

Technical and Bibliographic Notes / Notes techniques et bibliographiques

Canadiana.org has attempted to obtain the best copy available for scanning. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of scanning are checked below.

Canadiana.org a numérisé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de numérisation sont indiqués ci-dessous.

- Coloured covers /
Couverture de couleur
- Covers damaged /
Couverture endommagée
- Covers restored and/or laminated /
Couverture restaurée et/ou pelliculée
- Cover title missing /
Le titre de couverture manque
- Coloured maps /
Cartes géographiques en couleur
- Coloured ink (i.e. other than blue or black) /
Encre de couleur (i.e. autre que bleue ou noire)
- Coloured plates and/or illustrations /
Planches et/ou illustrations en couleur
- Bound with other material /
Relié avec d'autres documents
- Only edition available /
Seule édition disponible
- Tight binding may cause shadows or distortion
along interior margin / La reliure serrée peut
causer de l'ombre ou de la distorsion le long de la
marge intérieure.

- Coloured pages / Pages de couleur
- Pages damaged / Pages endommagées
- Pages restored and/or laminated /
Pages restaurées et/ou pelliculées
- Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées
- Pages detached / Pages détachées
- Showthrough / Transparence
- Quality of print varies /
Qualité inégale de l'impression
- Includes supplementary materials /
Comprend du matériel supplémentaire
- Blank leaves added during restorations may
appear within the text. Whenever possible, these
have been omitted from scanning / Il se peut que
certaines pages blanches ajoutées lors d'une
restauration apparaissent dans le texte, mais,
lorsque cela était possible, ces pages n'ont pas
été numérisées.

- Additional comments /
Commentaires supplémentaires: Continuous pagination.

THE
CANADA LANCET.

A MONTHLY JOURNAL OF

MEDICAL AND SURGICAL SCIENCE.

VOL. V.

JUNE, 1873.

No. 10.

Original Communications.

A BRIEF REPORT OF CASES OF SYMPATHETIC OPH-
THALMIA AND SYMPATHETIC IRRITATION.

BY A. M. ROSEBRUGH, M.D., SURGEON TO TORONTO EYE INFIRMARY.

(Read before the Medical Section of the Canadian Institute,
May 16th, 1873.)

About two years ago I had the privilege of reading a paper before this Society on Sympathetic Ophthalmia, in which I endeavoured to point out:

1st. That Sympathetic Ophthalmia is a peculiarly destructive form of inflammation of the eye, arising solely from irritation in the opposite eye, and that, as a rule, it runs its course unchecked, and the patient is left hopelessly blind.

2nd. That the most common cause of Sympathetic Ophthalmia, or Sympathetic Irritation, is injury to the opposite eye, particularly wounds in the region of the ciliary body; and

3rd. That the only possible means of arresting the progress of the disease is the early removal of the injured eye, and that in all cases when the injured organ is enucleated before Sympathetic inflammation is actually established, even although it may be already

very much weakened from Sympathetic Irritation, the uninjured eye never becomes affected with Sympathetic Ophthalmia.

The following cases illustrate some of these points. They are arranged according to the length of time that intervened between the date of injury and the appearance of Sympathetic trouble in the uninjured eye. Light are cases of Sympathetic Ophthalmia, and three are cases of Sympathetic Irritation.

I.—SYMPATHETIC OPHTHALMIA

CASE 1.—Total blindness in three weeks after injury of one eye from Sympathetic Ophthalmia.

Peter John H., of Lastowell, aged 16. Four years ago last March he was hooked by an ox, the horn rupturing the eye-ball and a portion of the vitreous humour escaping. The wound healed, but remained irritable, and two weeks after the accident the uninjured eye became sympathetically affected, and one week later he was perfectly blind. I saw the case about two years after the accident, and found both eyes destroyed as organs of vision. He is now in the Institution for the blind at Brantford.

CASE 2.—Total blindness in six weeks from wound in one eye

Mrs. A. W. B., of Little Scotland, Co. Brant, had an injury in one eye in February last. Some boys were exploding a percussion cap, while she was looking on from a distance of six or eight feet. A piece struck the eye in the ciliary region. The sight of that eye soon became impaired and the eye painful. In five weeks she complained that the uninjured eye felt "weak," and by the end of the sixth week she was blind in both eyes. I saw her three weeks later, and found a cicatrix in the sclerotic just external to the margin of the cornea. The eye was irritable and the tension reduced. The pupil was closed and the perception of light reduced to a minimum. On examination of the uninjured eye I found the pupil closed with plastic exudation, but the inflammation had subsided. The quantitative perception of light was good. I recommended the immediate removal of the injured eye, and subsequently an artificial pupil operation on the other eye, but as the patient had a great dread of chloroform, she declined operative interference.

CASE 3.—Total blindness from Sympathetic Ophthalmia six weeks after injury of right eye.

Joseph H., aged 22, Delaware, Ont. The right eye was injured

in September, 1870, from the recoil of a piece of spring wire. The steel caused a penetrating wound of the cornea and prolapse of the iris. The wound healed in about ten days and the sight recovered completely. In about two weeks after the accident he had an attack of what his physicians called conjunctivitis, supposed to be caused by exposure to the dust of a threshing machine. This congestion of the conjunctiva was probably symptomatic of ciliary irritation caused by dragging upon the ciliary processes on account of the prolapse of the iris. The eye recovered from this attack, but in about three weeks later the eye again became inflamed, the disease extending to the iris and closing the pupil. One week later, or six weeks after the injury to the left eye, sympathetic irido-choroiditis was set up in the left eye which resulted in total blindness. He is also at the Institution for the blind at Brantford.

CASE 4.—Total blindness from Sympathetic Ophthalmia eight weeks after wound of right eye.

Samuel McC., aged 36, Mt Pleasant. Right eye wounded in June, 1871, from splinter of wood while chopping. The wound was in the sclerotic, just external to the cornea, and extending into the ciliary region. About three weeks after the accident, he came to Toronto for advice. The surgeon whom he consulted did not recommend any interference, and he returned without anything being done for him. I saw the case in October, about four months afterwards, and found that the injured eye was quite destroyed, and that the pupil of the other eye was quite closed from plastic exudation. I then learned that the inflammation had set up in the then sound eye almost exactly six weeks from the date of injury of the other eye. The injured eye was enucleated and an iridectomy performed upon the opposite eye. Vision was somewhat improved by the artificial pupil. He returned in February, 1872, for a second operation. Unfortunately suppurative inflammation followed the operation, and he is now hopelessly blind. I learned subsequently that at this particular time erysipelas and puerperal fever were unusually prevalent in Toronto and vicinity. The suppurative inflammation following the operation upon the iris may have arisen from the same predisposing atmospheric cause.

CASE 5.—Blindness in one eye and Sympathetic irido-choroiditis in the other seven weeks after injury. Good result.

R. S. H., of Coneseon, while driving a nail, Feb. 15, the nail

broke and the end struck the left eye in the ciliary region. He was sent to me by his family physician four weeks after the accident. The eye was then filled with blood and quite useless, the sclerotic was ruptured in the ciliary region. He returned home with a note to his physician pointing out the danger to be apprehended, and recommending that both eyes be closely watched. He returned in three weeks, led by his brother. The injured eye was about the same as when I saw it last, with the exception that there was less hæmorrhage and he could see the light from the ophthalmoscopic mirror brighter than before. On examining the right eye, however, I found the pupil irregular and other symptoms of Sympathetic irido-choroiditis. The injured eye was enucleated the same day under chloroform. The right eye was placed under treatment and it commenced to improve immediately. In two weeks he returned to Consecon, the inflammation relieved, vision restored and wearing an artificial eye.

CASE 6.—*Total blindness from Sympathetic Ophthalmia two months after wound of left eye*

The following very brief memorandum is copied from my journal for 1871. I cannot now recall the case. Hamilton P., Toronto, aged 21. When six years of age the left eye was wounded with a scythe. The eye remained full size after the accident, but the sight was destroyed. Four weeks afterwards the sight of the right eye commenced to fail, and in about two months from the date of the accident he was quite blind.

CASE 7.—*Total blindness from Sympathetic Ophthalmia in nine months after wound of left eye*

Hester L., aged 21, County of Hastings, gives the following account of her case.—At eight years of age, the left eye was wounded with a stick of wood. The "pupil" was cut. The accident occurred at Christmas time. The wound was healed in about a month, but that eye was quite blind. She went to school for eight months, when the right eye began to fail. At first she noticed that there was occasionally a blur over the letters in reading, this increased, and both eyes became quite painful; the sight continued to fail until the month of October, when she found herself quite blind in both eyes. She has now been blind 13 years. Both eyes are atrophied.

CASE 8.—*Total blindness from Sympathetic Ophthalmia fifteen months after wound of right eye.*

George B., aged 18, Toronto, has been blind for 4 years. When about 12 years of age, he had a wound of the right eye with a piece of glass, which resulted in the loss of sight in that eye. The sight in the other eye began to fail in about a year after the accident. Six months after he applied for relief at the then Toronto Eye Dispensary, when he was found to be quite blind. His right eye was slightly atrophied (tension reduced) and tender to the touch, the direct result of the wound eighteen months previously. The left eye was full and the tension normal, but the pupil was completely closed, and the iris adherent to the anterior capsule of the lens, (posterior synechia) the result, undoubtedly, of sympathetic indolentiritis. The right eye was enucleated, and subsequently an artificial pupil operation was performed on the left, but without avail. The eye subsequently atrophied. He is also in the Brantford Blind Institute.

II—SYMPATHETIC IRRITATION.

CASE 9.—Sympathetic Irritation three months after wound of opposite eye. Good result.

Robert L., aged 45, Toronto. About March 15th, 1869, the eye was wounded by a piece of iron rivet, in using a hammer and chisel. The wound extended from the cornea into the ciliary region. The sight was destroyed, and the eye kept tender until June 15th, when he first came under observation. The wound had quite healed, but the eye was sensitive to the touch. The opposite eye to all appearance was healthy, but he complained of its being so weak, that he could neither read nor return to his work. In technical language, he had sympathetic irritation. A consultation with the family physician was suggested, but he was not seen again for two weeks, when the consultation was held, and the enucleation of the injured eye decided upon, to which he only gave a reluctant consent after the strongest representations were made to him by his clergyman and family physician. In a week's time the eye was perfectly healed, and in less than two weeks he was at work again.

CASE 10.—Sympathetic Irritation from wound of the opposite eye twelve months previous. Good result.

Daniel M., of Lindsay, aged 33. In March, 1870, while cutting hot iron with a chisel, a piece hit the eye and ruptured the sclerotic. His physician sent him to Toronto, and

three sutures were introduced. The wound was healed in three weeks. He returned to his home and his business as a blacksmith. The sight in that eye was destroyed, and the eye was occasionally a little sore, but he kept at his work for 12 months, when he returned to Toronto, no longer able to continue his business on account of Sympathetic Irritation. The injured eye was enucleated, and in a week's time the other eye was quite strong again. A week later he left Toronto wearing an artificial eye.

CASE 11.—*Sympathetic Irritation. Piece of steel in the eye eighteen years. Good result.*

A. R. H., Toronto. Right eye blinded 18 years from a piece of steel entering and remaining in the eye. No irritation in left eye until 12 weeks before he applied for relief. Left eye was then (Dec., 1869) so "weak" that he could neither read nor work. The injured eye was atrophied and a little tender. It was removed, 16th Dec. Four weeks afterwards his report is that his eye is all right. When last seen, 12 months ago, he was at work and wearing an artificial eye.

GENERAL CONCLUSIONS.—From these and other cases of sympathetic diseases of the eye that have come under my observation, I have been led to draw the following conclusions, which are in full accord with the conclusions of others, and which I take the liberty of expressing in language similar to that of Mr. Lawson in his admirable treatise on "Injuries of the Eye."

1st.—That Sympathetic Ophthalmia is a peculiar inflammation of one eye, originating solely from an irritation in the other.

2nd.—That the most frequent causes of Sympathetic Ophthalmia are penetrating wounds of the eye, and especially those which involve the ciliary region, and foreign bodies within the eye.

3rd.—That Sympathetic Ophthalmia usually takes the character of a malignant form of irido-choroiditis, with a tendency to a rapid effusion of lymph, capable of speedy organization.

4th.—That the disease once started is very difficult to arrest, that it is recurrent in its nature, and that when once fully established it often runs its course unchecked, to the complete destruction of the eye as an organ of vision.

5th.—That the removal of the injured eye affords the best chance of arresting the disease, and that, as seen in Case 5, if this operation is resorted to in its early stages, there is a good prospect

of its doing so. Hence the importance of diagnosing in what cases of injury, Sympathetic Ophthalmia is likely to follow, and the necessity of at once removing such injured eyes which are prone to produce it, and especially if they are already lost for all visual purposes.

Before proceeding to a description of the operation of enucleation, with which I will bring this paper to a close, I would add that in my opinion every surgeon might be qualified to perform this operation. It is not nearly so formidable as generally supposed, and the hæmorrhage is usually very slight. The wound is generally perfectly healed in six days, and an artificial eye may be worn in less than three weeks. The eyeball alone being removed, the conjunctiva and muscles form a cushion upon which the shell of the artificial eye rests, and which enables it to move in concert with the other eye.

The patient is placed on his back and brought under the influence of chloroform. The eyelids are widely separated by means of the spring (self-retained) speculum. The conjunctiva is seized near the cornea with a pair of fixation forceps; the raised portion is snipped with a pair of strabismus scissors; the points of the scissors are introduced through the wound, and the conjunctiva is dissected up for some distance on each side of the wound, and following the circumference of the cornea. This loosened portion of conjunctiva is detached close to the cornea by several snips of the scissors. A portion of conjunctiva on the opposite side of the cornea is seized, dissected from the sclerotic, and detached from the cornea in the same manner. When this part of the operation is complete, there should be a circular incision through the conjunctiva close to and surrounding the cornea. This opening is sufficiently large for the passage of the bulb. The recti muscles are successively picked up with a strabismus hook, and divided with the scissors. It is an advantage to use two hooks, the one being introduced before the other is withdrawn. The optic nerve is usually severed with a pair of scissors, but I consider it an improvement to divide the nerve with a blunt-pointed bistory. The eye-ball is made to advance through the conjunctival opening, and seized with the thumb and finger; the blunt-pointed knife is introduced on the nasal side, far back into the orbit. The nerve can be readily felt, it being slightly on the stretch. It is divided, and as the eye is being brought forward, the oblique muscles are divided. As a rule, but little after-treatment is required. One fold of wet lint should be kept over the eyelids for a few days, and the bloody discharges from time to time removed.

PUERPERAL CONVULSIONS.

