

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original 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.

L'Institut 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.
- Additional comments /
Commentaires supplémentaires:

Continuous pagination.

- 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.

THE
CANADIAN PRACTITIONER

FORMERLY "THE CANADIAN JOURNAL OF MEDICAL SCIENCE."

EDITORS:

A. H. WRIGHT, B.A., M.D. Tor., M.R.C.S. England. - J. E. GRAHAM, M.D. Tor., L.R.C.P. London.
W. H. B. AIKINS, M.B. Tor., L.R.C.P. London.

Business Management, - - - THE J. E. BRYANT COMPANY (Limited), 58 Bay Street.

TORONTO, OCTOBER 16, 1889.

Original Communications.

FEVER AND ANTIPYRETICS.*

BY JAMES THORBURN, M.D.

In obedience to your request, Mr. President, I have endeavored to collect some of the most important facts with regard to fever and antipyretics, their uses and abuses. In order, however, to arrive at an intelligent understanding of the uses of these remedies we must have correct ideas of fever. I need not tell you that on this subject much diversity of opinion exists among medical men of equal renown. Different theories have been promulgated as to what it is and as to its influence on the animal economy; all of them containing a certain degree of truth and having their followers. One theory is that fever is due to the presence of microbes in the blood. They being foreign, a contest is set up to get rid of them, and fever is the result. The temperature necessary to destroy these microbes would be destructive to life; although the *B. anthracis* and *B. tuberculosis* can be destroyed by a temperature of 109. There are two schools: the followers of one believing that high temperature is dangerous and should be counteracted, the other that it is salutary and should not be interfered with. It is, however, of comparatively recent date that the most eminent investigators on this subject have decided that fever is a disturbance or derangement of the heat-producing and heat-losing apparatus, through the agency of the nervous

system; that it is not disease *per se* acting independently of the nerves. In health there is a balance (thermotaxic) maintained between heat production and heat dissipation. Heat is chiefly got rid of by radiation, evaporation, conduction and respiration, about 80% being taken away through the skin, and about 20% through the lungs. The vaso-motor system controls the blood supply of the skin, having its vaso-constrictor or motor, vaso-dilator or inhibitory nerves. On these grounds, Traube founded his Retention theory. He maintained that during fever little heat was discharged from the body and that the contraction of the arterioles prevented it. The experiments of Leyden and Senator have proved that large quantities of heat are dissipated from the skin during fever. This opinion is confirmed by Wood and his assistants, and it was also found that this increased discharge is not confined to one period of the disease but exists throughout its whole course. The arterioles are not always contracted; at one time during the same fever the face may be flushed and at another it may be blanched, showing that the nervous system which controls fever is greatly disturbed and is not constant. Thus, Traube's theory that there is diminished discharge of heat from the surface of the body throughout the course of fever is overthrown.

We also know that heat production varies from many causes. A man in health by eating excessively will have elevation of temperature.

Sometimes, when heat production is highest the fever is lowest and *vice versa*.

*Read at the meeting of the Ontario Medical Association.

The retention may be great and the escape little, and *vice versa*. Hence we cannot always form a correct opinion from the temperature. The processes of production and waste are not always the same. If heat production were constant and no escape possible, death would ensue. Heat is the product of tissue changes and is chiefly generated in the muscles, secreting glands, and hollow viscera. The process of oxidation in the muscles is greater than in any other organ. It is however increased by exercise. The quantity of carbonic acid evolved is eight times greater than when quiet. The muscles constitute four-fifths of the body heat in health and are the chief furnaces in fever and in health. There is a regulating centre which keeps up the equilibrium in health. Just as we have a special sense for speech, imitation, mastication, etc., so we have a respiratory centre, a vaso-motor centre, and a thermic centre, which is situated high up in the cord and possesses heat exciting and heat inhibitory functions.

They also possess a distinct set of nerves which are distributed to the skin, etc., with a central and peripheral portion. They are distinct from nerves of sensation, which have the power of conveying to the brain impressions of heat and cold. For instance, apply a piece of cold metal to any part of the body and a sensation of cold is at once perceived. If again, the same metal be warmed, the sensation of touch is perceived but no longer the sensation of cold; thus showing that there are two distinct impressions, the one made by the nerves of sensation giving evidence that the body has been touched, and the other by the thermal nerves showing that the metal is cold or warm.

A section of the pons at the junction of the medulla oblongata causes the temperature of the animal to rise. Injuries or diseases of the nerve centres and their membranes especially high up in the cord give rise to increased temperature. Sir Benjamin Brodie pointed this fact out, and since his time many other cases have been recorded where the temperature of the patient had risen to 110 or 111, and Mr. Teale relates one case where it reached the unprecedented height of 122. In other cases there is a fall of temperature. It is impossible to explain the great alteration of temperature from injury to the vital cord. This rise of temperature is

closely connected with the seat of injury; for similar injuries in other parts of the cord produce no such effect. Heat dissipation is controlled by the vaso-motor nerves so that paralysis of that system is followed by the loss of heat and finally death from cold. If this paralysis be complete the heat dissipation is so rapid that finally the vital functions cannot be carried on. In ordinary health, a person enters a cold room, and in consequence of the contraction of the arterioles, heat is retained in the body, but if there is vaso-motor paralysis, the outer vessels will not contract and the body's temperature equalizes, the interior being the same as the surface and this condition remains until death ensues. Heat production fluctuates in the same way as heat loss. Wood confirms this statement in his experiments on dogs and rabbits; hence we cannot always judge of the condition of our patient from the temperature. In disorder of body heat, we recognize the essential condition of fever. Can drugs be heat dissipators, lowering temperature in health or in fever? Any drugs which cause vaso-motor paralysis will cause a fall of temperature. Have we any drugs that can control heat production through the inhibitory nerve apparatus? This is an important question and not easily answered. I think we may safely conclude that there is a thermal centre situated high in the cord, controlling and regulating the temperature of the body; that it is endowed with heat producing and heat inhibitory powers, that it has an anatomical and physiological connection with other centres, that it has a distinct or separate set of nerves, and that they are distributed over all parts of the body, especially the skin.

Having thus taken a brief survey of fever, a few words as to antipyretics and their action.

Those medicines which have specific action, as quinine in malaria, salicylic acid in rheumatism, allay fever not directly, but through their action on the germ proper of the disease.

Now, as a type of the other antipyretics, we may take antipyrin, which has provoked a great deal of discussion within the last few years. Its physiological action very closely resembles that of thallin, antifebrin and phenacetin, and it has been proved by experiment to be not merely a refrigerant, but a true antipyretic, inasmuch as it not only makes the dissipation of heat

more efficient, but also represses the production of heat. As an evidence of this fact let me mention the investigation conducted by Dr. Girard of Geneva. He induced fever by stimulating the corpus striatum and found that a subsequent dose of antipyrin was able to reduce the temperature and to keep it down for a time.

Dr. Wood had assured himself that the result was unaccompanied by any perceptible effect on the circulation, at least when the antipyrin was given in therapeutic doses.

But this drug not only represses the production of heat (thermogenesis); it also effects the dissipation of heat by increasing skin-radiation. It diminishes the amount of nitrogen wasted by the urine and also the amount of carbonic acid produced. It frequently, though not always, increases perspiration.

As to the physiology of its action, the lessened heat production under the influence of antipyrin has been attributed to a stimulation of the inhibitory centres connected with the thermal system. Paresis of these centres is one of the conditions of fever and the action of antipyrin is to restore their lost tone and power. So much for antipyrin and kindred drugs.

Another antipyretic, one of great value, is the cold bath. Though its application was originally based on a theory, probably erroneous, namely that high temperature is the primary source of danger in fever, yet its usefulness is undoubted. Its action presents some points in contrast to that of antipyrin. Its effect on heat production is not definitely settled. On excretion its effect seems exactly the opposite of that produced under antipyrin, in that it appears to increase tissue change. The cutaneous vessels are at first contracted and afterwards dilated. The diuresis which usually follows the bath probably promotes the dissipation of heat.

The remarkable results reported by Brandt fully support the statement of its practice. In more than two hundred cases in private practice, he had no deaths. In military hospitals he lost 5%, and less than 6% in other hospitals.

As Riess has suggested, these two antipyretic methods may supplement each other: using the antipyrin, which checks excessive tissue change, in wasted, feeble or aged patients; while in the robust and previously healthy, we

would not fear to use the cold bath, though it seems to increase tissue change.

(Probably we must seek for an explanation of the wholesome effects of cold bathing in its influence on the nervous system, transmitted in the first instance through the sensory nerves.)

LAPAROTOMY FOR PERTYPHILITIC ABSCESS—UNSUCCESSFUL.

BY G. A. KENNEDY, M.D., MACLEOD, ALBERTA.

