects of all remedies in use. It is arranged alphabetically and in parallel columns, the physiological action being given on one side and the therapeutical on the other. Botanical and pharmaceutical details are omitted. An introductory chapter on rules for prescribing, and one on the classes of remedies, with an index of diseases and their various and appropriate remedies, complete a volume that will be a useful reference book for the student and busy practitioner who have not the time to peruse the larger systematic treatises of Stillè or Wood. The author is well known as a careful scientific and practical investigator of the actions of medicines in health and disease, and he gives us concisely in this book the result of his labours, together with that of other workers in the same field. Dr. Woodbury has adapted it to the U. S. pharmacopœia, and has made such additions of new remedies, &c., as the advance of this branch of medical science, and the requirements of the American medical student seemed to demand. Dr. Farquharson favours the writing of prescriptions in English.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.—The third meeting of the fifteenth session was held on the 16th ult.; Dr. Gillespie, President, in the chair.—Professor Grainger Stewart exhibited four patients illustrating in a marked degree the varying amount of Tendon Irritability in different forms of Paralysis. Case 1, a little boy suffering from hemiplegia. Tapping ligamentum patellæ of the healthy joint with a percussion-hammer, the foot was jerked forward; on the affected side, movements more violent. The normal irritability was wholly lost in locomotor ataxy, and this was one of the earliest and most reliable signs of the disease. Case 2, locomotor ataxy; absolutely no response to tapping the patellar tendon. Ordinary reflex movements not impaired. Case 3, with some ataxic features, but showing excessive tendon-irritability. Case 4, well-marked ataxy; no irritability of tendon.

MODE OF TREATMENT OF VARICES.—Dr. Gabrielle, of the Italian Navy, recommends the following means: Apply over the varicose cord, throughout its whole extent, a very thin strip of lead, the thickness of which should not exceed a millimetre (½ a line) and keep it in place by means of a roller bandage; keep it on night and day for ten days, unless the patient cannot tolerate it during the day, in which case apply it only during the night and when he is not obliged to walk. The cure will often be complete after ten days' application—*Courrier Médical.*

Miscellaneous.

ONTARIO MEDICAL COUNCIL EXAMINATIONS.—There are 305 students up for examination in Toronto in the various years. Of these 89 are finals.

TORONTO UNIVERSITY.—The examinations in the Faculty of Medicine began on April 17th. There are 140 names on the list for the various years.

Dr. P. Heron Watson as one of the suite of Earl of Rosslyn, on his mission to the marriage of the King of Spain, has been made a Companion of the order of Charles the Third.

Mr. John Chiene has been elected surgeon to the Edinburgh Royal Infirmary in succession to Dr. Patrick Heron Watson, whose fifteen years' term of office has expired.

PERSONAL.—Dr. W. Metcalfe, Assistant Superintendent at the London Asylum, has gone to Rockwood Asylum, Kingston, to act in Dr. Dickson's place during the latter's absence for six months.

TREATMENT OF CHOLERA.—T. D. Atkins, M.R.C.S.E., of Exeter, England, states that he found oil of cinnamon a specific for cholera in an outbreak on board an Indian emigrant ship, every case recovering.

TORONTO GENERAL HOSPITAL.—Work has been commenced on the new Eye and Ear Infirmary in connection with the General Hospital. There are about one hundred and seventy-six patients in the hospital at present.

TREATMENT OF ACNE ROSACEA.—Dr. Balmanno Squire has found the ointment of chrysophanic acid applied all over the face and rubbed well in, twice daily, to be very successful in a case of acne rosacea.

INTERMITTENT NEURALGIA.—Dr. Oster in *Der Praktische Arzt* claims to have cured a large number of cases of neuralgia of the fifth nerve of malarial origin, by salicylic acid. (It is cheaper than quinine.)

TINCTURE STOPPERS.—The unpleasant cementing of stoppers can be entirely prevented by rubbing the stoppers with a piece of paraffine and giving them a turn in the neck of the bottle, so as to distribute a thin coating of paraffine all over. Renew two or three times a year.

The annual meeting of Convocation for the conferring of degrees in the Faculty of Medicine, University of Bishop's College, was held in the Synod Hall, on April 11th. The number of students in attendance during the session was 43. Of these were, from the Province of Quebec, 32; Ontario 4; United States 5; Jamaica, West Indies, 1; Bermuda 1; total, 43.

COR BOVINUM.—The *Gazette des Hopitaux* says Prof. Tourdes (of Nancy) removed, at the medico-legal autopsy of a man who had died suddenly, a heart which surpasses in volume and in weight all recorded cases of cor bovinum. In fact, except one in which the heart exceeded 1,000 grammes (15,434 grains), the cases vary between 500 and 680 grammes. This one reached 1,480 grammes, weighed the day of the necropsy. It still preserves 1,250 grammes of weight after being prepared and placed in alcohol for several days. America still beats this: the heart which Prof. Alonzo Clark presented to the College of Physicians and Surgeons of New York weighing 57 oz.