BY JNO. A. LANGRILL, M.B., JARVIS, ONT.

As so many cases of this formidable disease have been recorded within the past few years, in connection with its treatment with Potass. Bromidi, I will give a brief report of the leading features and peculiarities of the following case.—

Mrs. H—, at 28 years—primipara—tedious labor—was seized in the afternoon with convulsions during a powerful pain. As soon as possible I applied the forceps and delivered, but not before the occurrence of another paroxysm. On the birth of the child I found the cord torn obliquely across, about three or four inches from the umbilicus, and on the removal of the placenta, that portion attached to it was only five or six inches in length.

Between the attacks she lay in a semi-conscious state with a good deal of muscular twitching. Hoping that after delivery the convulsions would not return, I awaited the lapse of the previous interval, about twenty minutes, when another paroxysm, equally severe, occurred, and was followed by deeper coma. I then gave thirty grains of the Bromide, and repeated it in half an hour.

The next interval was rather longer and the spasm not quite so severe, but by the time that she came fully under the influence of the Bromide the twitching almost ceased, and the interval was at least four times as great, while the next attack was very slight.

On the arrival of my friend, Dr. Covernton, of Simcoe, an hour and a-half after this, she had had no return of the convulsive attack, but lay in a quiet stupor, from which she could be partially aroused with great effort.

We concluded to give the Bromide and Chloral per anum, as she had vomited the latter when I had tried it by the stomach.

She had only one mild convulsion after this, and the only further treatment was the administration of chloroform in small quantities at intervals through the night to quiet restlessness, and as an additional precaution against the return of the paroxysms. Of the latter there were seven in number, the first three of which were as violent as any epileptic convulsion I have ever witnessed.

In the morning everything was discontinued, and she gradually became conscious, but, unaware of the ordeal through which she

had passed. Her convalescence was uninterrupted, and her child, healthy at birth, continues so.

I might remark that the pelvis was capacious, the os dilated, and the pains powerful; and I can only attribute the *non-exit* of the child, at least an hour sooner, to the abnormal shortness—about eight inches—of the cord.

Après to the latter I might here describe another interesting case which I attended on the 10th inst. Mrs. M— was in labor with her eighth child. As soon as the occiput emerged I found the cord tightly entwined around the neck, but I succeeded, with more than usual difficulty, in slipping it over the head.

To my great surprise the child—a remarkably large and well developed one—was “still born,” and our greatest efforts failed to reanimate it. From the first both child and funis were pulseless and very pale. Finding all in vain I divided the cord, from which not a drop of blood exuded.

The explanation was soon evident, for on the expulsion of the placenta soon after, I discovered a common, plain knot on the cord about six inches from its junction with the placenta. Up to this point the umbilical vessels were distended with blood. The knot must have been slack till the descent of the child tightened it, and thus interfered with the circulation. The mother was sure she felt the fetal movements up to half an hour before its birth. The labor was in every other respect a natural one.

April 26th, 1873.

CASE OF COMPOUND PRESENTATION.

BY R. R. STEVENSON, M.D., UPPER STEWIAKKE, NOVA SCOTIA.

Mrs. E—, æt. 42; nervous temperament, delicate physique, has borne seven children; labors always tedious, first labor, footling, child dead, third labor breech presentation, delivered by a midwife of a still-born child. In her seventh, or last confinement, I was called to see her about 2 o'clock, on the 20th of July, 1872. Her midwife, who had attended her in her previous confinements, told me that she was taken in labor on the previous day, about 2 o'clock; that she found on examination a mal-presentation, but

could not make out distinctly its nature, but thought it was a footling. About 10 o'clock, during a sharp pain, the waters escaped, and she was not long in making out the character of the presentation. She found the funis and left arm presenting and I was consequently summoned. An examination revealed that the membranes were ruptured, the waters totally evacuated, the funis largely distended and hanging through the os externum, pulsation feeble, the left shoulder presenting, and the left arm engaging the vagina; the parts were hot and tender from perhaps too much manipulation. As each pain, by forcing the child in its unnatural position into the cavity of the pelvis, was thereby lessening the chances for assistance, I at once decided on podalic version. With some difficulty I succeeded in introducing my left hand through the os uteri, and after considerable search secured the left foot. By gentle traction, during the absence of pain, I brought it down sufficiently to secure the other, and by moderate traction during the intervals of uterine contraction, I delivered the feet. The rest of the labor was conducted as an ordinary footling case. From feeble circulation of the blood, necessarily arising from the pressure that had been exerted upon the cord during labor, the child was still-born. A few smart slaps on the buttocks and a dash of cold water excited feeble efforts at respiration. The cord was now separated and the child shortly afterwards presented the appearance of a fine healthy boy, weighing about 12 pounds. Some difficulty was experienced in removing the placenta, a small portion of it being adherent to the surface of the uterus. As a consequence, considerable hemorrhage took place before the removal of the secundines. My patient was now very much exhausted, and I began to fear that she would not rally from the shock, especially did the case appear alarming, as the uterus seemed flaccid and not disposed to contract. I dipped my hands in ice-water and applied their palmar surfaces over the uterine region. This produced vigorous contractions, and I now administered a little carbonic acid water, following with toast-water and wine, a large compress was laid over the uterine region, and a broad bandage, extending from the sternum to the symphysis pubis was tightly applied, with orders for my patient to remain perfectly quiet, in the horizontal position, for 6 or 7 days, and to use the bedpan and urinal as occasion might require. At the expiration of a fortnight she was able to sit up in bed, and by the

end of the month she was about her room. The administration of a few doses of citrate of iron and quinine for the relief of debility were all the medicines that I administered to her. Both mother and child now present the appearance of good health.

I have no special remarks to make in reference to this case, except to confirm Dr. Merriman's remark that "in all cases of compound presentation the pelvis is usually very large." These cases appear to be somewhat rare, as Drs. Clark, Collins and Jansen, if I am not mistaken, make no mention of a case of this kind as having occurred in their long and extensive practice, and Mesdames Lachapelle and Boivin mention only three cases as having occurred in 75,903 deliveries.

Correspondence.

To the Editor of the LANCET.

SIR,—In the LANCET for May, I notice a communication on "Extraordinary Anomalies in the Arterial Supply of the Upper Extremities," by M. Hillary, M.D., &c.

Dr. Hillary describes an instance, which came under his notice, of the axillary artery dividing into two trunks, one of which, after giving several branches to the shoulder and arm, viz. the subscapulars, posterior circumflex, superior and inferior profunda, and anastomotica magna, terminated as the *intrascapularis*, the ulnar and radial arteries coming from the other trunk, at a point somewhat above the elbow-joint. He says, "this is the only instance I can find of such a peculiar division," and then "as they approximate somewhat to this instance," gives extracts from Knox' edition of Frederick Tiedeman's plates on the arteries, and from Sharpey and Ellis's edition of Quain's Anatomy, in which the *intrascapularis* is described as arising from the brachial artery, and concludes by saying, "in none of these instances have any of these great anatomists seen an example such as I have shewn you," &c.

If Dr. Hillary had consulted the new edition of Quain's Anatomy, edited by Sharpey, Thomson and Cleland, or Gray's Anatomy, he would have found something much more to the point. In the former, under the head of "Peculiarities of the Axillary Artery," we read as follows:—"The most important peculiarity in the trunk

of the axillary artery consists in its giving off a much larger branch than usual,—an arrangement which has been observed in the proportion of one out of every ten cases. In one set of cases, this large branch forms one of the arteries of the forearm, most frequently the radial, (about 1 in 33), sometimes the ulnar, (1 in 72), and rarely the *interosseous* artery, (1 in 506. R. Quain). In another set of cases, the large branch gives origin to the subscapular, the two circumflex, and the two profunda arteries of the arm, but sometimes only one of the circumflex, or only one of the deep humeral arteries, arises from it. In the second class of cases the divisions of the brachial plexus of nerves surround the common trunk of the branches instead of the main vessel." In Gray's Anatomy, under the same heading, we find exactly the same statement. Again in both Quain and Gray, under the head of "Peculiarities of the Brachial Artery," we find the following.—"The interosseous, after arising from the axillary or brachial artery, is commonly situated behind the main artery, and, on reaching the bend of the elbow, passes deeply between the muscles, to assume its usual position in the forearm."

The course, branches and anastomoses of the radial recurrent branch of the radial artery, as Dr. Hillary describes it, more especially that of the right extremity, is so common as to be given by some anatomists as the usual arrangement. (See Quain, new edition).

Toronto, May 9.

H. ROBERTSON, M.B.

Selected Articles.

STRICTURE—RETENTION OF URINE.

CLINIC BY D. H. AGNEW, M.D., PHILADELPHIA.

The man now before you comes with a history of urinary trouble of several years' standing. His statements in brief are as follows.—A gonorrhœa, heroically treated, progressed nevertheless to gleet, and in the course of a few months a diminution in the size of the stream began to be noticed. This decrease has gradually continued until the present time, when he finds the current twisted and irregular, due to the insufficiency in the force of the stream to properly dilate the meatus. He is also obliged to pass his urine very frequently, sometimes rising six or eight times in a night, and the act is frequently accompanied by severe straining.

His immediate difficulty, however, is retention of urine, for which he seeks relief. I will not, therefore, this morning give you a lecture particularly upon stricture, but will rather speak for a few moments upon the very important subject of *catheterization*.

The passing of a catheter is an operation which is of common moment, and yet it is so frequently badly done that I cannot but urge upon you its importance. The principal hindrances and obstructions to the act will usually be found to be strictures, or narrowings of the urethra at any portion of its course from the neck of the bladder to the meatus. These obstructions are found in all stages from a slight thickening to occlusion, but I believe that few of the so-called impermeable strictures are really so. All of you know that the urethra is surrounded and enclosed by muscles, so that every stricture becomes to a certain extent *spasmodic* in its character. Pure "spasmodic" occlusions are, however, rare, yet this peculiar element enters so largely into every attempt to pass an instrument down a narrowed canal that it should be fully recognized. That muscular tissue exists in the urethra itself is known not only by clinical experience but also by actual demonstration, it having been shown that the outer and inner layers of the muscular fibres of the bladder are continued down the urethra, the one layer passing just beneath the mucous membrane of the canal at its prostatic portion, while the outer passes around that gland to meet its fellow at the membranous portion, surrounding it completely. Separating again, the layers pass forward to the meatus, where they reunite to form the lips, the internal one in its course lying directly in the sub-mucous connective tissue, and the outer, externally to the corpus spongiosum, between its fibrous coat and body. Thus we see that the urethra has a muscular investment throughout its entire extent, with a double layer, however, at the meatus and membranous portion, while the prostate gland and spongy body are also included between similar planes.

A man the subject of stricture, to a greater or less degree, indulges too freely in eating, drinking or venereal excesses; his irritable urethra responds, and these muscles are thrown into a state of spasmodic contraction, induced also by congestion of the vessels of the part: he attempts to pass his water, and being unable to do so, is alarmed, and his retention becomes, for the time, complete. Now under such a condition it is seldom necessary to use a catheter, a hot hip bath, rest, an enema of forty or fifty drops of laudanum, and ten drops of *unct. of belladonna* by the mouth, being usually sufficient to completely relieve in a few hours. Should these fail, however, a large-sized catheter may be gently carried down, as I shall presently show you. The retention of urine which follows operations about the anus is purely irritable and spasmodic, but will frequently require the use of the instrument for several days, especially in irritable, highly sensitive females. In hysterical women retention may

occur upon the most trivial cause, but the less frequently the catheter is used in such cases the better it will be for both surgeon and patient.

We judge, however, from the history of the case before us, that his is a case of organic stricture, and we will sound him at once.

Catheters are of various forms and sizes. The silver ones being rigid are adapted to the greatest number of cases, although flexible ones, both with and without stilettes, are occasionally useful. The olive headed bougie, or the vertebrated catheter, may be of service in special cases, when the canal is tortuous or when the middle lobe of the prostate is enlarged. You should also have in your possession an instrument of extraordinary length, for I have upon several occasions seen patients approach almost to the brink of the grave because the surgeon's catheter had not reached the bladder, the long distention having carried it high up in the pelvis.

I now inject this man's urethra with two or three drachms of warm sweet oil, and then take a silver catheter, No. 8, warm and oil it thoroughly, and grasping the penis with my left hand in such a manner as to open the meatus, enter the beak, holding the handle of my instrument directly over the *median* line of the patient's abdomen. Here let me say that there are but three requisites in the passing of a catheter, the first is, anatomical knowledge, the second, patience; and the third, patience. These well applied will render almost every impermeable stricture permeable. The point of the instrument should follow the lower wall of the urethra until the glans is passed, in order to avoid the lacuna which there exists in the roof, but from this point until the bladder is reached the upper wall should be followed closely, since pockets and depressions are much more frequently found on the floor. Remembering this precaution I permit the instrument to glide down the canal almost by its own weight, keeping the handle, as you will notice, always *directly over the median line* of the abdomen until the membranous portion is reached. I lay great stress upon this point, because by its observance you will be able to detect the slightest deviation which may occur at any point of its passage, and will avoid many failures. The "tour de maître," I consider as intended for "stage effect." The point is now at the membranous portion, the most common seat of stricture, and as yet no obstruction has been found. Now, if you will look at this model of the urethra you will see that an entire change must be made in the direction of the instrument. The point is now to pass upward and backward, and will require that the handle of the instrument be brought downward to occupy a position midway between the thighs. This movement is one easily accomplished in a normal urethra, but when obstructions exist it becomes one of exceeding difficulty, and is the manœuvre in which many failures occur. In the first place let me inform you that if you will still keep the handle exactly in the *median line*, while you describe this arc of a circle, you will avoid

many of the false passages, lacunæ and folds which often exist. Keep the point along the upper wall; remember your anatomy. Manipulate quietly, slowly, steadily, carefully, when arrested, withdraw and advance again, lest you have entered a false passage. employ no force, lest you perforate the already diseased walls; possess unlimited patience. If uncertain whether a false passage is entered place a finger in the rectum and guide the point. In determining this question, the tightness or laxity with which the instrument is held will often be of assistance, since a false passage usually holds it loosely and also imparts a sensation of roughness, though not of toughness, to the hand. The patient, also, will be frequently able to detect any deviation. In the present case I am arrested at the membranous portion, at about the point where it passes through the deep perineal fascia or triangular ligament. I place my finger in the rectum, and, having satisfied myself that the point has entered the constriction, I press very carefully, but unremittingly, upon it for at least five minutes, at the end of which time I can feel that the muscles are becoming tired in their resistance, and now as I engage the man in a moment's irrelevant conversation I throw off their guard and my instrument is in the bladder, as you see by the full stream of water which flows.