W. W., *et.* 28, was taken suddenly ill on the 27th February last with severe pain in the low right iliac region, consequent on a fall against the corner of an iron bedstead. The pain was continuous and greatly increased on pressure, there was vomiting, slight increase in temperature and pulse, and constipation, which was easily relieved, however, by a laxative. On the fourth day, a deep-seated, circumscribed hard swelling was made out in the region described, which swelling increased in size during the next two days. Aspiration and examination by the rectum gave negative results. Under treatment by opiates, rest in bed, and continuous hot applications the symptoms disappeared, and on March 14th he was up and about. The swelling could still be made out, but it was much smaller and less sensitive to pressure. It steadily decreased in size for about two weeks when it apparently disappeared.

Commencing on April 30th and July 13th he had two similar attacks, much less severe, which involved confinement to bed only for two or three days, and in which the same treatment as that first pursued was successful.

On August 7th I was again called to see him, and found him suffering from severe colicky pains all over the abdomen, and a good deal of localized pain and tenderness in the right iliac fossa. Temperature 101, pulse 100. He could not retain anything on his stomach. There was a swelling in the iliac fossa, but it was more diffused, and felt softer than when first noticed in March. He continued in much the same state until the morning of the 10th, when, having to go away, I left him in charge of a brother practitioner. His temperature had gone down to nearly normal, however, his symptoms were much less acute, and I anticipated his early partial recovery.

Returning to town on the 17th I was informed that he was well enough to be up, so did not see him until the 19th, when I was at once struck with his altered appearance. He had evidently grown much weaker, and was also in considerable pain. The preceding night he had suffered from diarrhoea and tenesmus. The lower part of his abdomen was tympanitic, he had difficulty in micturition, and complained greatly of a severe pain about the middle of the sacrum. The passage of about six ounces of urine by the catheter gave some relief. On examining by the rectum the tip of my finger came in contact with a large irregular mass, which seemed to occupy the whole of the pelvis, and which was compressing the rectum against the hollow of the sacrum. It had a soggy feel, but palpation between the hand on the abdomen and the finger did not give very definite results on account of the tympanitis. Temperature 101, pulse 96. Next day the tympanitis had extended upwards; he suffered from most severe colicky pains, principally in the epigastric region, and he was able to take but little nourishment. I then decided to operate, but owing to circumstances it was impossible to do so till two days later. On 21st, temperature was 98, 22nd 97, and on morning of 23rd, 96.6. The colicky pains were persistent, and on 22nd, hiccough was a depressing feature.

On the 23rd, after consultation with Drs. Mewburn, Deveber and Fraser, and assisted by them, I operated by making the median incision just large enough for two fingers. The small intestines were a little injected, and there was a considerable quantity of dark greenish colored fluid in the general peritoneal cavity. Finding it necessary to continue the incision downwards I did so carefully, and my finger soon tore into an abscess cavity, the mark of which was quickly drawn up to the incision, and a large quantity of foetid pus evacuated. It was then thoroughly washed out by a stream of hot water, and after the peritoneal cavity had been similarly treated, a drainage tube was inserted in the abscess cavity, its mouth stitched to the sides of the lower corner of the incision, and the whole sewn up. All the ordinary antiseptic precautions were observed. The latter stages of the operation had to be hastened, the patient's pulse being very low, and it being necessary to inject brandy freely.

Death followed some eight hours after return to consciousness. An autopsy revealed the fact that the front wall of the abscess was formed by the bladder, that it projected well down into the pelvis, and that its superior wall was composed mainly of small intestines adherent and matted together.

The noticeable features of the case are the cause, which is unusual; the long history of the disease, extending over six months; and its periodical lighting up and subsidence. Another point is the following: The man's life would probably have been saved had he been operated on last March; I was fairly certain of the diagnosis, and discussed the matter with him, but did not feel justified in insisting on an operation before trying palliative measures, and afterwards when he was apparently getting well. What is a surgeon to do in these circumstances?

Selections.

POST-PARTUM HÆMORRHAGE.*

BY GEO. A. TYE, M.D., CHATHAM, ONTARIO.

This is a subject of such transcendent importance that it never fails to claim attention, or to be welcomed as a subject for discussion.

Cases, from various causes, will occur in the practice of every obstetrician.

When it does occur, it is generally successfully treated. Yet every one will prefer prevention to its cure, for prophylaxis is one of the best achievements of our art.

I wish to record my experience in dealing with the third stage of labor in a practice of over two thousand cases, during the space of twenty-two years.

I do not intend to present this matter in all its relations, but with special reference to the practice of expression of the placenta, known as the Dublin method, or still more widely as Credé's method. When a student, I was taught to press away the placenta. I followed this practice for several years, and frequently met with this complication of post-partum hæmorrhage, sometimes so severe as to cause much anxiety to both patient and accoucheur, as well as danger to the former. I could not account for the frequency of these occurrences.

*Read before the Detroit Gynecological Society.

I consulted the authorities and found many recommending this method. I read carefully their directions and as carefully followed them, although the definitions and directions of its advocates were not at all uniform.

Still these cases occurred far too frequently, and I was not satisfied, and therefore searched earnestly for a cause.

I had long observed that cases of accouchement which had been completed before my arrival were rarely complicated with this accident. I watched and noted these cases for years, only to find that there was almost entire immunity, except where midwives had interfered. I also observed the practice of confreres who never employed expression, and found that they were nearly exempt from this trouble.

These facts led me to consider this matter independent of authority. The whole parturient act is intended to be, and nearly always is, a purely physiological act in all its stages, and therefore requires no assistance.

However, just as soon as the process deviates from the normal course, then the natural conditions are at fault, and there is more or less of a pathological condition. Then we have cause to interfere, and then only.

Midwifery is meddlesome when we do, or attempt to do, what may be done just as well or better without our assistance.

Let us suppose the first stage to be accomplished by nature's process, and the second stage terminated in the same manner, and the third stage follows. Now, why should anything artificial be introduced? Why should there be a Dublin method, or why should Credé's practice be followed, when the uterus can accomplish its work in this stage as well as in the two former stages? There is no cause, unless the conditions are altered.

When the second stage of labor has been accomplished, this—perhaps the most exhaustive work of all—leaves the uterus wearied, and rest is required for an accumulation of power. After a period of repose of variable length, corresponding to the amount of exhaustion or the recuperative power of the patient, a feeble contraction occurs, then a stronger one, as power returns, thus progressing until, portion by portion, the placenta is gradually separated and finally expelled.

During the period of rest coagulation has time to take place in the uterine sinuses. During this time the hand of the accoucheur rests upon the uterus and performs the duty of a watchman, and informs us continually of the uterine condition.

There is no necessity for rubbing or pressing the uterus to stimulate it to contract until it has had time to recover its ability to do so. Then if the power is there but not developed, such manoeuvres may call forth the latent power. Of course, after sufficient time has elapsed for rest, and then if contractions do not occur, even when stimulated, there is then an abnormal condition, and it must be dealt with.

When the uterus is able it will labor to detach the placenta which has hitherto acted as a tampon until nature's tourniquet is prepared.

Whenever the power is able to expel the placental tampon, it is also able to prevent hæmorrhage. Nature's plan is to produce these two results simultaneously; and if the placenta be removed before the contractile power is able to close the sinuses, then there will be hæmorrhage.

A period of rest, and time for contractions to expel the placenta unaided, is the natural process in the third stage.

The expression method is to aid every contraction in detaching the placenta by concentric pressure with the hand; and what is the result?

The two forces thus applied—the one natural, the other artificial—expel the placenta much earlier than if the natural force alone was engaged.

The placental tampon is removed by the double force, but the simple force of nature is too often, for want of time, inadequate to close the sinuses, and the artificial is now of no use.

The tampon is removed and the tourniquet is not ready.

Here the mechanical axiom will illustrate my meaning:

"Whatever is gained in power is lost in time; and, conversely, whatever is gained in time is lost in power."

But power is infinitely more precious than time.

The Credé method is said to save time, and it is too often employed for that purpose if the time of the obstetrician is limited.

In the physiological process which obtains in the great majority of cases, neither squeezing from above nor pulling from below is necessary nor advisable.

The artificial "*vis a tergo*" is equally dangerous with artificial "*vis a fronte*," and as likely to produce hæmorrhage.

During the latter ten years of my obstetric practice I have fully confirmed the views enunciated by experience.

I know beyond a doubt, in my own mind, that non-interference is incomparably more safe than expression.

The contrast between the two modes of practice is so great, and the physiological is so exempt from this serious complication, that I am pleased to have this opportunity of recording my experience for the benefit of those commencing obstetric practice, for I am well aware that a brilliant array of authorities can be quoted in opposition.

When the uterine contractions are well developed and continued for a length of time without expulsion, then there is undue adhesion, then the conditions are not physiological but pathological, and something is required to aid the normal power in removing an unusual obstacle.