Dr. N. H. Beemer, of Wyoming, received an appointment to the London Asylum about the middle of March. We observed in the *Western Globe* an account of a very pleasing incident which occurred just before his departure for his new sphere of labour, viz: a presentation of a Silver Set, accompanied by a most gratifying expression of esteem and affection on the part of a large number of friends and patients. The boys of his Sunday-school class, also, made him the recipient of a silver inkstand and an address. We are exceedingly pleased to notice these evidences of a public appreciation of that true merit which we personally know Dr. Beemer to possess. We most heartily congratulate the asylum on his appointment to its staff, and cordially re-echo all the good wishes for his welfare lately so well expressed by his friends in Wyoming.

EXAMINATIONS AT QUEEN'S COLLEGE, KINGSTON. — Finals — Messrs. Bennett, Brennan, Craig, Clinton, Evans, Kennedy, Kidd, Lewis, Lynch, and McArthur. Primary—T. and W. A. Cleaver, Donovan, Henderson, Horton, Hossie, Judson, Kilborne, Leonard, Lafferty, McCammon, Newlands, and Ward. Excellence of papers assigned positions to the following :— Hospital Surgeons—Messrs. Henderson and Leonard. Demonstrators—Messrs. Ward and Horton.

TRINITY MEDICAL SCHOOL.—The following gentlemen passed their examinations at Trinity Medical School at the close of the late session 1877-8 :—*For the Diploma and Fellowship* : Trinity Gold Medallist, W. A. Dafoe ; Trinity Silver Medallist, J. D. Bonnar ; Medical Faculty Gold Medallist, Charles Sheard ; Medical Faculty Silver Medallist, Henry D. Wilson. *Certificates of Honor in the Final Branches*—J. M. Groves, J. P. Rankin, U. M. Stanley, P. Dunfield. Passed—Messrs. H. A. DeLom, T. H. Ashby, A. M. Baines. *In the Primary Branches*—Second year's Scholarship, Mr. A. McDiarmid. Certificates of Honor,—Messrs. Chappell, Welford Duck, Thurreson and Parke. *First Year's Examination.*—1st. First year's Scholarship, Mr. Hatton ; 2nd. First year's Scholarship, Mr. Beatty. Passed—Mr. Shore.

UNIVERSITY OF MCGILL COLLEGE.—*Annual Convocation and Conferring of Degrees.*—The following gentlemen received the degrees of M.D. and C.M. :—Messrs. Beckstead, Grantly, Ont. ; Robert Bell, Montreal ; John D. Cameron, Glengarry, Ont. ; Alexander Chisholm, Lochiel, Ont. ; Robert Collison, Matilda, Ont. ; Daniel W. Faulkner, Halloway, Ont. ; Louis A. Fortier, Philipsburg, Q. ; John R. Fraser, Hawkesbury, Ont. : Henry C. Gardner, Orillia, Ont. , Wm. B. Gibson, Dunham, Ont. ; Fred. S. Greenwood, St. Catharines, Ont. ; James I. Guerin, Montreal, Que. ; John A. Hutchinson, Bluevale, Ont. ; Wm. H. Howey, Delhi, Ont. ; John J. McCann, B. A. Milbury, Mass. ; John McCrimmon, Woodville, Ont. ; Milton McCrimmon, Ancaster, Ont. ; John K. McKinley, Perth, Ont. ; Ernest McNeill, Montague, P.E. I. ; Thomas W. Mills, M.A., Hamilton, Ont. ; W. J. Neilson, Perth, Ont. ; Edward W. Setree, Prescott, Ont ; D. F. Smith, Listowel, Ont. Fred. J. Stafford, Montreal, Que. ; Hiram N. Vineburg, Montreal, Que ; Arthur D. Webster, Kentville, N.S. ; John W. Wright, B.A., Cressy, Ont. Of the above Messrs. Greenwood and Gardner are under age. They have, however, passed all the examinations and fulfilled all the requirements necessary for graduation and only await their majority to receive their degree. The Holmes Gold Medal was awarded to Hiram N. Vineburg, of Montreal. The prize for the final examination was awarded to Thos. W. Mills, M.A., of Hamilton, Ontario ; the prize for the primary examination, to W. R. Sutherland, Montreal ; and the Sutherland Gold Medal, awarded for the best examination in theoretical and practical chemistry, to John M. Lefèvre, of Toronto. The following are the gentlemen, arranged in order of merit, who deserve honourable mention in the primary examination :—Messrs. Lawford, J. L. Brown, Imrie, Shaw, Stevenson, Gurd, Lefevre, Gray, Williston, J. Smith, McCully and McGuigan. In the final examination :—Messrs. Neilson and Gibson. Botany : Rodgers and Gordon, 1st ; Carson, 2nd. Special prize for collection of plants, Beaumont Small. Practical Anatomy, senior class : Prize, John B. Lawford. Junior class : Prize, William L. Gray. Practical chemistry : Prize, A. D. Webster.

Births, Marriages, and Deaths.

BIRTHS.

At Montreal, on the 5th of April, the wife of W. H. Hingston, Esq., M.D., of a son.

At Hagersville, March 28th, Mrs. S. R. Porter, wife of John H. Porter, M.D., of a son.

At Ottawa, on April 4th, the wife of Dr. Sweetland, of a son.

DEATHS.

At his residence, Belleville, on Saturday, March 23rd, Jas. Lister, Esq., M.D., aged 65, son of the late Capt. Lister, Commander of Her Majesty's Coast Guard, Barnstaple, Devon.

At Hamilton, on the 29th of March, of pneumonia, John Bell, A.M., M.D., of Montreal, aged 33 years.