Now this is a No. 8, and the organic difficulty here cannot be very great. By the constant use of progressively increasing-sized sounds we may reasonably promise the man an ultimate cure, provided he will himself continue the use of a large instrument subsequently, for the rest of his life, at intervals of two or three weeks.

This man must now be put to bed, and given a full anodyne enema, for even the operation of catheterism is not infrequently followed by a severe train of symptoms known as "urethral fever."

Suppose, however, that we had failed with the No. 8 size? then after due trial we should have taken a No. 6, and then a No. 4, and so on increasing our delicateness of manipulation and our care in each decrease in size, lest perforation be effected and all the evils of a false passage result. With the small size, absolutely no force must be employed. Should we have failed in this, a flexible catheter would have been tried, or a bulb-pointed one, but it is never advisable to continue one sitting more than twenty or twenty-five minutes. At the end of that time, if unsuccessful, the patient should be put to bed with a warm hip-bath, a full anodyne injection, leeches to the perineum, and hot fomentations over the pubis, when in the course of a few hours the urine may commence to trickle through, and in a short time a full stream appear, provided the often neglected precaution be taken not to permit the cold air to chill him, by an attempt to rise and pass his water.

Should retention still continue, however, at the end of a few hours, and the symptoms be urgent, etherization may be tried and another attempt be made to enter the bladder. Failing again, a

skillful and experienced surgeon may perform forcible catheterization, or internal division; an inexperienced one should attempt neither, for it is but very rarely that any stricture is so tight as not to allow the trickling of a small stream through its aperture, at some time before the point of rupturing is reached by the bladder. Tapping of the bladder is an operation which I have never performed, having always been fortunate enough to relieve all patients by the means above proposed. Should it ever be necessary, however, it may be done with a curved trocar through the rectum, or by the delicate hypodermic-point puncture and suction of an "aspirator"

Should the retention be due to a swollen or congested mucous membrane, the same patience, gentleness and firmness will be effectual in gaining an entrance.

Should the case be an enlarged prostate, as so frequently happens in old persons, a flexible catheter may be necessary, or the "vertebrated" one of Squires or Sayre, assisted by a finger in the rectum to guide and lift the point. Of stricture itself I will speak more fully at a future time.—*Medical and Surgical Reporter, Philadelphia.*

THORACENTESIS—Dr. Austin Flint, in an interesting "Report of twenty cases of thoracentesis" (*Archives of Scientific and Practical Medicine*, March, 1873), lays down the following rules of practice as regards the employment of thoracentesis.

1. Thoracentesis should be resorted to without hesitation or delay whenever an accumulation of liquid or air within the pleural cavity compromises respiration sufficiently to endanger life, or occasions extreme suffering from the want of breath. This rule of practice applies to serous effusion as well as to empyema, and also to cases of pneumo-hydrothorax. Lives are sometimes saved by the operation. Complete recovery may follow, but the palliation of suffering, under the circumstances stated, furnishes a sufficient indication.

2. Thoracentesis is indicated in cases of pleurisy with considerable serous effusion, although the respiratory function be not compromised sufficiently to occasion any dyspnoea when the patient is at rest, provided the effusion do not diminish speedily under treatment with diuretics, hydragogues, and blisters. It is far better to resort to the operation under these circumstances than to persist in the use of the measures just named. These measures are perturbing, debilitating, and often slow in their operation in the cases in which they prove effectual, whereas the removal of the liquid by puncture of the chest is immediate, it does not enfeeble the patient, and occasions no constitutional disturbance. Moreover, thoracentesis, resorted to early, has this great advantage—it is likely to be followed by an easy and full expansion of the lung. The long-continued condensation of lung by the pressure of liquid, the investment of the lung by layers of lymph which become dense with age, and adhesions from newly formed tissue, are obstacles in the way of this result.

USE OF THE ASPIRATOR.

In the April number of the *Birmingham Medical Review*, Mr. Gilbert Smith, Resident Surgeon of the Queen's Hospital, reports the following cases illustrating the use of Dieulafoy's Aspirator, occurring in the practices of Messrs West, Sampson, Gangee, and Furneaux Jordan, Surgeons to the Hospital.

W. T., æt 77, admitted May 15, 1872, under the care of Mr. Jordan, with an extravasal tumour in the lumbar region, ten inches in its longest and four inches in its shortest diameter, caused by falling backwards, during an attack of giddiness. The next day, the largest needle of the aspirator was passed, and five ounces of dark fluid blood were drawn away, pressure was maintained with a thick pad over the site of the puncture. He expressed himself quite relieved from pain immediately afterwards. Seven days later the pad was removed, and there was neither swelling, pain, nor the slightest constitutional disturbance. He left the hospital quite well, at the end of ten days.

J. B., æt. 45, fell backwards against a wheelbarrow, and was admitted to the hospital under the care of Mr Gangee, with a fluctuating swelling in the lumbar region, about the size of a cocoa-nut. The aspirator was used with the largest sized needle, and drew away about two ounces and a-half of dark fluid blood, afterwards pressure was applied with a pad. He would not remain an in-patient after the first day, but he came every other day as an out-patient. At the end of one week the pad was removed, and there was no appearance of the swelling.

J. L., æt. 10, fell a height of eight feet upon her head, and was admitted to the hospital, under the care of Mr Gangee, with an extravasal tumour of the scalp. The aspirator, with the largest needle, removed three and a-half ounces of dark fluid blood, firm pressure was applied. The relief was immediate, and she was quite well on the eighth day.

F. D., æt. 1½, brought to the out-patient room of the Queen's Hospital, with a fluctuating swelling about the size of a hen's egg, and situated over the lower and outer side of the forehead, the result of a fall. The tumour was tapped with a simple trocar and canula, one-sixteenth of an inch in bore, and three-quarters of an ounce of dark fluid blood were evacuated. The extravasation being situated over bone, its evacuation was easily controlled by pressure.

M. O., æt. 13, was admitted under the care of Mr West, senior surgeon, with a transverse fracture of the tibia, and a small prominent fluctuating tumour over the junction of the fragments. Circular compression was tried for a fortnight without avail, a medium-sized needle was passed, and three quarters of an ounce of dark fluid blood were drawn away. Circular compression was continued, and there was no appearance of the tumour.

Mr. Gilbert Smith remarks on these cases that for many years various methods have been advocated for opening cavities containing fluid, that will combine complete evacuation of their contents with rapid closure of their walls, and with least fear of injurious results, such as limited and free incisions, evacuation with a simple trocar and canula, without any regard to atmospheric influence, and with the same instrument with ball and tube attached, or with a simple india-rubber tube fixed and carried under water to exclude air. Chassaignac's drainage tube, an admirable means of removing matter that tends to re-accumulate, and Lister's antiseptic method of opening abscesses. Dr. Georges Dieulafoy has recently constructed an apparatus called an aspirator. This consists of a powerful syringe provided with a tap, which may be turned in three directions, in one, which communicates with a nozzle on which any sized trocar may be fitted, in another, which communicates with the tube that empties the syringe, and in a third, which locks off all external communication. Whilst the tap is turned in this last direction a vacuum is made in the syringe by drawing the piston to the top of the cylinder, where it can be held fast by means of a notch cut in the length of the stem. This is a preliminary proceeding, and when the trocar is fixed to the end of the apparatus it is ready for use. Several sized tubular needles are used, the fine ones for diagnosis, and for emptying collections of fluid situated near delicate organs, the larger ones for diagnosing and emptying purulent collections situated in less dangerous localities. The trocar is now introduced in the direction of the fluid, the tap is turned in the long axis of the instrument, and when the fluid is reached it flows upwards into the exhausted cylinder. "With this instrument we are able," says Dr. Dieulafoy in his pamphlet, "to explore organs of the greatest susceptibility, to evacuate effusions from the pericardium, pleura, or abdomen, from the sac of the arachnoid, and from the cavities of joints." Its use is not wholly free from danger, since a few months ago a knee-joint was tapped with this instrument at a Dublin hospital, and the operation was followed by acute synovitis and death.

In not a single instance in the cases here described was there, after the evacuation of the fluid, the slightest constitutional disturbance, or reappearance of swelling, but the cure was rapid, and the relief from pain and discomfort immediate. As a contrast to the above method of treatment, I may mention the case of an old man who was admitted to this hospital with a large extravasal tumour of the back, from a fall, pressure alone was exercised over the swelling. The tumour became an abscess, and the patient died in six weeks from the effects of the constitutional disturbance.

In all similar cases to those enumerated the diagnosis is so simple as not to need further proof of the existence of blood, but if it were necessary to obtain further evidence, the grooved needle is all that is required. This little, simple and comparatively harmless instrument is not mentioned by Dr. Dieulafoy.—*The Doctor.*

NEW METHOD OF TREATING FUNCTIONAL DYSPEPSIA, ANÆMIA, AND CHLOROSIS.

[Dr. Brown-Sequard, in his new journal, *Archives of Science and Practical Medicine*, advises the following plan of treating the above diseases]—The patient, instead of being restricted to three meals a day, is made to partake of small quantities of food sixty or more times during the day. He gives the history of a case of inveterate dyspepsia in a "scientific man 34 years of age, of strong constitution, but reduced, from several causes, to a lamentable state of health. For about eight years he had been working very hard, taking no exercise, and living almost all the time in a vitiated atmosphere. He slept very little, and usually passed eighteen and even nineteen hours a day writing, reading and experimenting. His diet was miserable, and, with the object of avoiding the need of much food, he took a great deal of coffee. He gradually, though slowly, became exceedingly weak. His digestion, which had been very good all his life before he began to work so much, had gradually become very bad. He suffered greatly from pyrosis, and a feeling of great distress, and gastric distention after each meal. Acid eructations and gas were frequently thrown up into his mouth, and when he did not vomit, he found that his food remained in his stomach so long that, in the morning, he frequently ejected things eaten the previous day. * * * * His emaciation, and weakness and dyspeptic symptoms increased * * * * He had to be carried in a litter to the railway station," for the purpose of removing him to the country. The treatment adopted was to have the patient take two or three mouthfuls of solid food—chiefly bread and meat—every twelve or fifteen minutes, and a little less than a wine glass of Bordeaux wine and water every thirty or forty minutes. At the very outset of this treatment amelioration of the dyspeptic symptoms was obtained. This mode of alimentation was continued three weeks, when the frequency of administration of food was gradually diminished and the amount given each time slowly increased, until, in eight or ten days more, he ate only three full meals. "His strength during the first week had become almost as great as it ever had been previous to his illness."

Dr. Brown-Sequard, in giving a summary of his plan of treatment, says it consists in giving "but very little of solid or fluid food, or any kind of drink at a time, and these at regular intervals of from ten to twenty or thirty minutes. All sorts of food may be taken in that way, but during the short period when such a trial is made, it is obvious that the fancies of the patient are to be laid aside, and that nourishing food, such as roasted or boiled meat, and especially beef and mutton, eggs, and well-baked bread, and milk, with butter and cheese, and a very moderate quantity of vegetables and fruit, ought to constitute the dietary of the patients we try to relieve. This plan

should be pursued two or three weeks, after which the patient should gradually return to the ordinary system of eating three times a day. He says further: "My experience with the patients on whom I have tried the plan of feeding above mentioned, shows that the amount of solid food required by the adult is nearly always as follows from 12 to 18 ounces of cooked meat, and from 18 to 24 ounces of bread. As regards the quantity of fluid I have allowed, it has been notably less than the amount indicated by Dr Dalton (3 pints) and by Dr. E. Smith (4½ to 5 pints)."

He says that in carrying out his plan of treatment, three points need attending to 1st The liking and disliking of certain things by the patient, 2nd. The importance of variety of food, 3rd The digestibility of certain things compared with others, which varies immensely in different patients. When the patient becomes disgusted with any particular form or kind of food, it must be changed or abandoned at once. The patient should be allowed to select that food which to him is most agreeable, only keeping within certain reasonable limits of proper articles. This plan is mostly in harmony with the natural requirements of animals. Nature has adapted the instincts of all animals to the most preservative conditions on which life and health are correlated. In infancy we find that all animals (including man) take food in small quantities and frequently repeated. We adopt the same method while treating those patients who are sick with fevers and other debilitating diseases. Therefore, when a man is sick, we go back to first principles. [There is no doubt but that the plan of Dr. Brown-Sequard is admirably adapted to the treatment of very many disorders, and is far preferable to the abominable system of drugging patients who need hygiene rather than medicine to cure them.]—*Med. Arch.*

ÆTHIOPS MINERAL IN CHOLERA

BY H. H. CROFT, PROFESSOR OF CHEMISTRY, UNIVERSITY COLLEGE,
TORONTO.

A pamphlet has lately come to hand, on the above subject, a few words concerning which may not be out of place. M. Socrati Cadet, of the Royal University of Rome, publishes an account of the use of the above medicine during the epidemic of cholera in Italy in 1865-67, and from his statistics it appears that in cases treated without the sulphide, the cures were from 25 to 40 per cent, but under the employment of it, in doses amounting to as much as 72 grains per diem, the cures were from 60 to 100 per cent.

He ascribes its efficacy to its influence in destroying parasitic growths, to which many persons ascribe this terrible epidemic. This action of æthiops was noticed many years ago by Vallisnieri.

How this preparation can act so powerfully, unless from the excess of sulphur it contains does not seem chemically, very clear. As is well known it is prepared by rubbing or shaking equal parts of flowers of sulphur and mercury until the metallic globules completely disappear. The mercury combines chemically with the sulphur as may be proved by the fact that nitric acid extracts no mercury, and the sulphur can be dissolved out by carbon disulphide, leaving the black mercuric sulphide, which is insoluble in all acids except the nitro-hydrochloric.

It is well known also, that potassium sulphide was at one time recommended as an antidote for corrosive sublimate, its action being to convert the active chloride into inert sulphide. M. Cadet remarks in one place that the medicine is so innocuous, that it may be given to a person not suffering from cholera, without any ill effect resulting.

Possibly the large quantity of free sulphur contained in the æthiops may have had something to do with M. Cadet's success and that of several other practitioners who confirm his statements, at any rate it may be well to call attention to this remedy in view of the probable advent of cholera on this side of the Atlantic, in the course of a year or two—*Pharmaceutical Journal, Toronto.*

AN IMPROVED MEANS OF PLUGGING THE POSTERIOR NARES.

BY A. GODRICH, M. A., M. R. C. S.