In these cases the Dublin-Credé method is a most valuable aid, and will, in almost all cases, succeed in removing the placenta: and this is done by the combined natural and artificial forces. There is perfect safety from flooding, because the natural power is abundantly developed to close the bleeding-points, even if coagulation has not already taken place.

The conclusion, then, is, that in these cases expression is highly advantageous and perfectly safe.

Barnes, in his "Obstetric Operations," calls this physiological process "the exploded idea of letting it alone," although he admits there is sometimes nothing to do. Sometimes should read "rarely anything to do." There is no just cause for organized interference in this last stage. Such is not the case in the two former stages. There is rarely anything to do.

There is no just cause for interference in this last stage.

Lusk, Mundé, Garrigues, and other writers teach and commend the Credé method, but do

not point out definitely when it should be applied, nor limit its application to cases in which a pathological condition exists. Credé himself has so modified it as to allow considerable time to elapse before it is applied.

This modification robs the method of much of its danger.

Dornh, a German writer, advises waiting fifteen minutes before resorting to expression. So far as it goes, this is right; but this is not a matter to be determined by minutes, but by conditions; and these conditions are efficient uterine pains, and then this aid is not required. Why offer support where none is required?

At a late meeting of German physicians, the Credé method was discussed and sharply criticised by many, and its use greatly restricted by applying it only to certain cases, and not as a routine method.

We may be proud to be the priests of Nature, but let us not usurp her functions.—*Annals of Gynecology*.

TWO CASES OF CEREBRAL HÆMORRHAGE IN CHILDREN.

BY WM. COLLIER, M.D., M.R.C.P. LOND.

CASE 1.—J. B., aged 13, was admitted into the Radcliffe Infirmary, Oxford, on March 13th, 1889, with symptoms of heart disease, dyspnoea, swelling of the feet, and pain over the cardiac region, which had come on about a month previously. Had never had rheumatism, but had had symptoms of heart trouble at various intervals for many years past. On examination the heart was found to be considerably enlarged, and a loud double murmur at the apex was discovered. During his stay in the hospital his temperature varied between normal and 101.4°; occasionally falling and keeping to nearly normal for two or three days, and then shooting up and oscillating for a period. As no other cause could be found to explain the temperature, it was regarded as a case of ulcerative endocarditis. About six weeks after admission he was suddenly seized during the night with a fit of a convulsive nature; the attack lasted a few minutes, at the end of which time he became quiet and drowsy. An hour later another convulsive attack came on, and he rapidly passed into a condition of

profound coma, with stertorous breathing and widely dilated pupils; there was marked rigidity and flexion of both arms, with clonic spasms; the legs were also affected, but to a less extent; he remained in this condition for about four hours, gradually becoming more and more cyanosed, and died asphyxiated.

Necropsy.—On examination of the heart, a number of warty vegetations were found at the free edge of the cusps of the mitral valve: the other valves were healthy. The spleen was enormously enlarged, weighing 21½ ounces; on section it exhibited a number of recent infarcts. The kidneys also showed several infarcts, but of an older date. On examining the brain, an enormous recent blood clot, which on removal was found to weigh 2 ounces, was found occupying the right supratarginal convolution, but did not communicate with the lateral ventricle. The exact source of the hæmorrhage could not be discovered.

REMARKS.—In this case, there can be little doubt that a small clot of fibrin was carried from the diseased mitral valve to one of the vessels of the brain, blocking it so that the vessel gave way behind the block, fatal hæmorrhage following.

CASE 2.—L. W. aged 6½, was admitted into the infirmary on March 20th, and died on March 28th, 1889. Her illness commenced about three weeks before, with headache, vomiting, weakness of the legs and arms, and an increasing disinclination to move about. On admission it was observed that she had decided ptosis of the right eyelid, with paresis of the muscles of the left side of the face. There was loss of power, and some rigidity in the left arm and both of the legs, the left more than the right; she was unable to stand without some support. Pupils were equal, and reacted to light. She was quite sensible and complained of severe frontal and vertical headache. After admission all the symptoms increased in severity. The paralysis grew more marked, and she became more drowsy, and vomited at intervals. The ophthalmoscope showed well marked double optic neuritis. The temperature rose a few hours before death to 108°.

Necropsy.—On examining the brain, the pons were seen to be much enlarged, especially on the right side. Occupying the posterior half of

the interpeduncular space, covering the posterior perforated space, was a quantity of flocculent lymph and gelatinous material resembling blood clot. On washing this away a small vein, about the size of a No. 1 English catheter, was found completely blocked by a dark clot. At the inner margin of the right crus a blood clot, about the size of a large cherry, which had pushed the crus somewhat outwards and had partly eroded its substance, was found. On further examination, this clot was seen to be continuous with a larger clot which occupied the greater part of the substance of the right half of the pons. No disease of the bones of the skull or of any other part of the body was discovered.

REMARKS.—In this case the cause of the hæmorrhage is very obscure. The history points to its having been a slow oozing of blood into the tissues of the brain rather than a sudden effusion. A vein was found plugged for a considerable distance; it was thought the walls of the vessel might have given way behind the plug.
—*Brit. Med. Jour.*

THE OBSTETRIC USES OF CREOLIN. The *Medical Press* refers to creolin as about the best disinfectant in midwifery. It is not an irritant to the vaginal mucous membrane, like carbolic-acid sublimate solutions. It does not irritate wounds or abrasions, and will not retard healing. Under the use of creolin mucous membranes become softer and smoother than before its use. Its odor is not disagreeable, especially when brought into comparison with carbolic-acid or iodoform. If by accident it is taken internally it is said to be bland and harmless. It does not corrode instruments, but, mixed with water, it forms a nontranslucent emulsion, so that instruments may be lost sight of, if not sought for with care. The cost of creolin is not high, being less than that of carbolic-acid. The writer recommends Pearson's creolin as being less variable than some others. The uncertainty of its composition has been the chief objectionable feature of creolin.

THE CARBOLIC-ACID TREATMENT OF HÆMORRHOIDS.—Dr. Andrews, of Chicago, was one of the first to study the subject of the carbolic-acid treatment of hæmorrhoids, and he has been reverting to it from time to time during the past

ten years. According to the *Indianapolis Medical Journal*, he states that there have been thirteen deaths following the operation of injecting the acid into piles, out of three thousand cases. This is a mortality far greater than that attendant upon the use of chloroform as an anæsthetic. The estimated mortality, in the late civil war, following chloroform anæsthesia was about one in three thousand administrations often undertaken under circumstances of embarrassment and risk. But the chloroform was of the purest that could be found and was scrutinized with care before being accepted in the medical supplies. On the other hand, in regard to the purity of the carbolic-acid used by the operators on hæmorrhoids, little if any attention is given to it, it is alleged: generally the first that is offered is accepted without question. — *A. N. Med. Jour.*

MENSTRUAL URTICARIA CURED BY CASTRATION.—At the First Congress of the German Dermatological Society, held at Prague, June 10th to 13th, 1889, Dr. Taunton gave an account of a case of menstrual urticaria which had been cured by castration. The patient was a woman, thirty years old, who at every menstruation suffered with violent colicky pains and an extensive eruption of urticaria. She was in very poor health and had inflammation of both ovaries and salpingitis of gonorrhœal origin. Both tubes and ovaries were removed by Prof. Schauta. With the occurrence of the menopause, artificially brought about by the operation, the urticaria and the other disturbances disappeared. The woman—who was exhibited to the Society—enjoyed excellent health and presented a blooming appearance.—*Wiener med. Presse, Medical and Surgical Reporter.*

FATAL HÆMORRHAGE FROM THE STUMP OF THE UMBILICAL CORD.—Uncontrollable hæmorrhage on separation of the cord in the new-born infant is not common. It is very serious; only 32 per cent. of recorded cases appear to have recovered. Dr. Tross, of Karlsruhe, describes a case in the *Berlin. klin. Wochenschrift*. The infant was five days old; as the stump of the cord was in process of separation, severe hæmorrhage set in.