I beg to submit to professional notice an instrument that I had constructed by Messrs. Louis Blaise & Co., of 67 St. James' Street, for plugging the anterior and posterior nares in cases of epistaxis. I have long been struck by the unsatisfactory means at our disposal in dealing with such cases. There is, in the first place, owing to its large curve, no little difficulty in passing Belloeg's sound, the point of the instrument often hitching on the posterior edge of the floor of the nasal fossa. In the next place, the adjustment of the posterior plug, requiring, as it does, the passage of the surgeon's finger into the fauces, not only causes much distress to the patient, but often entails a more or less severe bite on the operator, as I have found to my cost; and lastly, when the plug is in position, the string passing from it through the mouth causes so much irritation of the soft palate and fauces, that but few patients have the courage to submit to it.

The instrument consists of a small elastic bag stretched on the end of a hollow style, by means of which it is pushed through the nasal fossa into the pharynx. It is then dilated with ice-cold water by means of the ordinary ear-syringe, the nozzle of which is inserted

into a piece of India-rubber tubing tied to the other end of the style. A small piece of thread or twine tied round this prevents the water from escaping. The bag, thus dilated, is now to be drawn well forward into the posterior nares, into which, by its elasticity, it will accurately fit. The anterior India-rubber plug is next to be slid along the style (this is more easily done if the style be previously wetted) into the anterior nares, which it fits like a cork. The cohesion between this plug and the style will, I think, be sufficient to hold both plugs in position, if not, a piece of string tied round the style in front of the anterior plug will ensure perfect security.

When it is necessary to remove the plug, all that the surgeon has to do is to cut the string tied round the piece of India-rubber tubing, when the water will be expelled by the elasticity of the bag, and the instrument may be removed without difficulty.

This instrument even at its thickest end, where the elastic bag is stretched over the style, is not larger than a No. 6 catheter, and it can consequently be passed through the nasal fossa without the least difficulty, and with very little discomfort to the patient, as I have proved by frequently passing it through my own nose. The style being made of elastic material—in fact, a gum-elastic catheter, and therefore capable of being bent to any curve required—also facilitates the introduction of the instrument. When once the instrument is in position, and quiet, it is almost impossible to tell by the sensations alone that there is any foreign body in the nasal fossa at all, the dilatation of the bag causing but little discomfort, being above the sensitive palate and fauces.

In designing this instrument, it has been my object to combine simplicity and cheapness with perfect efficiency. If I have not fully accomplished my object, I ask any one to suggest any alterations that may bring this instrument nearer to perfection, and enable us to do away with our present barbarous and unsatisfactory plan of plugging the nares.—*British Med. Journal.*

TEST FOR SEWAGE IN WATER.—At a recent meeting of the Royal Dublin Society, Dr. Reynolds called attention to Heisch's test for detecting sewage contamination. It is one of the best known but has been strangely neglected. About half a pint of the water to be examined should be placed in a colorless, glass-stoppered bottle, and a few grains of the best loaf sugar added. The bottle should then be placed in a position where it will be directly exposed to the rays of the sun. The liquid should not become turbid, even after a week or ten day's exposure. If there is a perceptible cloudiness, sewage contamination may be strongly suspected. Frankland has stated that this turbidity is due to phosphoric acid present in sewage and it has also been suggested that it is due to fungoid growths.

RUSSELL ON THE DIFFUSION OF ENTERIC FEVER
BY MILK.*

We beg to direct the attention of our readers, and especially to such as are specially interested in sanitary matters, to a very noteworthy report furnished recently on this subject by the medical officer of health for the city of Glasgow—Dr. James B. Russell. In this report it is proved, we might almost say to demonstration, that a localized outbreak of typhoid fever, in one of the suburban villages of Glasgow, was due to the existence, in the family of a dairyman, of a case or cases of this disease, and the contamination thereby of the milk served by the dairyman to his customers. It may be worth while to give a brief sketch of the circumstances of the case, and of the facts which point so strongly to this conclusion. The village of Parkhead, although closely adjoining some of the most crowded parts of Glasgow, retains the character of a country village. The water supply is good, and nothing suspicious could be discovered about the sewerage. In this village an epidemic of typhoid fever broke out in January, and, after lasting about a month, seems to have disappeared. Thus, in December, 1872, there were three known cases of typhoid fever, in January, 1873, there were fifty-three new cases in thirty-nine families, and in February only two new cases were known. Investigation of these cases in January showed that the epidemic had a very definite relation to the supply of milk by one of the dairymen in the district. Of the three cases in December, 1872, one was in the family of this dairyman, and of the families attacked in January, 1873, the large proportion had their milk supply from him. Thus, of the thirty-nine families attacked, thirty-two were so supplied, and these families gave forty-six cases of fever, while only seven families were supplied by others, and they only gave seven cases. This is rendered all the more striking from the fact that only about a seventh of the families in the district were supplied by the dairyman in question, so that the relation of the cases to this source could be no mere accidental one. A still more accurate test than this was resorted to. The epidemic was concentrated in five streets of the village—twenty-four of the thirty-nine families attacked residing in these streets, and it was resolved to take, as it were, a milk-census of these streets. From this it appeared that in these streets the dairymen in question supplied seventy-three families, and of these twenty-two had fever, and that other dairymen supplied a hundred and forty-six families, and only two had fever. There could certainly be no more definite proof than this. One or two other points of corroborative evidence are brought forward at the close of the report, one of which is perhaps

* Glasgow Herald, Medical Times and Gazette, and British Medical Journal, March 15.

worthy of special notice. In two families supplied by the dairyman in question, it was stated that the two individuals seized were the only members of the family who used the milk. In both cases it was used with porridge, while the other members took sour milk or syrup. In connection with these facts, the report makes some remarks on the system, which obtains to a considerable extent in Glasgow, of having dwelling-houses in immediate connection with shops for the sale of provisions, and the medical officer indicates that the department has received instruction to make all such places the subject of frequent visitation. Any cases of infectious diseases will be at once reported and dealt with.—*London Medical Record.*

PROF. KNOX AND TEXT-BOOKS ON ANATOMY.—Perhaps the most eminent teacher of anatomy in Edinburgh, or in Britain, early in this century, was Dr. Robert Knox. He was a man abounding in anything but the milk of human kindness toward his professional brethren, and if people had cared in those days to go to law about libels, it is to be feared Knox would have been rarely out of a court of law. Personality and satirical allusions were ever at his tongue's end. After attracting immense classes, his career came very suddenly to a close. I need scarcely refer to the atrocious murders which two miscreants, named Burke and Hare, carried on for some time to supply the dissecting-rooms with "subjects." They were finally discovered, and one of them executed, the other turning king's evidence. Knox's name got mixed up with the case, being supposed to be privy to these murders, though many considered him innocent. The populace, however, were of a different opinion. Knox's house was mobbed, and though he braved it out, he never afterward succeeded in regaining popular esteem. He was a splendid lecturer, and a man who, amid all his self-conceit and malice, could occasionally say a bitingly witty thing. It is usual with lecturers at their opening lecture to recommend text-books, and accordingly Knox would commence something as follows. "Gentle men, there are no text-books I can recommend. I wrote one myself, but it is poor stuff. I can't recommend it. The man who knows most about a subject writes worst on it. If you want a good text-book on any subject, recommend me to the man who knows nothing earthly about the subject. (That was the reason that Dr. T. was asked to write the article, 'Physical Geography,' for the 'Encyclopædia Britannica') The result is that we have no good text-book on anatomy. We will have soon, however, Professor Monro is going to write one." That was the finale, and, of course, brought down the house, when, with a sinister expression of his face, partly due to long sarcasm and partly to the loss of an eye, he would bow himself out of the lecture-room.—*All the Year Round.*—*Medical and Surgical Reporter.*

ON BRIGHT'S DISEASE.

In a lecture by Sir William Gull, in *The Doctor*, he says —

Of this affection there were two cases in the ward, which afford a good illustration of some of its phenomena. One of them is a girl, at 18, who has been exposed to wet and cold, which has brought on an attack of acute catarrhal albuminuria. The kidney is like the lung, in this, that it is liable to catarrh, and women are more liable to it than men, their circulation altogether being more easily disturbed, and in this case there is constitutionally a greater tendency, her father died of consumption. Three weeks before admission she got her feet wet, and went about in her boots all day; the next day she felt languid, then she vomited, and soon began to swell all over. The urine was scanty, and on being examined it was found to contain albumen, with epithelium cells, and casts of the tubes. She is slowly improving, but only very slowly, for perhaps of all organs of the body the kidney is one of the slowest in recovering.

There are two or three interesting things in this patient. One is that as you have seen there are lines across her abdomen, just like those which result from child bearing, and if you were not aware of their true nature, they would be almost sure to give rise to suspicion. But there is in fact no reason to believe that these lines are due to distention at all. We may, I think, be quite satisfied there has been no pregnancy in this case. She says, and there is every reason for believing her, that she has always been regular since she first began at the age of 16; and these lines, "*Linee cruridarum spuris*" we may call them, forms as a result of a kind of atrophy of the skin, a spontaneous atrophy, so far as we can trace. Here is a model of them on the knee of a boy, and here another on the forehead of a child. In respect to the morbid conditions of the kidney it should be borne in mind that the kidney is, of all the organs in the body, perhaps the most vascular. Certainly, if we consider the rapidity of the circulation in it, it is so: if we consider the large arteries, and the peculiar arrangement of the malpighian bodies, it is an arterial gland. The spleen, perhaps is, in one sense, more vascular, it is more a mass of vessels, but vastly more blood circulates through the kidney, and thus it becomes liable to throw off albumen under various circumstances: in weakness after fever, in attacks of cold, in little alterations of the blood from indigestion, or from over-fatigue. In fact, any disturbance of the circulation or of the digestion may bring it on, so it may be a symptom only of these slight disturbances, and may recover in a few days, or may continue year after year without becoming worse. In case of this kind the albumen is present, especially after meals. But the case of this girl is not one of this kind, it is due to some anatomical changes in the kidneys. We know this, because she has anasarca, which is a sign of it. In fact, she has catarrhal Bright's disease.

Bright's disease, which is real structural disease of the kidney, is of three kinds. We might illustrate it and its relations to albuminuria by inscribing a small circle within a large one, and then subdividing the former, thus albuminuria is the large circle, that comprises all cases in which albumen is present in the urine, and it lies quite outside of Bright's disease. That is confined to cases of anatomical change in the kidney itself, and the three kinds of it are these that I will write:—

1. The catarrhal. 2. The gouty. 3. The cachectic. It is true the gouty might be said to be only a form of the cachectic, but there is a real difference in the disease which justifies the distinction. In the gouty form of Bright's disease the kidney is contracted and small, and there is no anasarca. In the cachectic form, which is connected with syphilis, with albuminoid degenerations and phthisis, the kidney is large and waxy.

In the catarrhal the kidney is large and swollen, the epithelium becomes fatty, anasarca takes place rapidly, it is what is called "acute dropsy." The people become languid and we can smell their breath that there is urine in it.

The gouty kidney is met with chiefly in the upper classes; the catarrhal rather in the lower, who suffer from exposure and cold, there is no anasarca, the patients are pallid, they have headache, they pass little urine of low specific gravity. It is easily overlooked, but appears at once when we examine the urine. It is indicated, too, by the aspect of the face, and the breath, and by the pulse.

This last is hard, because probably from resistance to the circulation in the minute vessels the left ventricle is enlarged.

In the cachectic form of Bright's disease, there is albuminoid deposit in the kidneys. It comes in syphilitic children, and in the consumptive, and the kidney, as I have said, is the seat of waxy degeneration, it undergoes an amyloid change, in which the blood-vessels are largely concerned. The other glands, too, are generally enlarged. In this form also there is much dropsy. Here the affection of the kidney forms only a part of the general cachexia; it is but a fraction, and we might almost say an insignificant fraction, of the disease, in the catarrhal form it is the main disease, in the gouty it is a chief part.

These are the three great varieties of Bright's disease. The girl whose case we have been speaking of presents the catarrhal form, due directly to exposure. There is another case of it also in the wards, a man in whom it has come on after small-pox. It is essentially the same form of the disease, though different in its origin. It is a frequent sequel of fevers, and of various kinds of them. But you must carefully distinguish Bright's disease from albuminuria. Nothing could be more false than the formula, albuminuria—Bright's disease. And if it should get into your minds, see that you entirely banish it. Albuminuria may be a mere transient disorder of circu-

lation or assimilation; Bright's disease is a structural perversion of the kidney. And let me add one thing more. The important element, as concerns the health, even in Bright's disease, is not the presence of the albumen; it is the absence of the proper urine. It is the failure of the kidney to discharge its function of elimination; not its suffering to escape a little of the pabulum of the blood. This loss is doubtless an evil, though the cases are probably few in which it would be a very serious one, if it stood alone, the great damage is done by the retention in the blood of the urea and other excreta. So the instrument by which to measure the gravity of the disease is not the lamp and nitric acid, but this, the test for the specific gravity.

TURPENTINE IN HEMORRHAGE FROM THE BOWELS.—Dr. S. Wood, of Clyde, New York, in an article in the *Buffalo Medical and Surgical Journal*, August, 1872, advocates the use of oil of *Turpentine* alone in large doses for the control of hemorrhage of the bowels, occurring as a complication of typhoid fever.

Case in illustration—In the evening of the second day of the month of September, 1852, I was requested to visit W—, a boy of sixteen years, with typhoid fever, some two and a half miles distant, and who had been under the care of another practitioner some two or more weeks. I was told that the case was one of great urgency, since an unfavorable prognosis had been given. On arriving at the bedside, I was informed that blood in large quantities was passing from his bowels at each frequent evacuation. Found patient exceedingly restless from pain and tympanic distension of the bowels. Skin dry and burning; pulse extremely rapid and thready, tongue dry, clean, and with dark papilla, with sordes on the teeth and lips. The prognosis indeed seemed most unfavorable.

In being called upon to prescribe in an emergency of this kind, there was an imperative demand for immediate and decisive action. What was to be done should be done quickly. Not a moment was to be lost. In running rapidly through my mind the various styptic remedies of the *Materia Medica*, suitable to the case before me, I happened to recollect an article first published in the *Medical Times*, August 17, 1850, from the pen of Dr. Wm. Budd, physician to the Bristol Infirmary, on the "styptic properties of oil of *Turpentine* in a case of purpura hemorrhagica," and also another article in *Braithwaite's Retrospect* for January, 1851, by John Griffith, Esq., Wexham, on the use of *Turpentine* in large doses, in uterine hemorrhage, and from the high praise given this remedy by these medical gentlemen, I at once resolved to give it a trial. Some was procured from a near neighbor, and, without delay, I administered a teaspoonful in some sugar and water, and in fifteen minutes as much more. After the expiration of an hour I gave half the quantity in the same

manner, and then ordered that in two hours twenty drops should be given, and so on every two hours until I should see the patient again the following morning.