A single vessel was found to be the source of bleeding, but all attempts to tie it securely failed. The umbilical tissues were secured by transfixion, but free hæmorrhage took place from the tracks made by the transfixing needle. The tissues were firmly tied above the seat of transfixion, and the hæmorrhage at last ceased. The stump was swabbed with perchloride of iron, and wool containing that salt laid upon it, and retained by means of a binder. In the night hæmorrhage recurred: the mother, acting on Dr. Tross's advice, at once tied another ligature round the parts below that which he had applied, but in vain: the child died. The entire integuments assumed, after death, a remarkable lemon-yellow tint, which steadily increased. The blood which escaped during life showed no disposition to coagulate. The above is described by Dr. Tross as a case of omphalorrhagia neonatorum spontanea. — *Brit. Med. Jour.*

NAPHTHALIN IN TYPHOID FEVER. Dr. C. Schrwald has made some bacteriological experiments in Prof. Rossbach's laboratory, from which he draws the following conclusions:—1. Naphthalin retards but slowly in the temperature of a room the development of the bacilli of putrefaction of feces, and of typhoid. 2. Naphthalin finely powdered and well spread, or in solution and continually shaken, has its disinfecting power increased. 3. In a temperature of 98° the effect of naphthalin is much more powerful, which makes it highly probable that it is chiefly in its gaseous state that it destroys the germs. 4. Gaseous naphthalin in solution has more effect on aerobic than on anaerobic bacilli, and more on germs cultivated in a solid medium than on those cultivated in liquid. 5. The conditions for the full effect of naphthalin are much more favourable in the intestines than in the test-glass. 6. Naphthalin added to feces decreases their germs by about a half, but administered internally, it first decreases them to one-third or even a quarter: after this, however, their number rises again almost to its original figure. 7. Against the bacilli of typhoid stools naphthalin is considered still more effective: and decreases the number of the germs even to one-tenth. 8. The administration of naphthalin should be commenced at the very beginning of typhoid fever. 9. As calomel affects some of

the faecal bacilli, while others are more readily destroyed by naphthalin, it is best to give, whenever possible, both drugs combined.—*Lancet*.

THE PUPIL AS A GUIDE IN THE ADMINISTRATION OF CHLOROFORM.—As a result of experiments upon animals and of observations made upon man. Dr. H. I. Neilson formulates the following conclusions: 1. The first effect of chloroform narcosis on the pupils consists in a dilatation which varies in intensity and duration in different individuals. As the anaesthesia becomes more profound the pupils then begin to contract, and finally become very small and immovable. If now the chloroform is pushed still further, a sudden dilatation occurs, which is the result of asphyxia, from which the patient seldom recovers. 2. As long as the pupil is observed to dilate in response to sensory stimuli, such as pinching the skin, the anaesthesia is not yet sufficient to allow the commencement of the operation. 3. As soon as the pupil becomes strongly contracted and immovable the administration of the anaesthetic must be suspended until a commencing dilatation is observed, and the patient must be held at just this point as long as the operation continues. 4. Vomiting causes a dilatation similar to that occurring as the patient emerges from the narcotic condition, but it is usually more sudden in the former case. In experiments upon dogs it was found that the contraction of the pupils did not begin until the blood-pressure was somewhat reduced, and that the dilatation proceeded *pari passu* with the increase in the blood-pressure. The author regards the appearance of the pupil as a very reliable guide for the administration of chloroform, as by it he is enabled to judge accurately concerning the condition of the patient.—*La Riforma Medica*—*Brooklyn Med. Jour.*

A STRANGE USE OF HYPNOTISM.—In the *Bulletin Medical*, September 4th, 1889, it is stated that Tessié claims that he has been able to fix a stamp upon the mind which results in the formation of what he calls "ideogenous zones," or regions, the stimulation of any one of which will be followed by actions of a definite character. His experiments were made in connection with a propensity which is perhaps exceptionally developed in his own country—

namely, to indulge the sexual appetite. He describes a case in which he put a man into the hypnotic state, and said to him: "The right auricle represents lubricity, and the left auricle represents chastity." He then waked the subject; whereupon, keeping the most absolute silence, he pressed the patient's right auricle, and saw that he became gradually erotic. At the moment when he was about to masturbate, Tessié pressed the left auricle, and the subject gradually lost his passion and resumed the air of chastity.

The first time that Tessié performed this experiment, he says, he forgot to suppress the suggestion. The next day the patient presented himself fatigued, and said that in the evening he had met a friend who had pressed his right hand. Some moments later he became possessed with a violent desire for coitus. He felt that this desire came to him from the right auricle which he pressed several times in the twenty-four hours. He relieved himself by masturbating several times, and that night he had intercourse several times with his mistress; and that very day, on coming to Tessié, he had had two ejaculations, for in walking he had pressed the right auricle.

A story of this sort would hardly be credited, were it not told on good authority. It is almost incredible that a scientific investigator should choose such a field for experiment, and one who reflects on the story cannot fail to note the character of the subject and to suspect that he merely seized a ready excuse for the indulgence of a propensity to vice or deliberately played upon the credulity of his investigator.

If there is any element of scientific truth in the singular claim of Tessié that he can "create" ideogenous zones, it is to be hoped that he, and those who imitate him, may hereafter create virtuous and manly zones, and not start their subjects in courses which it may not be so easy to stop.—*Medical and Surgical Reporter*.

DEATH FROM SUBLIMATE IRRIGATION AFTER ABORTION.—Seven years since, Tarnier introduced the practice of washing out the vagina with weak corrosive sublimate injections. The results proved satisfactory, and the injections came into vogue in German and English, as well as in French, lying-in-hospitals, extending

freely into private practice. Like every thorough method of counteracting deadly agencies in the human organism, sublimate irrigation is not free from danger, and although it greatly reduces the death-rate and proportion of puerperal fever cases in long series of labors, some cases of mercurial poisoning will occur in those series, notwithstanding the most careful administration of the remedy. In this country Drs. Dakin and Boxall have published very minute observations on mercurialism under the above-noted conditions: they appeared in the *Transactions of the Obstetrical Society* for 1886 and 1888. Dr. Legrand read before the Anatomical Society of Paris, in April, a case of twin abortion, retained placenta, and death from acute mercurialism. Between the birth of the first and second child, 10 litres of a 1 in 2,000 solution of sublimate were employed to wash out the uterine cavity, twice at an interval of three hours only. Immediately after each injection of sublimate a 2 per cent. solution of boracic acid was thrown up into the uterine cavity; but sublimate had been several times employed for vaginal injection. After the extraction of the second child the boracic solution was injected into the uterine cavity. The intra-uterine injections were discontinued, and boracic and carbolic solutions were used for the vagina. A day later gingivitis, salivation, colic, and dysentery set in, and carried off the patient in five days. The kidneys were large, pale, and very œdematous; they contained mercurial salts in solution. The palate was ulcerated; the œsophagus, stomach, and small intestine healthy. The mucous membrane of the entire large intestine was covered with eschars and ulcers, most marked on the summits of rugæ. The ulcers began in the cœcum, were least abundant in the transverse colon, and most marked towards the anus. The above conditions have been noted in many other cases of death after sublimate irrigations in childbed. The kidneys were diseased. Keller, of Bern, has already pointed out the danger of mercurial irrigation when these organs are not healthy. The English authorities just quoted both dwell on this danger. Dr. Legrand relates that the ulcerated intestinal mucosa swarmed with bacteria. This fact, he adds, must make us despair of ensuring intestinal antiseptis by means of corrosive sublimate.—*Brit. Med. Jour.*

THE TREATMENT OF POST-PARTUM HEMORRHAGE.—The most frequent cause of bleeding after delivery is failure of the uterus to contract; Crede's method of expressing the placenta, the frequent use of the hot douche, of uterine massage, and ergot generally induce uterine contraction promptly and efficiently. There remain, however, cases in which an abnormality in the contraction of the uterine muscle results in failure to close the uterine sinuses; the means usually employed fail, and a prompt and radical procedure is demanded. An application directly to the interior of the uterus is usually sufficient in these cases. Such may be a hot intra-uterine douche of antiseptic fluid: the injection of vinegar; a bit of ice carried within the uterus, or reflex stimulation of the uterine muscle by the antisepticized hand carried to the fundus.

A more reliable procedure than these, and a permanent check to bleeding, is the use of iodoform gauze as a uterine tampon. Born and Eckerlein (*Centralblatt für Gynakologie*, Nos. 25 and 26, 1886) report the most prompt and satisfactory results from this treatment. A strip of gauze four inches wide and two or three feet long is carried by the finger or a simple uterine applicator notched like an arrow, to the fundus; usually the presence of a single strip suffices, and the remainder is used to tampon the vagina moderately. Should more than a single length of gauze be easily admitted, the uterine cavity is moderately distended, and an additional strip is used for the vagina. In the absence of iodoform gauze any antiseptic material of similar dimensions may be employed. Such tampons may remain twenty-four or thirty-six hours in position, and may be renewed, with antiseptic douches, whenever required. Arterial bleeding from extensive laceration of the cervix may be promptly checked in this manner.

The value of the iodoform gauze tampon in bleeding from low attachment of the placenta has been clearly shown, and the treatment by this means is an established procedure. There is every reason to urge a similar adoption of the same efficient agent in treating post-partum hemorrhage.—*Med. News.*

THE SACRAL OPERATION IN GYNECOLOGY.—The new method of sacral extirpation of the uterus and uterine tumors is gaining ground in

Germany. Recently Dr. Hochenegg has performed it successfully in two cases, which are reported in *Fortschritte der Medicin* of August 15th.

His method of procedure was as follows: In the first case, free access to the pelvis was first gained by dividing the recto-vaginal and respectively the recto-vesical septum. The carcinomatus uterus was so strongly adherent that the extirpation could not be completed according to the usual methods. The superficial incision was curved: the coccygis was extirpated and the right wing of the sacrum resected below the third foramen: the attachments with the rectum then divided, the peritoneum opened, and the uterus drawn forward; the vessels were then isolated, ligated, and cut through; the cervix then cut through, and the extirpation completed per vaginam. The peritoneum was partially sutured and both wounds drained.

In the second case, the extirpation was for a tumor firmly attached to the uterus. The growth was situated on the left side, was as large as a man's fist, cystic, and intra-ligamentous. Here also the coccygis was excised and the left wing of the sacrum partly resected. The rest of the operation was performed with blunt instruments as far as possible. On account of the firm adhesions of the tumor to the uterus, the latter had also to be extirpated from the cervix, and was removed through the sacral wound. The isolated vessels were then ligated, the stump of the cervix sutured with silk. The peritoneal wound was packed with iodoform gauze, and the sacral wound left open. Healing was rapidly effected, but for some time a small fistula remained in the sacral wound.

The advantages of this new method of operation are as follows:

1. It is of superior value in such cases where adhesion or fixation of the uterus render extirpation per vaginam technically impossible.

2. By means of this operation the retro-peritoneal lymphatic glands can also be removed, which fact is of great importance, as they are often found carcinomatous. The prognosis is, therefore, more favorable.

3. The operation is also practicable for small tumors which can neither be extirpated by laparotomy or per vaginam. Greater control of hemorrhage and drainage is possible. Finally,

the danger of ligating the ureters is greatly diminished.—*Med. News.*

INTESTINAL OBSTRUCTION.—Dr. Gelpke reports in the *Correspondenzblätter für Schweizer Aerzte* four cases of intestinal obstruction, of which two had been operated on, one with success, and two had been successfully treated with metallic mercury. From these cases he concludes that quicksilver is a valuable remedy in cases of obstruction, and that the metal seems to be quite innocuous to the system if not too long retained. It had been so retained in one of the two cases in which four teaspoonfuls of quicksilver had been given, and the feces and urine of the patient contained the drug for twelve weeks: there were other distinct symptoms of mercurial poisoning, such as great emaciation, excitement, loss of hair, and some stomatitis. The other patient, on the contrary, showed no signs of mercurialism whatever. He considers that in hernia it is generally advisable to commence the abdominal section from the orifice of the sac. Finally, considering the uncertain and not very successful results of laparotomy, he would not operate before other means, such as quicksilver, have been tried for from four to six days.

Dr. S. V. Reitz, in the *Centralblatt für Chirurgie*, reports the case of a labourer suffering from obstruction of the bowels, who, after three days' fruitless administration of purgatives, was brought to the hospital. Faecal vomiting was present, and a tumour could be felt on the left side of the umbilicus. Enemata of water by the long tube, though as much as six pounds of water were injected, were unsuccessful, but the vomiting and sickness improved under repeated washing out of the stomach. The next day the patient was considerably worse, and faecal vomiting returned, with cold perspiration, restlessness, meteorismus, a pulse of 120, and a temperature of 100°. After the enema with the long tube had been again used, and the stomach repeatedly washed out, without any improvement, seven drachms of bicarbonate of soda in five ounces of water were injected into the rectum, followed by three drachms of tartaric acid in the same amount of water, and the anus closed. The patient, who was on his knees and elbows, complained at once of severe abdominal

pains, and in five minutes the injection came away with exceedingly offensive flatus. Shortly afterwards the patient felt considerably better. In three hours the enema was repeated with half the previous doses, and was shortly followed by a large loose motion, and by a second later on. The patient completely recovered.—*Lancet*.

TETANY.—At the recent meeting of the Association of American Physicians, Dr. James Stewart, of Montreal, read a paper on tetany. The details of the following case were referred to: The patient, a male, aged forty, has been troubled during the past eight years with regularly recurring attacks of tetany. He served as a soldier during the American civil war. Suffered at that time and subsequently from chronic dysentery and malarial attacks. For upwards of ten years he has been troubled with diarrhoea. Patient is tall, emaciated, and anæmic. The first subjective symptom of his tetany is usually double vision, which is quickly followed by the characteristic contractions of the flexor muscles of the hands. Occasionally the flexors of the forearms and adductors of the arms become spastic, muscles of the face almost constantly suffer, muscles of the lower extremities rarely. The affected muscles are the seat during the attacks of fibrillary twitching. The attacks often last several days (seven to twelve), unless terminated by the very free use of morphia.

The galvanic irritability of the nerves is found to be greatly increased, also the mechanical irritability of both nerve and muscle. Knee-jerks exaggerated during attack, absent in intervals. Œdema of the hands and arms, with herpetic eruptions frequently to be seen after particularly severe attacks. The quantity of urine excreted during attacks is usually normal in amount, and contains urea and indican in great excess. Patient has been under observation for more than three years, and it has been noticed during the past two years that he has been getting gradually dull and apathetic. It takes him a long time to answer questions; he complains of general numbness, his face and lips are swollen; symptoms closely resembling those seen in myxœdema.

Tetany, he said, may be divided into three varieties: 1. Epidemic or "rheumatic" tetany, common in Europe, but extremely rare in

America. The course is acute and favorable. 2. Tetany from exhausting causes, as lactation, diarrhoea, etc. Course is chronic and favorable. 3. Tetany from removal of the thyroid glands. Course generally is usually either quickly fatal, or chronic and incurable. 4. A form of tetany occurring in cases of dilatation of the stomach. Very fatal. Infantile tetany is excluded from this division, as what is so frequently called tetany in infants is not that disease. No doubt, true tetany may occur in childhood.

Experimental tetany.—When the thyroid gland is removed from cats, dogs, or monkeys, a condition very similar to the typical tetany of the human subject is observed, viz., fibrillary tremors and intermittent spasmodic contractions. Death usually follows in a week, and no changes can be found to account adequately for it.

The fact that there is a great increase in the electric irritability of the nerves after the removal of the thyroid glands is strong evidence of the similarity of the tetany of man and animals. Of the many forms of muscular contractions seen in man, in none, with perhaps the exception of cholera, do we find any marked increase of the electric irritability of the nerves and muscles.

No pathological changes that in any way can be considered characteristic have been described. All recent observers tend to confirm the conclusion of Schiff, that the tetany following removal of the thyroid glands is directly due to the loss of the gland, and that the thyroid gland in some way has a direct influence over the nutrition of the nervous system. It is difficult to explain how causes so diverse in their operation, as "rheumatic" influences, diarrhoea, pregnancy, lactation, and removal of the thyroid, can induce similar symptoms. It appears probable that impoverishment of the nerve centres is one of the main factors in its production.—*Med. News*.

THE DANGERS OF THE SUMMER VACATION.—The unexpected death of Mr. Firth, M.P., has excited much interest during the past week. It is not so much the public services of the deceased as the circumstances of his death that call for notice in our columns. Mr. Firth fell a prey to the summer vacation, and many less

known men fall victims to the same agreeable institution. The annual holiday is essentially adapted to the tastes and habits of youth, of the age, in fact, that can most thoroughly enjoy and appreciate relaxation from labor. The young tourist has physical strength and mental elasticity unknown in later years. His duties are, as a rule, of such a kind as to involve little or no responsibility when he ceases to attend to them for a few weeks. In the prime of his life all these conditions are changed; unfortunately this fact is often overlooked by men who try to persuade themselves that they are still young. The digestive and circulatory functions are often seriously at fault in hard-worked men over 40. Hence such men may bear the accustomed fatigues of business, but cannot so well tolerate sudden feats of physical strength, such as long walks and steep ascents. The mind can receive but few fresh impressions, so that prolonged exertion is not associated with that charm of novelty which in youth counteracts weariness of body and soul. Unfortunately, again, there are responsibilities incumbent on the prime of life which cannot be set aside during a holiday. The least of these, the question of letters sent on from home, is a restraint very irksome to the traveller who likes to go where he pleases, in the direction of wild or picturesque scenery, rather than along the line of specified *postes restantes*.