Sept. 3.—Symptoms much improved, pulse slower and fuller, less heat of surface with a tendency to perspiration, expression of countenance less anxious, and, from the character of the stools, was fully convinced that the *Turpentine* had controlled the hemorrhage almost immediately after the first dose had been taken. For the next twenty four hours I ordered the remedy to be given in twenty-drop doses every four hours.

Sept. 4.—Patient still improving, symptoms all better, no more hemorrhage, but the *Turpentine* was so obnoxious that I reluctantly discontinued its further use until I should see him again, and substituted a tonic in its stead.

Sept. 5.—Hemorrhage had returned with symptoms of a very threatening character. I now prescribed the *Turpentine* again, to be given in twenty-drop doses, as last, every two hours for three or four doses, depending upon symptoms, and then every four hours until I should see him the next day.

Without extending the report of this case further, I will briefly state that I continued the remedy some three or four days. At the expiration of this time convalescence was fully established, and without further drawback went on rapidly to complete recovery, there being no more hemorrhage.

INSANITY—[The following is an extract from a lecture by Dr. C. B. Radcliffe, in the *British Medical Journal* for April 5.]

“That state of mind to which is given the name of melancholy is so common among lunatics, that melancholy and insanity have been used as mutually convertible terms. The anatomy of melancholy, to go no further, is a treatise on insanity. In some cases, of course, this state of mind is not so obvious as in others, and it may be difficult to detect it if the patient be reticent. In the more aggravated cases there is no such difficulty, the patient often sitting hour after hour, or day after day, motionless, with clasped hands and woe-begone features, or else, driven past endurance by feelings of anguish and despair, continually moving about, moaning or wailing, wringing his hands, praying for death, or even seeking it, too often successfully, at his own hands. As a rule, this state of mind would seem to be the very reverse of that which shows itself in inordinate self-esteem, the patient often believing himself to be thoroughly bad and wicked in every way, with a dreadful doom in store for him both here and hereafter. And the more marked delusions in association with melancholy are in conformity with this idea. I know, for example, a miserable man, long a victim to deep melancholy without

delusion, whose delusion now is that he is a murderer, condemned and left for immediate execution, who will not look out of window lest he should see the gallows, and who, whenever the handle of his door turns, expects the executioner. And the cases are legion of those who think that they have committed the unpardonable sin, for which their inevitable doom is everlasting destruction. It would also seem that this terrible self-depreciation may lead to another kind of delusion, the very opposite of that to which inordinate self-esteem would seem to lead in some cases,—namely, to a loss of personal identity, in which the idea of self is lost, as it is lost in lycanthropy. At all events, I know of one case in which there were true fits of lycanthropy, or rather cynanthropy, where the settled melancholy, which was the predominant state between the fits, had its origin in what may be spoken of as the *teorm doctrine* of human nature, and in the miserable forebodings as to the future to which it led. But, be the relation of this, or any form of delusion, to melancholy what it may, the facts remain not only that melancholy is a morbid feature in insanity, but that melancholy, more or less deep, without delusion, must have assigned to it a very prominent position among the symptoms of incipient insanity.

“There are, no doubt, many variations and combinations in the symptoms of incipient insanity. Sometimes one or two of the symptoms only are present, to the exclusion of the rest. If all are present,—an almost inconceivable case,—then there would be a state of intense self-conceit without actual delusion; a state of moroseness and misanthropy without actual delusion; a state marked by great mistrust and suspicion, without actual delusion; a state of uncontrollable impulsiveness without actual delusion; a state of melancholy without actual delusion; a warped state of the intellect without actual delusion, irregularity of fancy showing itself in illusions and hallucinations; and, lastly, a tendency to delirious excitement. In actual insanity one or more of these several morbid conditions is always present, the change which has happened consisting only in the addition of some actual delusion, which delusion very often, to say the least, may be looked upon as the natural result of the exaggeration of the morbid mental condition most closely associated with it.”

CLINICAL LECTURE ON OVARIAN CYST.

BY T. BAILLARD THOMAS, M.D., NEW YORK.

The first case, gentlemen, which I show you to-day is in the person of Miss S——, *æt.* 23, born in the United States, and single. She says she has been sick during the last year. The chief symptoms from which she has suffered are pain in the side, pain in

the back, and pain down the thighs. She has also had a burning pain in the left inguinal region, suffered from general debility, vomiting, palpitation of the heart, and pain in the head. She has been perfectly regular with regard to her monthly periods. Previous to last year she was in ordinary health, although always delicate; but thinks that within the past year she has emaciated a very little. There is one other symptom which the patient neglects to give us, and which is decidedly important, namely, the presence in the abdominal cavity of a large tumor. This enlargement of the abdomen was first noticed in the early part of last year, and now it has advanced to such an extent that it is the source of great discomfort.

Physical Examination. - The first thing that meets our eye, as the abdomen is exposed, is the presence of a large protuberant mass filling the abdominal cavity generally and symmetrically. The next step to be taken in the consideration of the case is to determine, if possible, what the nature of this mass is, whether it is the cause of the symptoms of which the patient complains, and whether it is concerned in the diagnosis or not. When you approach such a case as this, it is always well to run over in your mind the pathological states which may give rise to such a condition as we have here. This is important, not only in this case, but whenever you approach a diagnosis at all, it is well to inquire what are the causes that may give rise to the existing condition, whatever that may be.

For example, when you are called upon to visit a case of supposed ordinary colic, do not give a dose of opium simply, without determining, if possible, what the pain may be dependent upon, for it may be produced by the passage of a gall-stone; and in that case your diagnosis would not be ordinary colic, but passage of a gall-stone, the term colic expressing but a single symptom.

These remarks apply particularly to the study of abdominal tumors of the female, because it is one of the most intricate subjects you will have to deal with in the whole department of gynecological science. In connection with this class of diseases, very many mistakes are made, and often made by pure carelessness upon the part of physicians who have them under observation. Even to-day, coming in contact as I do almost daily with this class of diseases, I find that the only method of examination which gives me a fair chance of avoiding errors in diagnosis, is first to go over every case in the same manner as I shall go over this case with you. Let us therefore inquire what are the conditions that may cause enlargement of the abdomen in any case.

(1) The first cause which we will mention is *tympanites*. In a hysterical woman an immense amount of air will sometimes collect in the intestinal canal. These are the cases in which we have those phantom tumors, by which many a man has been deceived. So great

has been the deception and mistake in these cases that experienced operators have cut into the abdominal cavity with the unfortunate result of giving ocular demonstration of the presence of a gaseous collection, instead of the presence of an ovarian tumor.

(2.) Ascites may produce an enlargement of the abdomen, and this woman may have cirrhosis of the liver, which has given rise to such an accumulation of fluid.

(3.) Utero-gestation may cause such an enlargement, and there are several reasons for suspecting that this is the cause in the present case. All the gastric symptoms of which she complains could be very easily explained by that condition, and the general depreciation of strength might depend upon the mental state easily induced in an unmarried girl under the apprehension that she was pregnant.

(4.) It may be a uterine fibroid, which has been growing for a year, and such a tumor would produce very much the same symptoms as we have present in this case.

(5.) It may be a solid ovarian tumor, and, lastly, it may be an ovarian cyst or dropsy.

There are a few other conditions which might cause enlargement of the abdomen, such as cancerous affection of a portion of the omentum, hydatids of the liver, etc., but such cases are so rare that I deem it hardly necessary to mention them in connection with this case. Ordinary enlargement of the liver and spleen could hardly lead into error, if existing alone, but they might do so if they existed in connection with ascites. What we wish to study now, however, is the conditions which might produce just this kind of protuberant, symmetrical enlargement of the abdomen, and ordinary enlargement of the spleen and liver do not do this.

Let us now return and consider, *seriatim*, the causes which have been written upon the blackboard.

(1.) If this tumor is due to tympanites we shall obtain a resonant sound upon percussion. The percussion note in this case is dull. An additional precaution, however, is necessary, for in those phantom tumors of which I spoke a few moments ago there is sometimes such a rigidity of the muscles, produced by contraction, that the resonance upon percussion can scarcely be obtained. Under such circumstances the administration of an anæsthetic will dissolve the tumor and your diagnosis will be made at once.

(2.) If this is due to ascites, depending upon cirrhosis of the liver, the liver will be diminished in size, the intestines will be upon the surface of the fluid, and there will be resonance upon percussion over the surface of the tumor, above the level of the fluid. We have, however, just determined that there is dullness over the surface of this tumor upon percussion. Again, if this were ascites, we could, by palpation, get the sensation of a wave communicated to the hand through the abdominal walls, but nothing of this kind can be obtained here. The age and appearance of the woman are both

against cirrhosis, the liver is not diminished in size (this being in a great majority of cases the cause of ascites), and we may therefore safely exclude that cause for this enlargement.

(3.) We can exclude utero-gestation in this case at once, for the following reasons — The uterus is of normal size, and there are no signs whatever of the presence of a fetus upon auscultation. Many a practitioner has made an error upon this point of differentiation simply because he has not taken sufficient care in making out his diagnosis, and the result of such an error you can easily appreciate. There is one way to determine whether utero-gestation is present or not in such a case as this, which is very simple and very satisfactory. *Put the hands in ice-cold water, and immediately lay them upon the surface of the abdomen, and within a period of time varying from five to thirty minutes your senses will convince you, unless life has become extinct in the fetus.*

(4.) This tumor is not a uterine-fibroid, because it is not solid. You determine whether it is solid or not in just the same way you would determine whether any inanimate object is solid or not—rely upon your senses. Perhaps, however, you may be a little in doubt, and if you are, do what has been done in the case before us now, tap the tumor with an ordinary hypodermic syringe, and draw out some of the fluid, if any fluid is present. The operation is almost painless, is harmless, and is a most excellent adjuvant in making out a diagnosis. In this case we have drawn out a clear fluid, like Croton water, and we may safely exclude the uterine-fibroid.

(5.) This tumor is not a solid tumor of the ovary, because it has just been determined that it contained fluid. In the manner in which we have proceeded with our investigation, it will be seen that the only cause left which would produce such an enlargement of the abdomen as we have here, is ovarian cyst, or dropsy. With proper care in examination, it could hardly be possible to make errors in diagnosis with regard to enlargements of the liver and spleen, even though they may be associated with ascites, yet they may lead into error, and so will the conditions which have been mentioned as probable causes, when proper care is not taken. This tumor is probably not due to hydatids, because the character of the fluid obtained by tapping is not that of a hydatid cyst.

Her appearance clearly indicates that she has no malignant disease.

We come now to look for the positive signs that we have to deal with in a case of ovarian dropsy.

There are no intestines over this tumor, because the ovarian tumor rises up and pushes them away. The resonance therefore will be obtained upon the sides of the tumor.

The fluid drawn is another reason for believing it to be an ovarian cyst, and that makes the diagnosis complete.

Prognosis.—From 6 to 8 out of 10 such cases as this are cured.

This proposition, however, represents no man's experience in connection with ovarian tumors, unless he has had this class of cases to deal with exclusively. The favorableness of prognosis in this case is based upon the rapidity of its growth, the clear water-like contents, and the trifling effect that it has had upon the patient's general health.

The treatment is summed up in one word, and that is ovariectomy. Paracentesis is not advisable, for a large number die as a result of the operation. When an ovarian cyst is tapped, two openings are made, one through the peritoneum and the other through the walls of the cyst, the result of that is that some of the fluid may, and probably will, flow out of the cyst into the peritoneal cavity, and give rise to peritonitis or septicæmia. It is the formation of this *double opening* that constitutes the essential difference between the tapping of an ovarian cyst, and tapping for the removal of fluid accumulated in the abdominal cavity from other causes.

This, gentlemen, is the method I pursue in the examination of every case of abdominal tumor I am called upon to examine, and I believe you will find it of practical service in your future careers.—
Am Journal of Obstetrics.

HYDRO-THERAPEUTICS AND LOCAL WITHDRAWAL OF HEAT.

DR. RIEGEL (*All Wien. Med. Ztg.*), mentions that Dr. Brand has for some years treated typhus fever by cold water procedures consisting of tepid baths occasionally, and in the intervals between them by the application of cold compresses on the chest and abdomen. As an advantage derived from this mode of treatment the author mentions that in this case there is not the excessive change in temperature observed in the sole application of very cold baths, and that there are not so many cold baths needed. The author has also showed that the effect of this much milder experiment can at any rate be made equal with those when cold baths of a far lower temperature are used.

Further experiments concerning the value and feasibility of the local application of cold which was carried out by Dr. Rosenberger, show that it is possible always by means of cold compresses or bladders of ice to lower the temperature of a high fever. It was observed that the magnitude of the effect in lowering the temperature increased with the cold applied and the extent of surface submitted to it, but it was also found that by means of similar local withdrawal of heat the temperature of a healthy person could be brought below the normal, and finally at least in the later periods of the application of cold, the temperatures thus attained are alike in similar spaces of

time. From all of these experiments it was at least proved that the frequently repeated assertions that the local application of cold was of no special effect in lowering temperature, were not founded on observations of Nature.

There had, however, been as yet no experiments made over long periods of time, and thus it was not conclusively ascertained whether the effect might not become less in a longer period of time. The author, therefore, made a series of experiments so arranged that he applied continuously ice-bladders on the breast and abdomen, and made observations every hour upon the temperature in the rectum and the axilla. Only typhus cases were experimented on, and comparative experiments were made with them by placing ice bladders on the chest during one day and treating the patients by cold baths on the other days.

In a former place the author had put it as a notable disadvantage of the treatment by baths, that the temperature of the body in a very short time undergoes excessive extremes. The patient who has a temperature of 40° C in the rectum, in half an hour will be submitted to a temperature of 15° R, or still lower, and the temperature of the rectum will go down to 38° C. In less than an hour the temperature will have again risen to 40° C and will again be suddenly lowered to rise again suddenly. It results from this, that in the worst cases of fevers such a patient may undergo twelve baths in twenty-four hours.

Whether such a repeatedly rapid change in the temperature of the body be without danger or not the author leaves unanswered, but he puts the query whether the more frequent recent occurrence of hæmorrhage from the intestines in typhus may not be owing to this cause on account of the excessively cold baths sending the blood suddenly from the surface of the body towards the internal organs. Besides, this treatment is not sufficient in cases of very severe typhus fever, since the baths are at most only used once every two hours.

When in very severe cases of typhus the temperature is measured every hour or every half hour, we come soon to be convinced that the temperature gets to its height in less than an hour after the bath, and it is hardly possible to carry out the practice of hourly bathing either in hospitals or in private practice, even were the patient willing to get into a bath every hour. Even in the best hospitals much difficulty would be found in carrying out such a plan, but in private practice it were out of the question to speak of it.