To turn to the more special character of Mr. Firth's case, it should be remembered that he was walking alone when death overtook him. The precise pathological character of the illness to which he was subject is not recorded. The tourist, no longer youthful, is often condemned to solitary journeys or solitary walks. Solitude is a powerful agent in hastening fatigue, and in increasing all the dangers of fatigue during a long walk. Should the traveller be subject to any organic disease, the risks of solitude become greatly increased under these circumstances. This fact is proved by Mr. Firth's death, as well as by a somewhat similar case, the decease of a tourist in Ennerdale which occurred not long ago. The latter victim to his vacation certainly overwalked himself, whatever disease he might have been subject to. Mr. Firth was probably in worse health when he ascended the Flegère, one of the easiest of all ascents in Switzerland. He

looked and felt well when he set out on his last walk, but pure fatigue could hardly prove fatal in the course of so easy a journey.

The moral of cases of this kind is clear. The middle-aged tourist must be chary of undertaking tasks which involve physical fatigue which could be undergone with ease when he was younger. His chief want during his vacation is rest. A reasonable amount of exercise is good, but still, rest is his principal requirement. No doubt rest also requires precautions, especially against errors of diet, but hard exercise involves greater risks. In mature age the tourist who has realized the beauties of Nature in youth can contemplate them and reflect upon them with profit. Such is his holiday work. He is fitted for contemplation and reflection. He must partake with studied moderation of pleasures for which he has become less fitted. It is not an unwholesome sign when the experienced traveller tells his friends that the top of a mountain looks best when viewed from the valley. We are not taking into account exceptional individuals, who are physically young men at the age of fifty; we speak of that great majority of the mature who are too apt to rely on the experience of older friends with evergreen constitutions.—*Brit. Med. Journal*.

SULPHUR FUMIGATION.—The communication of our correspondent on the subject of sulphur fumigation, published in the July number of the *Journal*, directs attention to a very important subject. In his family, after carrying out faithfully the instructions of his physician as to fumigation, two other cases of scarlet fever occurred. Inasmuch as two important rules were violated in this instance, the inefficacy of sulphur fumigation to prevent contagious disease must not be considered as demonstrated by this case alone. The two rules referred to are:

1. That at least three pounds of sulphur should be burned in every thousand cubic feet of air-space to be fumigated; and
2. That the sulphur should be burned in the presence of moisture.

The first of these rules has been insisted upon over and over again. The second rule has not been even mentioned in the rules for disinfection prescribed by most boards of health. Dr.

E. R. Squibb, in a paper recently read before the Kings County Medical Association, refers especially to this defect. He says that moisture is necessary to enable contagious matter to propagate contagion, and *equally necessary for any reaction with agents which have the power to so change their molecular structure as to destroy their capacity for contagion.* He shows that sulphur dioxide, resulting from burning sulphur in the air, is not a disinfectant, but requires the presence of moisture: and that in proportion to the amount of moisture, up to what would be a very large dilution, the more there is present the more perfect are the conditions for thorough disinfection, and the less moisture there is present the more imperfect the disinfection.

Dr. Sternberg's experiments, made in 1880 and 1881, demonstrated that to destroy the power of *liquid* vaccine five grammes of sulphur burned in a cubic metre of air were sufficient, while to destroy *dry* vaccine sixteen grammes per cubic metre were required.

That there is a growing tendency to abandon the fumigation by sulphur of premises infected by contagious diseases, or at least not to depend upon it alone to the exclusion of other means of disinfection, cannot be denied. Writing on this point, Dr. Squibb says that he has reached the conclusion that burning sulphur for disinfection should by no means be abandoned, but should be more thoroughly and more carefully applied. He says that a shallow pan of water upon a kerosene stove well started in advance of lighting the sulphur, and the floor, ceiling, and walls well sprinkled with water by means of an ordinary dust-brush, is perhaps as good a practice as any.

Dr. Sternberg says that, admitting that in the absence of spores, micro-organisms suspended in the atmosphere or attached to the surface of objects may be destroyed by sulphur dioxide, when generated in a sufficient quantity in a well-closed apartment and in the presence of moisture, the question remains whether the same object may not be as well accomplished by thorough ventilation, and by washing all surfaces—walls, ceilings, floors, furniture, etc.—with a 1:1000 solution of mercuric chloride, which we know to be promptly destructive of germs of all kinds. —*Brooklyn Medical Journal.*

THE
Canadian Practitioner

A SEMI-MONTHLY REVIEW OF THE PROGRESS
OF THE MEDICAL SCIENCES.

Contributions of various descriptions are invited. We shall be glad to receive from our friends everywhere current medical news of general interest.

When a change of address occurs please promptly notify the Publishers, THE J. E. BRYANT COMPANY (Limited), 58 Bay Street.

TORONTO, OCTOBER 16, 1889.

THE TORONTO TRAINING SCHOOL
FOR NURSES.

The success which has attended the Training School for Nurses in the Toronto General Hospital has been as remarkable as it has been gratifying to those who have watched its progress. The course of instruction in the different varieties of nursing is thorough and complete. The nurses before graduating, are compelled to pass two rigid examinations: one at the end of the first year, and the other at the completion of the second year. At the last examination, written and oral, conducted by Drs. Cameron, Grasett and Wright, the eight successful candidates obtained an average percentage of 79, the individual percentages ranging from 70 to 85. The success of the School is chiefly due to the untiring efforts of the capable superintendent, Miss Snively, the matron of the Hospital, whose report at the recent "Convocation" held in the Hospital theatre, presented some interesting facts. From it we learn that the total number of graduates is now 86: and of these 4 are foreign missionaries, and 15 are in charge of hospitals in various parts of Canada and the United States. Two of this year's graduates are now en route for the inland China mission.

THE STANDARD OF MATRICULATION
IN MEDICINE.

Many are the discussions which take place on the subject of elevating the standard of matriculation in medicine. Many say it is much too low, and at the same time have no intelligent idea of what it really is. Some, who have a

more intimate knowledge of the question, think it should be materially raised, even going so far as to contend that a degree in arts should be demanded. Others think it would be well to leave things as they are for a few years. This view is clearly stated in the report of the Committee on Education, as presented at the last meeting of the Ontario Medical Council, from which we quote the following :

"Your Committee have duly considered the advisability of raising the standard of matriculation for students wishing to take the medical course, and register at this College, as instructed by resolutions to them referred, and in view of the fact that the matriculation has been three times changed in the last ten years, and that it is much higher now than at any former time, and that as this present standard has been required but a very short time, your Committee do not think it advisable to make any further advance in that direction at present."

MEDICAL SCHOOL OPENINGS.

The Medical Colleges have been opened in due form, and the regular work of the winter sessions is in full blast. In the University of Toronto a new departure was made, and there was what was called "The Annual Convocation of the University of Toronto and University College," which was supposed to be a general opening for the Faculties of Medicine, Law, and Arts. The miserable little convocation hall was of course crowded, and the proceedings were very interesting; but the Medical Faculty appeared almost to have lost its identity while the audience gazed on the grand parade of University College prize-men (male and female), and listened to English and Latin speeches and orations from professors and students in the same college. However, there came a change, and for eleven minutes things assumed a medical aspect while Dr. Daniel Clark delivered an admirable address, in which he referred to the position of the Medical Faculty in the University, spoke of the importance of the subject of medical psychology, which had long been recognized in this University, and the difficulties in obtaining a sufficient supply of dissecting material. Although all present were interested in the proceedings of the Convocation, it was

thought by many that it would be well in the future to have a separate "opening" for each of the different Faculties.

Trinity Medical College adhered to the old custom, and had its separate opening exercises. Dr. Bingham, who is popular with the students, delivered an address on "Preventive Medicine," which was well received by the students and their friends who were present. We regret that we are unable to give a full report of the able addresses of Drs. Clarke and Bingham, but are pleased to state that they were a credit both to our profession and to the Schools they represented.

We are unable to state exactly the numbers of students in the Medical Colleges of Toronto, but we understand they are large, and will in the aggregate approach six hundred. All will probably agree that immediate demands are likely to be amply satisfied.

HOT-AIR INHALATION IN PULMONARY TUBERCULOSIS.

During the past few months we have heard much about the efficacy of inhalations of hot-air in pulmonary tuberculosis. In September of last year Halter, of Germany, published a paper on the immunity of limeburners from pulmonary phthisis. Dr. Wright, in a paper published last December in the *Record*, claims that hot-air inhalations are a specific in this disease inasmuch as they check the growth and multiplication of the tubercle bacilli. Dr. Trudeau, in a paper read before the Association of American Physicians (*Medical News*), gives a report of four cases in which he carried out this treatment for periods varying from one to three months. The time of inhalation was rapidly run up to four hours daily, divided into two sittings, during which the temperature of the inhaled air was maintained at 200°C. (392°F).

The results were not very encouraging. The different examinations of the sputa invariably showed the presence of the bacilli. Dr. Trudeau thinks that "although difficult of absolute demonstration it is most probable that the temperature of the air-cell itself can be influenced but very slightly, no matter how high or how low that of the inspired air may prove to be. The intense vascularity of the lungs, the fixed

temperature of the blood rapidly circulating through them (which is relatively low when compared to that of the heated atmosphere furnished by the apparatus), the moisture and infinite subdivision of the surfaces, and the very slow admixture which takes place between the tidal and residual air, all conspire to rob the incoming current of its heat and to confine the possible variations of temperature in the air-cell within very narrow limits.