Again, in many cases of typhus fever, the temperature does not get high enough to indicate the use of a bath, and yet the mean daily temperature may be much above the normal. And yet it is by no means indifferent to the organism that a fever even with a moderate heat should exist for a long time. Bathing typhus patients is very difficult to carry out among persons of moderate means in private practice. It has consequently frequently been attempted to use

cold applications which are so much more readily attainable, and to see whether similar or equal results could not be obtained from them. But the trials were not sufficient, until recently, to determine this point. Dr. Leube used ice-pillows, but these were not found to suffice, and the substances mixed with the ice to produce a low temperature were apt to excite unpleasant consequences from the too great cold produced.

The author's early attempts with local withdrawal of heat by means of ice-bladders had shown an unexpected fall of temperature, and this circumstance made him think that the whole effect of such local applications must be great in twelve or twenty-four hours. Besides, the danger which exists at the moment of a temperature of 41° 42° , we have to thank the hydro-therapeutic method of treatment because it has the power of lowering the average temperature in the twenty-four hours. It is important to accomplish the end in as simple a manner as possible. And if an ice-bladder laid along the chest, &c., can accomplish this in twenty-four hours as well, it is evidently preferable to the system of cold baths. The author has instituted a series of experiments, and arrives at the conclusion that the effect of ice-bladders in the whole time of experiment never is less than that of ordinary treatment by cold baths. In two series of cases with very young patients, indeed, there was quite a marked advantage in favour of the ice-bladder, and on the day in which ten baths were used the mean temperature in the rectum was 39.69° C., and in the 39.18° C., whilst on the days in which only two ice-bladders were applied one on the thorax, the other on the abdomen, the mean temperature in the rectum was but 37.34° C., and in the axilla, 37.49° C. This plan of ice-bladders has, therefore, much to be said for it in private practice.

In the majority of cases no artificial mixtures such as those used by Leube are required. A great advantage in this plan consists in the economy of labour which results from it, since the change of the ice-bladders is only required after several hours. Even then patients who shun water most become easily persuaded to allow one or more ice-bladders to be laid on the body, whilst on the other hand, there are many patients who can with the very greatest difficulty be persuaded to take a cold bath. The rather too much urged idea that the use of the ice-bladder keeps the patient too much in the horizontal position is not of much weight. The patient can lie on the side and the ice-bladder can be perfectly well applied, but the great advantage of the plan is, that it can be used even when the temperature of the body is not excessive. Thus, whilst in very severe cases, this method may be described as not being able to combat the high temperature, in ordinary cases and in private practice it has numerous advantages.

The author's ice-bladders are so made as to lie quite close to and along the body, and cover the abdomen and chest completely.

If the periphery of the body be less covered the lowering of the temperature is notably less, and this rises with the superficies covered by the ice-bladders. From time to time the bladder is to be opened and the air contained in it let out, neglect of this precaution makes the bladder not lie so closely to the body. — *The Doctor.*

MEDICAL ELECTRICITY

From nearly all Medical induction coils two currents are obtained, one called the primary or extra current, and the other the secondary. The first is taken by branch wires from the first or inducing coil of the helix, and is merely the battery current broken by the rheotome, and intensified by the inductive action of the coils on each other. The other is the induced current proper, and is taken from the outer coil, which has no connection with the battery. And inasmuch as the duration of an induced current is only momentary, namely, upon the making and breaking of the inducing current, a rheotome or current-breaker is always introduced into the primary circuit, so that the current as felt is always a series of shocks. With the quantity current battery, however, and a properly constructed helix, these shocks are not painful. You will thus recognise the difference between the current as it should be and the one obtained from most of the small portable batteries, put up and sold for Medical use, invariably as the best in the market, but which are so objectionable from their small quantity and fierce biting intensity of their currents, that they should be banished from Medical use, except in a minority of cases.

As we said of the galvanic current, that it acted primarily and powerfully upon the nervous system, so we may say of the induced, that, whether we use the primary or secondary current, its most noticeable effect is upon the muscular system. This is owing to the fact that every time a current of electricity is passed through a muscle it causes it to contract, and as the faradaic is a constant succession of currents, there is a succession of contractions, which, if sufficiently rapidly produced, may amount to spasm. The ordinary method of applying this current is by means of sponges to various parts of the body; and it is a very efficient way, but far exceeded in power by the electro-thermal bath.

It is a bath-tub of non-conducting material, with the rheophores arranged along the sides, so that the electricity can be sent in any direction through the water, including in its action the patient who is placed therein.

The advantages of this method are many, among which are these. The patient need not be touched by the hands of the operator, the direction of the currents being perfectly governed by means of a key-board. The avoidance of concentrating the current on any

one part, as in the application with sponges, and the consequent avoidance of shock to any part, as the spine. The certainty of the application is not lessened, while, if a local treatment of any part is desired at the same time, it can be made through a sponge to the part radiating the electricity from that point on all sides.

Bearing in mind the effect of this form of the force on muscle cell, whether of the striped or unstriped variety, it will be readily seen how there is not so efficient a treatment as this for obstinate constipation in all the range of therapeutics. The contractions of muscle produced by electricity are perfectly physiological, and the renewal of tissue thus obtained is permanent and normal; and all the drugs of the pharmacopœia, pummelings of the movement cure, change of climate, or of diet, could not do it as well. If the curing of constipation were the only thing we could do with it, would it not be deserving of high praise? But all degenerated muscles are acted on in the same way, and if enough of the contractile fabric cells are left, the nutrition may be so improved that it shall be restored to its normal condition.

This property of acting on contractile fibres enables us to control the formation of hæmorrhoids, to collapse vascular tumours, promote uterine contractions, and restore the tonicity of a dilated bladder.

In glaucoma the application of this current often renders the operation of iridectomy unnecessary, by producing absorption of the effused fluid.

But, besides these dynamic effects, the application of induced electricity has other purposes. It also acts on the nervous system, but in a more general way than galvanism.

We often meet cases in which there is mal-assimilation of food, and although the patient eats enough, he is literally starving in the midst of plenty. There the application of faradism through the medium of the bath has the happiest effect, and rouses to duty the dormant powers through whose dereliction the title of life is turned aside. In the control of pain this current rivals galvanism, and, contradictory as it may seem, sometimes relaxes spasms better.

The *St. Louis Medical and Surgical Journal* publishes some notes on the surgical use of electricity, from the pen of Dr David Prince, of Jacksonville, Illinois, who also premises a few general observations on terms.

He says, electricity, electric, electrification, are terms employed to cover the whole subject, though sometimes confined to static or frictional electricity. Galvanism, galvanic, galvanisation, are terms employed to denote the form of electricity produced by chemical action, to denote the use of the agent, and the effects produced by its employment. Faradism, faradic, faradisation, are terms employed to denote the form of electricity produced by induction, the uses of this agent or the effects of its employment.

The use and value of terms he thus illustrates: If a galvanic

current be passing along a wire and another wire be placed in close proximity without touching it, a current will flow in the latter wire in the opposite direction, at the closing and opening of the circuit, *i. e.*, at the starting and at the stopping of the primary current. While the primary current may flow constantly as long as the chemical decomposition continues, the secondary current can only exist momentarily, and is repeated just as often as the primary current starts and stops. It is always, therefore, an interrupted current. Faradisation always signifies the employment of an interrupted current, though the interruption may be so rapid as to destroy the feeling of shocks. For the stimulation of nerves and muscles, the high tension of this current and its shaking character, render it most highly useful in arousing organs from a sluggish condition.

The soothing or quieting effect of this current is never direct, but indirect or secondary, as a lethargy may follow such exercise as exhausts from its degree or its duration. Faradisation for paralyzed muscle should, therefore, be of short duration, for the exhaustion of an irritability already enfeebled must do more harm than good.

It is nearly or quite useless for surgical purposes, because it is impracticable to make the induced current heat a metal for cauterisation, or to make it effective in electrolysis. By this term is meant the decomposition of the tissues so as to set their elements free—hydrogen and the alkalies going to the negative pole, and oxygen and the acids going to the positive pole.

For the purposes of electrolysis the negative pole in the form of a needle (or a number of them) is employed to develop hydrogen in the tissues. If the action is only continued for a very brief period, the vitality of the tissue is not destroyed, but a new action is set up which in many instances is sufficient to stop a morbid growth. If the action is continued longer, the tissue is torn apart by the development of hydrogen, and a slough is the consequence of the disintegration.

Ordinary steel sewing needles can be employed for electrolysis, for they are not corroded by the hydrogen, which is developed. When it is the object to produce coagulation and solidification, as in the treatment of the contents of an aneurismal tumour, the needle introduced is connected with the positive pole, and it must be of platinum. The plating of needles for this purpose is useless, because the galvanic current causes the plating to peel off, and if not, the deposit of Ca^1 on the needle holds with such closeness that the plating must become detached in the attempt to clean the needle.

Needles connected with both poles may be inserted into a tumour, and this may be advantageous when it is wished not to subject the underlying parts to the passage of the current. This may be the case when the growth is upon the head or face. In other cases the positive current (and *vice versa*) may be introduced through a sponge in the hand, or applied to any convenient part of the body.—*The Doctor.*

The Canada Lancet,

A Monthly Journal of Medical and Surgical Science,

Issued Promptly on the First of each Month.

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

TORONTO, JUNE 1, 1873.

HEALTH OF TOWNS AND CITIES.

Within the last few years sanitary interests have grown almost to the proportion of a distinct science. They have engaged the attention of men of education and philanthropy, both in the medical profession and out of it, and sanitary legislation has been under the careful consideration of statesmen, both in England and America, the two foremost nations of the earth in all that appertains to the welfare of the people whom they govern. Several Acts relating to sanitary matters, have already passed into law in Great Britain, and a Bill has been introduced into the Senate of the U. S., to establish a Bureau of Sanitary Science. The medical profession, too, of both these countries are thoroughly alive to the importance of this subject, and are wisely using the knowledge already gathered, to form and guide public opinion to secure additional legislation. No one at all familiar with the causes of disease and the modes of prevention, can pass through even our most favored rural districts, to say nothing of towns and cities, without being impressed with the great need of legislative enactments, by which the health and lives of the people may be protected, and their welfare and happiness promoted. Some of our city fathers, however, seem to labour under the delusion that in some way or other, owing to climate, abundance of food, plenty of water supply and natural drainage—we are to escape from

many of the perils that older countries suffer from. Lord Palmerston once told a deputation that waited on him, to ask him to order a fast on the approach of an epidemic of cholera, to cleanse their sewers, and diligently visit the dwellings of the poor, and following up the advice, he at once, with his usual energy, enacted such laws as were necessary to carry out measures for purifying the towns and cities. The result was, the reduction of the death-rate, from twenty-six to twenty-three, and in some instances, to seventeen per thousand. The sanitary measures which were instituted, related chiefly to an improvement in the dwellings of the poor, and to drainage. London in the seventeenth century was considered the most unhealthy capital in Europe—but her sanitary condition has so much improved, especially within the last quarter of a century, that she is now the healthiest of the large cities of the world. The death-rate of Paris in the fourteenth century, was about fifty per thousand, and although she has increased three hundred and fifty times since that period, her death-rate previous to the war, was only about twenty-eight per thousand.

The results which have followed the introduction of sanitary measures into English towns, are most interesting and instructive, showing as they do, that towns may be made nearly as healthy as rural districts; by improvements in the dwellings, drainage, and the constant removal of all filth and offal from the streets and alleys. Croydon for example, was at one time regarded as one of the worst country towns in England, in a sanitary point of view, the death rate being about twenty-eight per thousand. It had no drainage, and filth was everywhere allowed to accumulate. In 1850, sanitary improvements were commenced, consisting in drainage, sewerage, removal of filth, and the introduction of pure water for families. The death-rate fell after the completion of the improvements to eighteen, and in one year to fifteen per thousand. Liverpool was long considered the most unhealthy city in the civilized world, a large proportion of her inhabitants lived in cellars and badly ventilated buildings—surrounded by filth, cesspools, privies, &c. Infectious diseases, typhus, typhoid, &c., were fearfully prevalent, until Dr. Duncan began the work of arousing the authorities to a proper sense of their responsibility, and steps were taken toward sanitary improvements. The result was, the disappearance of all epidemics, and a diminution of the death-rate, to about fifteen per

thousand within five years. Such examples of the value of sanitary measures in the improvement of the health of towns and cities, are of importance to us. Our towns and cities, are for the most part, the growth of comparatively few years, and they are in the most favorable condition for improvement. They readily admit of thorough drainage and sewerage, and pure water can in most cases be readily supplied; and these, together with the constant (not spasmodic) removal of all filth, are the great desiderata.

These are matters, however, that are usually unattended to, until the approach of cholera, or some other fearful epidemic arouses us from our slumbers, and then frantic efforts are put forth, and loads of money expended in cleansing the city, when it is, in all probability, too late. If on the other hand, such measures were regularly and systematically attended to, and all regulations for the cleanliness of the city faithfully carried out, neither the much dreaded cholera, nor any other form of epidemic could obtain a foothold amongst us.

RESUSCITATION IN APPARENT DEATH FROM CHLOROFORM.

Our attention has been called to this subject from a melancholy case that occurred recently in London. From the report of the coroner's inquest, which is before us, we learn that on Thursday, May 1st, chloroform was administered to a Mr Rice of that city, for the removal of some tumors of the eyelids. During the operation, the chin was observed to drop and the face to become deathly pale. On examination, it was found that respiration was suspended, and that the pulse could not be felt at the wrist. He was immediately placed upon the floor (we believe he had been sitting on a chair) and about 15 minims of Spts of Ammonia diluted with eight or ten parts of water were poured into his mouth. This was not swallowed. Artificial respiration was then commenced, by mouth to mouth inflation, and after two or three inspirations and expirations it was suspended, and more of the Ammonia mixture was poured into his mouth.

In about a minute and a half respiration and circulation were fully re-established, and the operation was concluded. In an hour or two after the recovery from the chloroform, the patient began to

complain of soreness in the throat, and in about four hours after the operation, he was found to be suffering from his throat; respiration very difficult and 34 to the minute; pulse over 130. He died about 36 hours afterward, the report of the *post mortem* was not given.

The jury returned a verdict to the effect that the deceased came to his death from congestion of the lungs caused by Spirits of Ammonia diluted, and without attaching any blame to the surgeon, recommended that in all cases of chloroform administration, at least one additional physician or surgeon be present. We make no comment upon this verdict. The reader will draw his own conclusion. The case, however, brings up a subject of great practical interest, namely, the best methods of resuscitation, in apparent death from chloroform.

According to physiologists, after expiration, there remains about 170 cubic inches of residual air in the lungs. When, then, a patient ceases to breathe from an over-dose of chloroform, there remains in the lungs 170 cubic inches of air surcharged with chloroform vapour. If circulation continue, the blood in passing through the lungs absorbs more and more of the chloroform, and the system is brought more deeply under its influence. If the flagging circulation be revived by stimulants, it is only to bring additional poison into the system and render death more certain.

Undoubtedly, the first indication, is to get rid of the chloroform vapour in the residual air of the lungs, and this is to be accomplished by means of artificial respiration. Artificial respiration acts primarily by eliminating the chloroform and secondarily by stimulating the circulation. There is no better stimulus to the heart's action, than the presence of pure atmospheric air in the lungs. Simultaneously with artificial respiration, rectal injections of brandy and water may be given, but no stimulant should be given by the mouth until the patient is sufficiently recovered to enable him to swallow perfectly.

In all cases where signs of danger are noticed, the following measures should be adopted. The patient should be placed in the recumbent position and the tongue drawn well forward. Artificial respiration should be commenced without a moments delay. First of all, pressure should be made upon the lower part of the sternum, and against the walls of the chest, to expel some of the air.

In the case of a child, mouth-to-mouth inflation is perhaps the best, but in the case of an adult, Dr. Sylvester's method, or better still, Hunter's double acting bellows or Richardson's pocket bellows should be resorted to. The bellows has this advantage that respiration is carried on quietly without interfering with the heart,—a matter of great importance when life is hanging in the balance. Warmth should be applied to the body, and friction from the toes upwards. Cold water should not be dashed on the chest; and no cold air should circulate near.

If there is no recovery in five or ten minutes, the head and shoulders should be lowered on an incline of 30° . The regurgitation of blood from the system may stimulate the head and heart. Tracheotomy may also be performed and a tube inserted. The efforts should not be relaxed for at least half an hour.

It will be observed that we have not referred to the use of galvanism as a means of resuscitation in these cases. We believe that artificial respiration, especially when quietly induced by means of the bellows, is more efficacious, and far less dangerous. An article on this subject will be found in the present number of this journal.

After all, we think that we would be perfectly safe in saying that very many of the cases of accident from chloroform arise from the haphazard manner in which this anæsthetic is administered. We will refer to this important subject in our next issue.

BARNES' METHOD OF REDUCING CHRONIC INVERSION OF THE UTERUS.

Dr. Barnes of St. Thomas' Hospital, London, England, [*British Obstetrical Journal*,] a new periodical, by the way, the 1st number of which is before us, describes a new method of effecting reduction of the uterus in chronic inversion. It consists in first introducing into the vagina a caoutchouc bag distended with water, and allowing it to remain four or five days for the purpose of dilating the upper part of the vagina and with it the os and cervix uteri. Taxis is then resorted to, should this fail the os uteri is incised at two or three points to relieve the constriction, and the taxis is then applied. This operation is done by drawing down the uterus outside the vulva by means of a sling of tape passed round the body. The neck

being on the stretch; an incision about two-thirds of an inch long and about one-third of an inch deep is made on each antero-lateral aspect, and one posteriorly. Taxis is then applied gradually, no bad symptoms have followed these operations. He prefers this plan to that of "forcible reduction" as by Prof. White's method, or "abdominal incision and dilatation of the inverted os" as devised and practiced by Prof. Thomas.

Owing to the inconvenience in the adaptation of elastic bags for the purpose of dilating the os, he has recently had a special instrument constructed, formed on the model of the Stem-pessary. The stem suitably curved is surmounted by a hollowed cup of caoutchouc upon which the inverted fundus uteri rests. The lower extremity of the stem has strong elastic tubular bands attached to it, two of which pass up in front and two behind, and are made fast to a belt around the abdomen so that the uterus is pressed up steadily upon the fundus of the vagina which tends to pull open the cervix uteri.

He also refers to two or three cases in which he mistook inversion for a polypus, and was only warned of his mistake by the excessive pain which the attempt at removal by the wire *ecraseur* produced, and he closes a very interesting and instructive paper by a few remarks indicating the means by which the error may be avoided. The first is the greater sensitiveness of the *neck* of the uterus; secondly by the introduction of the sound into the bladder, and the finger into the rectum, the point of the sound may be felt by the finger above the tumor, in inversion, and thirdly he recommends the removal of polypi without anaesthetics, so that if the ligature be tightened round the uterus the pain produced gives warning and opportunity of retrieving the error at the last moment. The ligature round the polypus gives no pain.

CEREBRO-SPINAL MENINGITIS — Profuse perspiration has been found very successful in the treatment of this affection. It has been stated in some of the daily papers that "hemlock sweats" were almost a specific in the treatment of this disease when it raged so extensively in many parts of the States about 20 years ago. This disease is undoubtedly due to the presence of a blood poison, and there can be no doubt regarding the propriety of full and free action of the skin, with a view to the elimination of the poison from the system.

UNPROFESSIONAL.

The following communication has been handed us for publication. It speaks for itself:--

(To the Editor of the LANCET.)

SIR,--The following card has been published in the columns of the "*Petrolia Advertiser & Sentinel*," and has also been circulated in hand-bill form from house to house:

DR. GRANGE wishes to return thanks to his friends and the people of Petrolia generally, for the remarkably liberal patronage with which he has been favored.

He is pleased to announce that he has made arrangements whereby he can obtain at any time, in consultation, the aid of the best medical talent of Wyoming, Sarnia, Strathroy or London, without additional charge to his patients. N B Indigent persons treated gratis.

Petrolia, May 9, 1873.

You have had occasion more than once to refer, in terms of reprobation, to advertisements of an unprofessional character emanating from men who disregard professional responsibilities. For such violations of comity and good taste there is no tribunal to which we can, with more propriety appeal, than to the profession at large, through the columns of such a journal as the "*LANCET*." A man may affect to disregard the opinions of a few, but he must be more than a man, or less, who can endure, without remorse and chagrin, the scorn and contempt of all his fellows. We may therefore hope that the exposure, which it is my duty now to make, will deter others from offending in a similar manner.

It is no compliment to the intelligence of the Petrolia public to suppose that they can be deceived by so transparent a falsehood as that suggested by the second paragraph of the card. I know something of the character of the medical men of London, Sarnia and Wyoming, and I am sure that Dr. Grange will find it difficult to persuade any of the regular physicians of those places to hold any professional intercourse with him, when their attention has been directed to this card.

It will not surprise the readers of the "*LANCET*" to be informed that Dr. Grange is one of those practitioners who systematically violate and disregard all the courtesies and ethics which are recognized among honorable medical men. These regulations are fully as much in the interests of the public as in those of the profession; and the man is dangerous, as well as disagreeable, who refuses to recognize and abide by them.

"*Hic niger est. hunc tu, Romane, caveto.*"

Yours truly,

MEDICUS.

Petrolia, 20th May, 1873.

ANOTHER INSTANCE—"PILGRIM'S" PROGRESS.—The following article, which first appeared in the columns of the *Guelph Mercury*, has been going the rounds of the press, and we feel also constrained to give it the benefit of our circulation.—

"By the kindness of Dr. McGuire, we were to-day enabled to examine a very curious and rare surgical case, which he has now under his care. It may be remembered that some two months or so ago a little boy, son of Mr. John Pilgrim, about eight years old, was accidentally run over by a cutter, the runner of the hind bob passing obliquely over the knee and quite round the limb, bruising the tissues badly, and making a wound which gaped seven inches. Dr. McGuire was called in, and after consultation and a good deal of consideration, he determined, in order, if possible, to save the leg, to try an experiment which is somewhat rare in the annals of surgery. This was to inoculate the injured limb with some skin from the boy's father's leg. He broached the subject to the father, who was perfectly willing to submit to the experiment, if the child's leg could thereby be saved. Accordingly, about a fortnight ago, the first steps in the experiment were made. The Dr. took from the father's leg six pieces of flesh—each piece being scarcely as large as a five cent piece—and immediately transplanted them, so to speak, to the boy's injured leg. The doctor tells us that he cut the *full* depth of the skin, and that he believes therein consists the success of this experiment. That it *has* proved successful we were enabled to judge for ourselves to-day, having, in company with the Doctor, paid a visit to the little sufferer, and examined the limb—the appearance of which simply defies description. We may say, however, that the pieces of flesh thus *inoculated* have taken root, so to speak, and are rapidly growing larger and spreading over a greater surface, and that they will shortly push out in every direction until they ultimately meet and join one another. It is the doctor's intention to make a further inoculation, so as to insure the more rapid healing of the leg, which is, however, progressing in every way most favorably. As a surgical experiment it has proved as successful as it is unique and rare—being, we believe, the first case tried in this country, while the cases elsewhere have been very few and far between, and we cannot, therefore, wonder if Dr. McGuire takes a natural and professional pride in its successful issue."

Both these are instances of the length to which some men will go for the sake of a little temporary notoriety. The practice of inviting members of the press to witness operations and examine cases about which they know nothing, with the view of getting a gratuitous puff in the papers, is an old dodge frequently condemned

by the profession. We cannot but express our surprise that Dr. McGuire, a practitioner of 12 or 13 years standing, should so far lower himself as to indulge in any such questionable means of spreading his fame abroad.

The effect too appears to have been carefully studied. The Dr. took the portions of integument from the father's leg and cut the full depth of the skin. It would not appear so miraculous if they were taken from the boy's chest or arm, and then the operation was "unique" and "rare," being the "first case in this country" and "few and far between" elsewhere—wonderful prodigy! This little operation of transplantation, performed every day in our hospitals or in private practice, so simple that it is scarcely ever referred to now in our medical periodicals, is thus magnified into a procedure bordering on the miraculous, when reported by Dr. McGuire through the editor of the *Graphic Mercury*. Such conduct is highly reprehensible, and no one who has any regard for the ethics of the profession, or respect for himself, would permit any such fishy production to appear in print.

GALVANISM IN APPARENT DEATH FROM CHLOROFORM.

Dr. B. W. Richardson has performed some very interesting experiments on rabbits with a view of ascertaining the value of galvanism in apparent death from chloroform. He used the battery for three distinct purposes: first, to excite and sustain respiration; second, to excite and sustain the heart and respiration; third, to excite the heart while the respiratory process was sustained by artificial respiration. The various forms of galvanism were tried, frictional electricity, the continuous current and the interrupted current. First, a rabbit is put gently to sleep with vapor of chloroform; the administration is carried on quickly and, at the end of four minutes, the rabbit is practically dead. It is allowed to remain in this state a full minute, but it is not moved or handled. Artificial respiration is now commenced with the double action bellows and kept up for three or four minutes and the animal recovers. Another equally healthy rabbit is narcotised until it ceases to breathe. At the end of one minute, one pole of the battery by means of a needle, is brought in

contact with the larynx and the other in contact with the diaphragm. When the contact is made and broken, respiratory action follows the same as if the lungs were emptied and inflated with the bellows. The action is continued, but it is noticed that the muscles begin to respond more feebly and soon cease entirely. The current is gently increased, again the muscles contract, but at last they cease to act under any current, but if the current is passed through the limbs, the muscles of the limbs respond readily enough. What is the explanation? The muscles are *exhausted* by the electrical current. The electrical current "under a semblance of restoring life clenches death." The thorax is opened and the heart, at first is seen to be at rest, in contact with the air, it recommences to pulsate. A weak current is passed through the heart, and immediately the organ flags and stops, the muscular tissue being exhausted by the electric current in the same manner as the respiratory muscles.

Dr. Richardson at one time thought it would be well to combine galvanism with artificial respiration, but he had less success than when he used the bellows alone.

"After these experiences," Dr. Richardson says: "I feel it would be too unreasonable to recommend galvanic action as a means of resuscitation. Galvanism is a two edged sword. It might, by accident in some cases, restart respiration, but it would in this respect be inferior in principle to artificial respiration, and in the majority of cases it would more effectively promote death than restore life. . . . One day we may see how to use electrical excitation with advantage, and on a known principle; but that day has not arrived."

URINE AS A MEDICINAL AGENT.—The injection of healthy urine into the bladder has been strongly recommended by Dr. Clemens of Frankfort in cases of catarrh. The bladder is first washed out with tepid water, and healthy urine from a young person in its warm state is injected. It has also proved serviceable in allaying spasm. The injection may be repeated twice or thrice a day.

MEETING OF THE MEDICAL COUNCIL.—The meeting of the Medical Council, at the request of some of the members, was postponed until the last week of the present month, commencing about the 24th inst.

SPENCER WELLS AS AN OVARIOTOMIST. — Spencer Wells has operated for ovarian tumor upwards of 500 times, and the mortality has steadily declined with each hundred, until, in the fifth hundred, eighty per cent. recovered and only twenty per cent died. His fame as a successful operator has attracted to him patients from all parts of Europe. The Samaritan Hospital, of which Mr Wells is surgeon, is an ordinary London dwelling-house, of brick, five stories high. Each room has an open, soft-coal fire, and a ventilator over the outer windows. Bi-chloride of methylene is the anæsthetic solely used by him for the past four years. He uses the clamp in most cases, but is not wedded to it, and frequently uses ligatures. He says the ligatures, cut short and dropped in, take care of themselves. No carbolized ligatures are used. The sponges are cleansed with sulphurous acid and warmed at the fire. He gives good diet, as soon as the patient wants it. The urine is drawn every six hours, and the bowels are moved after the seventh day. He relies a good deal on the temperature, which is taken frequently.

ANTIDOTES TO SEA SICKNESS — Bessemer suggested an antidote to sea sickness, that of arranging a swinging berth which would always be horizontal, and now, we learn "an English joint-stock company, which proposes practically to realize Bessemer's antidote against sea sickness by the construction of two steamers for the channel trade, has been organized in London. Its name is to be the 'Bessemer Steamboat Company (limited),' with £25,000 in £50 shares. Bessemer is the engineer, Reed the builder, and Lord Henry Lenox, M.P., the President of the Directors, among whom is Admiral Sir Spencer Robinson. The two steamers are expected to be completed in from eight to ten months, and will have all the comforts of first-class boats in addition to the advantages of the invention. The company has also been granted the exclusive right to run steamers of this kind between the following five ports: Dover, Folkestone, Ostend, Calais and Boulogne."

CAUSE OF GOITRE.—M. Thomas (*Chemical News*) is of opinion that goitre is due to the absolute absence of iodine in the natural waters used in mountainous countries. These researches deserve attention, for it appears that water coming in contact with copper pyrites, or the products of its oxidation, is deprived of any trace of iodine or its compounds which it may contain.