The inference held out as conclusive that, because the breath on expiration measures as high as 45°C. (113°F.), the air in the air-cells must necessarily be much warmer is fallacious, for the expired air is in a great part composed of the last inspiration still surcharged with its recently acquired heat. As the bacilli in the bronchial secretions must necessarily be brought in much more intimate contact with the hot air than those imbedded in solidified areas of lung or in impermeable tubercular masses, the failure of the latter agent to diminish their virulence to any appreciable degree is most significant.

CONCLUSIONS.

1st. The therapeutic value of hot-air inhalations in phthisis is doubtful.

2nd. The evidence obtained by the bacteriological study of the cases presented does not confirm the assumption that inhalations of heated air can either prevent the growth of the tubercle bacillus in the lungs of living individuals or diminish the virulence of this microbe when it has gained access to them.

NOTES.

FEMALE PRACTITIONERS in Russia are forbidden to attend male adults.

THE PUBLICATION OF *The Quarterly Compendium* has been suspended.

THE *Medical Waif* has changed its name, having been adopted by *The North American Practitioner*.

IN CERTAIN SECTIONS of Russia gunpowder enjoys the reputation of a reliable emmenagogue. Two curious cases are reported where criminal abortion was caused by its internal administration, the dose being a wineglassful.

THE UNIVERSITY AT SAN JOSE, CALIF., will hereafter prohibit the entrance of any student who indulges in tobacco.

MEDICAL JOURNALS. — It has been ascertained that the principal medical periodicals of the world number 266; 174 are published in the United States.

THE PRUSSIAN MINISTER OF EDUCATION has ordered that every newly appointed professor of hygiene shall give, as a part of his work, lectures on the history of medicine.

THE NEXT MEETING of the Congress of American Physicians and Surgeons is to be held in Washington, in September, 1891, under the presidency of Dr. S. Weir Mitchell.

TORONTO UNIVERSITY SENATE ELECTIONS. The following gentlemen were elected to represent the medical graduates: Drs. I. H. Cameron, A. H. Wright, L. McFarlane, and W. H. B. Aikins.

ILLEGITIMACY IN IRELAND. — The Report of the Registrar-General (*Press and Circular*) calls attention to the fact that illegitimate births in the whole of Ireland amount to only 2.9 per cent. of the total births, a ratio greatly lower than that of any other part of the kingdom.

THE DEPOPULATION OF FRANCE is treated of in the *Official Journal* by M. Michet, who puts it tersely thus: Diminution of marriages, augmentation of divorces, decrease of legitimate births, increase of illegitimate births, excess of deaths over births, but for the illegitimate births the population of France would decrease.

THE AMERICAN PUBLIC HEALTH ASSOCIATION will hold its next Annual Meeting at Brooklyn, N.Y., on the 22nd, 23rd, 24th and 25th of this month. This Association comprises over eight hundred members, all devoted, officially or otherwise, to its declared purpose—the advancement of sanitary science and the promotion of organizations and measures for the practical application of public hygiene. In the furtherance of this purpose it has met annually, during the last sixteen years, in different cities

of the United States and Canada, and has in every instance had the effect of greatly stimulating public effort in the promotion of health and measures for its maintenance. The following Canadians are members of the Advisory Council: Drs. C. W. Covernton, and P. H. Bryce, of Toronto, Dr. W. R. D. Sutherland, of Winnipeg, and Dr. Wm. S. Harding, St. John.

QUEIROLO (*Deutsch. Med. Woch.*) in his endeavour to determine the toxic effects of the sweat taken from persons suffering from some of the acute infectious diseases inoculated rabbits with the sweat of persons suffering with small pox, malaria, typhoid fever and rheumatism, making at the same time control experiments with the sweat of persons free from fever. All the rabbits inoculated with a sufficient quantity of the sweat of sick persons died within from twelve to forty-eight hours. In the patients in question he artificially increased the production of sweat by means of dry heat. He believes that by this means he obtained only a favourable influence upon the issue of the disease, as through profuse diaphoresis and the simultaneous administration of abundant quantities of fluids a washing of the injurious substances from the polluted organism is accomplished. Hence in the treatment of infectious diseases he considers great care should be exercised to have free diaphoresis.

HYDROCHLORATE OF SPERMINE.—In answer to a note requesting information concerning the above preparation, we have the following courteous reply from Messrs. Parke, Davis & Co. "In the interests of scientific pharmacy we have followed out the idea as suggested by the Brown-Sequard investigations, and after a series of exhaustive experiments we have been enabled to isolate a scientific preparation, namely: Hydrochlorate of Spermine. The quantity of this product is quite limited and in view of the expense attending its production, we are not in position at the present time to afford you a sample for investigations therein. Permit us, also, to say that we ourselves are not particularly interested in a continued examination of the subject, but having prepared a product scientifically, we shall be pleased to assist in its investigation as far as may be possible if

the medical fraternity indicate a desire to take it up at this point. It will also afford us pleasure to supply such scientific information as we may be enabled to collate in the advancement of this idea in the event that it is found to possess therapeutic value. We thank you for approaching us at this time, and assure you that our services are always at your disposal."

THE INDUCTION OF PREMATURE LABOR.—Prof. Hirst considers Krause's method as the safest and most effective. His routine application of the method is as follows (*Univ. Medical Magazine*):—The vagina is cleansed by a copious injection of corrosive sublimate solution, 1 part to 4000; the cervical canal is carefully wiped out with a pledget of cotton soaked in the same solution and held in a pair of intrauterine forceps. A rubber bougie of medium thickness is removed from a basin of sublimate solution, in which it has been lying, and, held between the thumb and forefinger of the right hand, is passed into the vagina and guided into the os by the forefinger of the left hand, the patient being in Sim's position. The bougie is pushed with great gentleness into the cervical canal, and, being further propelled with the same care, is allowed to find its own way between the membranes. After having entered some seven or eight inches it will be difficult to push it farther without too much force. The end projecting without the vulva is then bent into the vagina, and the whole held in place by a loose tampon of iodoform gauze. This I usually do in the afternoon; 24 hours later the cervix will commonly be found soft, but the os not dilated. Another bougie is then inserted alongside the first, and the tampon replaced by a fresh one. On the following morning the os will likely be sufficiently dilated to allow the completion of the delivery by forceps, version, or by the natural forces as seems best in the individual case.

THE CLINICAL SIGNIFICANCE OF THE PRESENCE OF ALBUMEN IN THE URINE.—There can be no doubt that, without prejudging questions which are still *sub judice*, some real change has taken place in professional opinion upon this subject (*Lancet*). A decade or two ago, if the question had been put, "What is the signifi-

cance of the persistent presence of albumen in the urine, and what is the prognosis in such cases?" but one answer would have been forthcoming, viz., that such cases were instances of organic disease of the kidneys, and that the most probable outlook was death within two years. This answer can no longer be given with safety. That it would be true of a very large number, possibly the vast majority of such cases, is very probable; but we have come to recognize that there are exceptions, and that it is our business to determine how these may be recognized with reasonable certainty. In fact, albuminuria, which was long regarded as absolutely diagnostic of grave disease, is now recognized as only a symptom—usually a most serious symptom, but, nevertheless, one that does not exclude the necessity of further inquiry, or relieve us from the obligation of doing our utmost to interpret it correctly. As has been well said, we may compare albuminuria with hæmoptysis. If a patient spits blood frequently, there is a very high probability that he has tubercle in his lungs; but it is a question of probability, not of certainty, and in exceptional cases even frequent blood-spitting is not followed by any evidence of tubercular mischief. So with albuminuria. Its presence most strongly suggests the existence of organic renal disease; but we have to abandon the attitude of dogmatism with regard to this symptom, and admit that it may co exist with perfect health.

Book Notices.

A System of Obstetrics by American Authors.
 Edited by Barton C. Hirst, M.D., Associate Professor of Obstetrics in the University of Pennsylvania, etc.* Vol. II. Philadelphia: Lea Bros. & Co.

We are delighted with the second volume of this great work on obstetrics. The various articles which together make up the volume are written by ten authors, all of whom appear to have some special qualifications for the work assigned to them.

Dr. Theophilus Parvin takes "Diseases and Accidents of Labor," which are made by him to include lacerations and injuries of the uterus, vagina, vulva, and perinæum, hæmorrhages, and

injuries to the child. He advises sutures for lacerations of the vagina, but gives no particulars. We have found them unsatisfactory, and consider them worse than useless for aseptic purposes. The chapter on hæmorrhages is of considerable value, but there is some evidence of haste, and we think a good proof-reader would not have been superfluous. The important subject of eclampsia is well treated, though we think there is a tendency to jumble together the opinions of various authors without properly analyzing them. Upon the whole, however, Dr. Parvin's chapters will be found exceedingly pleasing as well as profitable.

Dr. Davis writes on the Forceps, giving an interesting history of the instrument, and judicious directions for its application. He also discusses embryotomy as compared with Caesarian section and other substitutes. Dr. Cameron of Montreal, takes the two subjects of Version and the Premature Induction of Labor. These chapters are perfect and complete, although the author is sometimes, probably through no fault of his own, too concise, as, for instance, when discussing the indications for the induction of abortion. Considering his articles as a whole we have to regret that he did not fill a few more pages. Dr. Robert P. Harris wrote the article on Caesarian Section, Symphysiotomy, Laparo-Elytrotomy, Laparo-Cystectomy. His name is sufficiently well-known in connection with these procedures to convince all that Harris is the man for the place. He has filled it well.

The subject of Puerperal Infection is treated by Dr. Garrigues, of New York, in a most masterly way. We have no hesitation in saying that there is nothing in the English or any other language to excel it. All things considered we have not seen its equal. We are not entirely in accord with him in all his details, but we are inclined to follow him very closely indeed. We quite agree with him that the old term "Puerperal Fever" should be dropped, but we don't like his choice, "Puerperal Infection." "Puerperal Septicæmia" has been coming into rather common use lately, and notwithstanding Dr. Garrigues' arguments, we are inclined to stick to it.

Dr. Harold C. Ernst, of Boston, writes on the "Etiology of Puerperal Fever" from a

modern scientific point of view. Dr. Hirst, the editor, treats "Some Complications Independent of Septic Infection," including abnormalities in involution, hæmorrhages, hæmatomata, non-infectious fevers, diseases of the urinary system, etc. After this comes a chapter on "Insanity, and Diseases of the Nervous System" by Dr. Lloyd. One of the most useful chapters in the volume is that on the "Management and Diseases of New-born Infants," from the well-known author, Dr. J. Lewis Smith.

On the whole we have so high an opinion of this "System of Obstetrics" that we believe no general practitioner should fail to possess it.

Personal.

Dr. L. H. Carter (McGill, '88) has located at Coulterville, Cal.

Dr. Findlay McEwen has been appointed an Associate Coroner for the County of Lanark, and Dr. Duncan McEdwards, of Thedford, an Associate Coroner for the County of Lambton.

PROFESSOR HENRY MONTGOMERY.—Professor Henry Montgomery, who was at one time lecturer on biology in the Toronto School of Medicine, was for several years Professor of Natural Science in the University of North Dakota, Grand Forks. He was also Vice-President of that Institution, and his untiring labors in its interests were very highly appreciated. He has recently resigned his position at Grand Forks, and has accepted a similar position at Courtland, New York. His many friends in Toronto will be pleased to hear of his continued success.

Miscellaneous.

A CASE FROM PRACTICE.—Semi-Literary Patient (who is just about to receive a hypodermic of morphine): "Doctor, don't give me none of that Exile of Life."

THE DOCTOR'S PORTRAIT.—After his death, a physician's outstanding bills are rarely collectable. Many a one, with a large practice dies and his estate is found to be not worth admin-

istering on. According to Dr. Jarvis' tables, the average of the lives of physicians is fifty-six years. If you begin practice at twenty-four, your active-life prospect will be thirty-two years, and from a thousand to fifteen hundred dollars will represent your average yearly income. Now, were you (through God's mercy) to practice these thirty-two years without losing a single day, and collect (say) eight dollars every day of the time, you would receive but \$93,440. Deduct from that amount your expenses for yourself and your family, your horses, carriages, books, periodicals and instruments; your taxes, insurance, and a multitude of other items for the whole thirty-two years (11,680 days), and then, so far from being rich, even after this long and active life of usefulness, in this most important and honorable profession, after a whole life-time of scientific work, mental toil and slavery to our unrelenting taskmaster, The Sick Public; from the days of the dirty, unwholesome dissecting rooms, through all life's phases to old age: with not even the 1,564 Sabbaths to call your own—you would have but little, very little, left to support you after you naturally reach the downhill of life, or are broken down in health and faculties deteriorated, and in need of a physician yourself, through worry, anxiety, and fatigue in the discharge of your duty.—*Dr. Cathell in last edition of Physician Himself.*

"DOCTORS' ORDERS."—"Doctors' orders" are too often looked upon by the laity as arbitrary enactments of professional pedantry, which your true Briton shows "the freedom that runs in his blood" by defying or evading. Nor is this absurdity confined to the ignorant, for one often hears people who should know better boasting of their deliberate neglect of advice which they have paid a big fee to obtain. The moral which we wish to enforce has lately been pointed by a case which occurred in the London Hospital in a manner which we hope will bring it home, at least in some measure, to the public mind. A man suffering from typhoid had some grapes secretly given him by a friend, whom he asked to procure them for him. He became worse soon after eating them, and in three days he died from perforation of the intestine. The coroner trusted that the public would take warning by the case, and all medical officers of hos-

pitals and nurses will, for the sake of their own comfort, if from no higher feeling, fervently echo the wish. Melancholy and constantly repeated experience makes them dread "visiting days," as almost inevitably followed by general rise of temperature throughout the ward, and too often by intestinal disturbance of one kind or another. It is hardly to be wondered at that fruit, and even food, should be smuggled in by sympathetic relatives, for in convalescence from acute ailments the appetite is often ravenous almost beyond belief. This is naturally hailed by the friends as a sign of returning health, and it seems hard to withhold the food which is so eagerly craved for. It cannot be too widely known that, in typhoid fever especially, what is wanted before everything is rest for the ulcerated intestine, and unexpected death when everything seemed to promise speedy recovery has often been due to the clamorous hunger of the patient overthrowing the judgment of the medical attendant. If this can happen even to well-informed professional men, it is a thousand times more likely to occur to persons who have no knowledge of the patient's real condition, and only see his suffering. There is probably not a hospital in the kingdom in which relapses and disasters due to the ignorance of well meaning friends are not of frequent occurrence.—*Brit. Med. Jour.*

DR. OLIVER WENDELL HOLMES AT EIGHTY.—Dr. Holmes celebrated his eightieth birthday recently. His house was filled with children and flowers and the mementoes of friends. He was serene and happy, with just a slight infirmity in respect of his organs of hearing. He was able to illustrate, in his own person, his dictum made some months before, that it was "better to be eighty years young than forty years old." The year 1809 was no mean year, for it gave us Holmes, Gladstone, Tennyson, Lincoln, and Darwin. A newspaper paragraph has appeared stating that Holmes, the genial, has grown cynical in his eightieth year, and the writer sees fit to offer Dr. Holmes the suggestion that he should take up his own early writings and thus revert to his original type of thought. In the first place, we beg to doubt the allegation concerning Dr. Holmes' cynicism, unless, perchance, he had been reading some of his own books and

then reading some of those "just out"; almost anybody would feel like uttering a caustic word or two under those circumstances. In the second place, the advice to him to read his own books has no sting in it, as it might have to some authors who began by writing in a cynical vein and repented of it afterward. A characteristic little story about Holmes' early days at the Harvard Medical School has found its way into print lately. Holmes, it is said, was about to give one of his anatomical demonstrations—he had only recently come from the Dartmouth school to take his professorship—and he was surrounded by a small company of his colleagues, most of them of great stature in comparison with him; and he seemed for the moment or two at a loss for words. But finally he said: "Why, gentlemen, do you know that I feel a little strange here? I feel like a small silver coin rattling round among just so many great big coppers." That broke the ice, the constraint was dismissed, and the lecture went smoothly on. Holmes had no fear of giants, as was seen when he measured foils with Hodge and Meigs regarding puerperal fever as an infectious disease. As he himself has said, "I had a savage pleasure, I confess, in handling those two professors—learned men both of them—skilled experts, but babes as it seemed to me in their capacity of reasoning and arguing."—*New York Medical Journal.*

Births, Marriages and Deaths.

BIRTHS.

DIGBY—On October 10th, at Brantford, the wife of James W. Digby, M.D., of a son.

BRUCE—On the 10th October, the wife of Dr. P. H. Bryce, of a son.

MARRIAGES.

GARRATT—FLETCHER—On Thursday, Oct. 3rd, by the Rev. John Langtry, at St. Luke's Church, Mima M. Fletcher, to Alton H. Garratt, M.D., Toronto.

GILMOUR—EDGAR—On October 8th, by the Rev. E. B. Harper, D.D., Dr. J. T. Gilmour, M.P.P. for West York, to Maggie, only daughter of the late John Edgar, Esq.