ETHER VS. CHLOROFORM.—In an article in the *Brit. Med. Jour.*, March 8th, Dr. Hutchinson, of London, remarks, in reference to the general question as to the choice of anaesthetics, that we ought, with the exception of a few cases, to allow ether to supersede chloroform. At the same time he prefers chloroform to ether in the aged and the very young. Ether produces more cerebral excitement than chloroform, patients struggle more violently, and sometimes become unmanageable as if drunk, less air is allowed, and consequently there is greater liability to venous congestion about the head, all of which are attended with some degree of risk in a senile and degenerate brain. In young infants, his experience is that chloroform is exceptionally safe, and infinitely more convenient than ether in such operations as hare-lip, for instance, and he therefore gives it the preference.

MEMORIAL TO VON GRAEFE.—We learn from the *Boston Medical and Surgical Journal* that it is proposed to erect a bronze statue in memory of Von Graefe, to be placed in front of the Chanté Hospital Berlin. Committees have been appointed in Boston, New York, and Philadelphia, to co-operate with the central committee at Berlin in obtaining subscriptions for this purpose. Subscriptions will be received by either of the members of the Committee. The following are the names of the gentlemen who compose the committees.—Boston, Messrs. Williams, Jeffries, and Derby. New York: Messrs. Agnew, Althof, Noyes, and Hackley. Philadelphia: Messrs. Norris, Dyer, and Thompson.

TRANSFUSION OF MILK IN CHOLERA.—In the *Practitioner for July, 1873*, is an article from the pen of Dr. Hodder, of Toronto, on the transfusion of warm milk into the veins of patients in the later stages of Asiatic Cholera. The experiment was tried in the Hospital Toronto, during the cholera epidemic of 1849. In the first and second cases the patients rallied immediately and ultimately recovered. In the third the patient, although in *articulo mortis*, rallied for a time after the transfusion, but the operation not being seasonably repeated, the patient succumbed.

SUCCESS.—Nothing is so successful as success. If a physician is supposed to have a large practice, everybody will contribute to make it larger; just as a man who is reputed to be rich can always borrow.

LIGATURE OF THE ARTERIA INNOMINATA — Mr. O'Grady of Mercer's Hospital, Dublin, (*Medical Press and Circular*) performed this unusual and interesting operation on a patient about 60 years of age, a few weeks ago, for the cure of a large subclavio-axillary aneurism. The subclavian artery was so involved as not to be reached. The bifurcation of the innominate being low down, it was found necessary to remove the inner third of the clavicle. The common carotid was also tied near its origin. The patient rallied well and continued well during the first 24 hours, when symptoms of serous apoplexy set in and he gradually sank.

INTRODUCTION OF THE STOMACH PUMP TUBE.—Dr. McEwen, in the *Glasgow Med. Journal*, Feb '73, recommends that the head should be bent forward on the introduction of the tube, instead of backward, as is generally taught in books. When the head is thrown backward, he says, the spine becomes convex anteriorly. When the tube is passed along it has a tendency to impinge upon the larynx, but when the head is bent forward, the mouth, pharynx, and œsophagus form a curve along which the tube glides gently into the œsophagus and at the same time is directed away from the larynx.

SENATE TORONTO UNIVERSITY — At the recent election for members of the Senate, to be chosen from among the graduates, in accordance with the terms of the act recently passed, the following gentlemen, among others, were chosen: Dr. J. H. Richardson, Dr. Thorburn, Dr. McFarlane, and Dr. Oldright. It will be seen from the above that the Medical Faculty is fairly represented in the Senate, four out of fifteen, the whole number to be selected in this way, being members of the medical profession.

CANADIAN MEDICAL ASSOCIATION — The next meeting of the Canadian Medical Association will take place in the city of St. John, N. B., on the 6th of August. The St. John Medical Society are making preparations for the reception of the delegates. A ball is proposed at the new Academy of Music. The following gentlemen were appointed at the last meeting, to deliver addresses on the present occasion:—Dr. Howard, on Medicine; Dr. Hingston, on Surgery; Dr. Hodder, on Obstetrics, and Dr. Botsford, on Hygiene.

CORRECTION.—By some strange oversight the letter in the May No. of the LANCET, on "Malignant Diseases of the Orbit," (p. 454) is not credited to the writer. It should have been signed, A. M. Josebrugh, M.D., Toronto.

DEATHS.—Baron Liebig, the great chemist, died at Munich, on the 18th of April, at the age of 69. It is intended to erect a monument to his memory.

Josiah C. Nott, M.D., of Mobile, on the 31st of March, in the 69th year of his age. The following resolution was passed at a stated meeting of the Academy of Medicine, New York, Austin Flint, Sr. President—*Resolved*, that in the death of Dr. Nott, we recognize the loss of one of our most devoted members, a gentleman eminent for his high integrity and his unblemished character, distinguished alike as an ethnologist, gynecologist, and surgeon, and by his untiring zeal for the advancement of medical science.

His chief literary works are "Broussais on Inflammation," a translation, published while yet a student. "Physical History of the Jewish race," "Types of Mankind," "The indigenous races of the Earth," "Tract on the Negro." He also enjoyed a large and extensive practice, and distinguished himself as a successful Gynecologist.

NOTICE TO SUBSCRIBERS IN ARREARS.—We beg leave to intimate that, during the course of the present month, we will draw upon those subscribers who are still in arrears, through the Express Company.

We also beg leave to state that we are now about to make a transfer of the names of subscribers from the old to a new list, and we would take the liberty of saying that the names of those who are upwards of one year in arrears will be dropped, and their accounts rendered forthwith. It is now upwards of a year since we adopted the cash-in-advance system. We have done our part by way of enclosing bills and reminders, and those who are still in arrears will only have themselves to blame if they find their Journals discontinued and their accounts placed in other hands for collection.

TORONTO UNIVERSITY.—The following gentlemen have successfully passed their final examination in medicine in this University.—Messrs. Armstrong, Beeman, Close, Gunn, Gray, Hagle, Meldrum, Morrow, Nichol, Richardson, Robinson, and Wright.

University Gold Medalist.—J. A. Close.

" Silver Medalists'—M. I. Beeman, A. Wright, and S. D. Hagle.

Starr Gold Medalist.—N. W. Meldrum.

" Silver Medalists.—J. A. Close and S. D. Hagle.

APPOINTMENTS.—William Walter Meacham, of the Village of Odessa, Esquire, M.D., to be an Associate Coroner within and for the County of Lennox and Addington John Adams, of the Village of Gravenhurst, Esquire, M.D., to be an Associate Coroner within and for the Territorial District of Muskoka Samuel Knapp Lake, of the Village of Bloomfield, and Isaac Frederick Ingersoll, of the Town of Picton, Esquires, M.D., to be Associate Coroners within and for the County of Prince Edward James Douglas Stephenson, of the Village of Kleinburg, Esquire, M.D., to be an Associate Coroner within and for the County of York Samuel Cowan, Esq., M.D., of the Village of Harriston, to be an Associate Coroner within and for the County of Wellington Octavius Yates, of the city of Kingston, Esq., M.D., to be an Associate Coroner within and for the County of Frontenac Oliver Rupert, of the Village of Maple, Esq., M.D., to be an Associate Coroner within and for the County of York.

WILLIAM SLOAN, of the Village of Blyth, to be the third trustee under 34 Vic., Cap. 42, Sec. 14, to receive from municipalities the bonuses voted in favour of the "London, Huron and Bruce Railway Company."

The Consul General of the Netherlands in Canada has appointed Mr. W. N. Wickwire, M.D., as Vice-Consul of the Netherlands for the port of Halifax, N.S.

CASES IN TORONTO GENERAL HOSPITAL.

(Reported by G. S. Ryerson of Trinity College.)

CASE 1.—Mrs J P., æt 35, a native of Canada, was admitted to the Hospital under Dr Geikie's care, April 17th. The patient is a strong healthy-looking woman, and was employed as a maid-of-all work in a boarding house in this city. Her mistress, a woman of quick and fiery temper, became suspicious that she obtained an undue share of her husband's attention, whereupon she (the mistress) obtained a pistol from one of the boarders under the pretence of "shooting cats;" catching her husband in the girl's room she fired, and the latter sustained the following injuries.

On washing off the clots, it was found that the left eyeball was collapsed. The cornea being perforated at its lower and outer side; the vitreous and aqueous humours had escaped and the lens had disappeared. The right eye was congested and had several grains of powder imbedded in the sclerotic coat. A good deal of powder was also imbedded over the greater part of the face, and some grains of shot could be felt in the forehead.

April 19th. - Ordered to be kept in a dark room with perfect quiet. R sol. atropine, one drop in the right eye twice daily to keep the pupil dilated.

April 20th. - Feels better, pulse normal, no appetite.

R—Ext. Belladon. fl.	ʒss.
Vin. Opii	ʒi.
Zinci Sulph.	grs. viii.
Aqua ad.	ʒviii —M.

Fr. Lotto., to be applied continuously with cloth.

Continued about the same up to April 24th, when the left eye being very much swollen and painfully tense, it was deemed advisable to let the contents out with a bistoury.

April 30th. - Slept none last night, complains of a great deal of pain in the left eye, very slight discharge, opening almost closed, powder specks on the face inflamed.

April 20th. - Eye again opened, considerable discharge, improving, it appears likely to slough away

May 1st. - Eye again very painful, patient can get no rest, very weak.

May 2nd. - As patient was suffering great pain from the left eye, and as it could never be of any use and might endanger the sight of the other, it was deemed expedient to excise, which was accordingly done by Drs Bethune and Geikie with forceps and scissors. It being thoroughly disorganized, it was removed in small pieces.

May 3rd. - Vomits considerably, feels weak, can get no sleep.

May 5th. - Erysipelas has set in; forehead swollen; tense on pressure, left socket doing well.

R—Lotto plumbi Oj., to be applied to the forehead with a cloth.

May 7th. - General health not very good.

Erysipelas in the forehead, extending upwards into the scalp, and down to the superciliary ridges, eye feels comfortable, abscesses forming.

May 8th. - Opened same.

May 14th. - Improvement, right eye quite strong, left lid still swollen.

May 21st. - feels quite well, powder spots remaining on face and in right eye. Left orbit nearly healed.

May 22nd. - Recovered so as to be able to go out. The left eyelid is still somewhat red and swollen but the sight in the right eye is perfect.

CASE II.—COMPOUND FRACTURE OF THE ULNA WITH DISLOCATION OF THE HEAD OF RADIUS FORWARDS.—Under the care of Dr. Geikie.

F. H., æt. 28, a reporter by occupation, was standing on the platform of one of the stations on the line of the Great Western

Railway, when a projection of some kind, from a passing car, struck him on the left forearm, about the junction of the upper, with the middle third of the limb, causing the above injury. This happened at 8 o'clock a.m., of the 19th of April. He was admitted into the Hospital at 4 p.m. on the same day.

He was immediately put under chloroform, and an examination made, which shewed in addition to the external wound, the deeper soft tissues to have been very much crushed and the *ulna* broken in three places, one situated a little below the olecranon process and the other two nearer the middle of the bone, and more or less comminuted. From the opening in the soft parts the blood was oozing very freely.

The surrounding tissues were found much pulpified, and the head of the radius dislocated forwards.

After the reduction of the dislocation under chloroform, the arm was placed upon a well-padded rectangular wooden splint. No bandaging of the limb was employed—the injury received being such that no compression whatever was admissible.

After having done very well since his admission on the 24th, his arm was very much swollen; pulse 120 compressible. Feels very weak, deep seated erysipelas had evidently set in—ordered—

R—Tinct. Ferri Mur.	ʒss.
Quin. Sulph.	grs. xvi.
Aquæ ad.	ʒviii. —M.

A table-spoonful every four hours.

April 25.—Arm very tender, much of the erysipelatous blush present.

April 26th.—Arm very much swollen; discharges from the openings sanguino-purulent matter, temperature 99; pulse 120; respiration 23, tongue furred, dark.

R Lot. Plumbi. cloth kept wet with it.

April 28.—Great improvement, pulse 98; temperature lowered; skin cool and moist; fluctuation present from deep seated formation of pus.

April 26th. - Enlarged openings with bistoury; copious, sanguino-purulent discharge; is able to move and has strange sensation in fingers from injury sustained by the nerves.

May 3rd.—Has been improving till to-day, when the arm is again much swollen.

May 4th.—Arm again freely opened opposite the olecranon; free discharge of pus.

May 6th.—Feels very much better; spirits good. Patient being of a very nervous temperament, is very restless.

May 9th.—Complains of a great deal of pain for the last two days. On examination, the head of the radius is movable from the injury done the surrounding parts, was found to have become again somewhat displaced. No difficulty was found in replacing it, and to retain it, the arm was placed at an angle somewhat more acute.

May 14th Spicule of bone protruding through one of the apertures were removed with forceps. General health is now good; has had linseed poultices applied continuously since the suppuration began up to the present. Ordered now for the greater lightness to have warm water dressing covered with oiled silk, to be changed as required.

May 20th. —Openings cicatrizing, has no pain.

May 23rd Swelling abated ordered to have a plaster of paris splint to secure perfect rest, was allowed to sit up to-day for awhile.

May 26th. Swelling entirely abated, patient able to be up and walking out in the open air. He has begun passive motion and there is every prospect of his having a good useful arm with the various movements of the forearm wonderfully good when the great severity of the injury he sustained is taken into account.

BOOK NOTICES.

A MANUAL OF QUALITATIVE ANALYSIS. By Robert Galloway, F. C.S., Professor of Chemistry in the Royal College of Science for Ireland. From the fifth London Edition, pp. 402, 12mo., 1873. Philadelphia. Henry C. Lea. Toronto. Copp, Clark & Co.

The above work is divided into three parts. Part I. treats of the systematic qualitative analysis of metallic salts. Part II. the ultimate and proximate analysis of organic substances. And Part III., which seems singularly misplaced, treats of chemical manipulations, apparatus and reagents. Notwithstanding some slight defects the work forms an admirable text-book on the subject of practical chemistry. Some important additions have been made to the present edition, such as the mode of detecting poisonous metals and acid radicals in organic mixtures, the detection and isolation of vegetable alkaloids, Bunsen's flame reaction, &c., &c. The new nomenclature has been adopted throughout exclusively. The author adopts, in his work, the progressive method of teaching the principles of chemical analysis, and a series of questions are set at the close of each chapter to test the progress of the pupil. The style is clear and explicit, and the mechanical execution of the work is all that can be desired.

ALLINGHAM ON DISEASES OF THE RECTUM.—Second Edition, revised and enlarged. Philadelphia. Lindsay & Blakiston. Toronto. Willing & Williamson.