

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.

- 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.

KINGSTON MEDICAL QUARTERLY.

VOL. III.

OCTOBER, 1898.

NO. 1

The KINGSTON MEDICAL QUARTERLY is presented to the Medical profession with the compliments of the editorial staff. Contributions will be gladly received from members of the Profession. JOHN HERALD, Editor.

THE QUARTERLY.

WITH the present number the QUARTERLY enters upon the third year of its existence. By the promoters of this journal it was felt that Eastern Ontario required and would support such a publication. We have been more than gratified at the manner in which the QUARTERLY has been received by the profession. Many have been the words of commendation received by us from our readers in various sections of the Province. These expressions of approval have been very gratifying and have confirmed us in our original belief that there was room in the world of medical literature for the KINGSTON MEDICAL QUARTERLY. During the two years just past we have received a number of contributions from those who are not on our editorial staff. These contributions were very welcome and most willingly published, both on account of their own value, and also because the QUARTERLY was started, not for the purpose of expressing the views of the staff alone, but more especially to be an avenue through which the practitioners of Eastern Ontario could communicate their opinions and relate their professional experiences for the benefit of their confreres. Had we not received such communications we would feel that the QUARTERLY had failed in the main object of its existence. Again we would renew our invitation to all practitioners to make use of the QUARTERLY. Articles upon purely technical subjects, histories of cases, or opinions upon matters relating to the welfare of the profession, are requested from our co-labourers in the field of Medical Science. The columns of the QUARTERLY are open to all such. We trust that many of our fellow practitioners will respond to this invitation during the current year.

In line 18, page 104, for "death
 In line 1, page 105, for "marti
 In line 8, page 105, for "practi
 In line 22, page 105, for "practi
 In line 27, page 105, for "functio
 In line 30, page 105, for "practit

LOW BIRTH RATE IN ONTARIO.

THE Anglican Synod at its recent meeting discussed the question of the birth rate in the Province of Ontario. In Ontario the number of births per 1000 inhabitants was stated to vary from 18 to 20 per year, while in the Sister Province of Quebec it averages 36 to 40 per 1000. The question was very pertinently asked Why this difference? Several reasons were advanced. Among which may be mentioned the economic reason that young men are now crowded out of employments formerly open to them and now followed by women and so, being unable to be sure of regular remunerative labor, they were loath to assume the responsibility of supporting a wife and a probable family. Another reason assigned was imperfect registration of the births which actually occur. We feel that both of these reasons play a part in producing the low birth rate, but we are confident that those combined do not fully answer the question, nor are they in our opinion the chief factors in producing the result to which the attention of the Synod was directed. There is another and a more important cause operating to produce this low death rate, viz.:—The means adopted by even married women to avoid pregnancy and, with shame be it confessed, to prevent the pregnancy, when it occurs, going to full term. In these loathsome and much to be condemned practices the women are not alone to blame. In many instances these practices are known to and shared in by their husbands. As this is a matter which comes more within the knowledge of medical men than of any other class in the community, we deem it to be our duty to express our opinion. It is not our intention to recite the various means adopted in the hope of preventing pregnancy as we do not deem such a course either necessary or in the public interest. Suffice it to say that there are few medical men in this country who have not been requested by patients to tell them what they can do to avoid having any more children. Such requests, be it known, are not made by the poor alone, or even mainly. Men and women in apparently fair circumstances are more apt to make such a request. The reasons given by these applicants for advice are either that the wife is in delicate health and is unable or unfit to bear children or that they cannot afford to provide for any more children. If either of these reasons be the true reason, in

th" read "birth"
 tial" read "marital"
 ctioners" read "practitioners"
 ctioners" read "practitioners"
 ctions" read "function"
 ctioners" read "practitioners"

any case abstinence from marital relations is a remedy which will attain the desired end without debasing both husband and wife. However much may be said against the practices adopted to prevent pregnancy it must fall far short of our condemnation of the practice of terminating pregnancy before full term. We do not wish to be misunderstood. The deliberate production of abortion upon married women is by no means rare in Ontario. How many medical practioners could give instances in which they have been importuned by married women to commit this operation! How often are medical men told if they won't produce the abortion some one else will! And, with shame be it confessed, some one else evidently does, as in those cases the pregnancy does not go to full time. More than this we believe that many abortions are brought about without the assistance of a medical man. Time and again the doctor is called in to find a married woman undergoing an abortion for which the doctor cannot and the woman will not assign a reasonable cause. The woman no doubt knows and the doctor undoubtedly suspects the real cause.—A deliberate attempt on the part of the woman to prevent the fruits of conception going on to maturity.

Have we exaggerated the actual state of affairs? We are sure the medical practioners of the province will answer no. These causes were referred to at the meeting of the Synod but were not dwelt upon. It is one thing to point out a cause and another to advise a remedy. How shall those abominable practices be rooted out? The men and women of this country must be educated to know and to feel that it is a woman's highest functions to perpetuate the species. The men and women must be taught that to indulge in connubial relations and at the same time to adopt measures to prevent conception is little, if at all, short of prostitution; that by such means the woman is dethroned from her honourable position of wife and debased to that of a concubine. Men and women must be taught that the destruction of a foetus is MURDER no matter at what stage of the pregnancy the abortion is produced. Who shall carry on this work of education? The medical practioners and the clergy. Speaking for the medical profession we are confident that as a class they have been doing their duty in this respect. There may be, we fear there are, exceptions to the general rule. They have their reward. Occa-

sionally one such comes under the lash of the law. All such are ostracised by their confreres. It is not for us to say whether the clergy have been doing their duty or not, but this we will say, the matter must not be minced. A feeling of modesty or prudishness must not prevent them from speaking in plain and unmistakable language. The sin is a grave one and we fear wide spread. Let the remedy be caustic.

MEDICAL COUNCIL ELECTIONS.

BEFORE the issue of the next number of the QUARTERLY the election of members to the Medical Council will have been held and the results known. In the selection of our representatives to this medical parliament it is surely our duty to choose none but the best. No consideration of local interest should enter into the determination of this question. We want honourable men; men of large experience; men of large intelligence; men of broad and liberal views; men who are conversant with the requirements of a modern medical education. We trust that only such will be elected. We care not from what part of a district the candidate may come. We care not at what school he may have been educated. If he have these qualifications he is fit to be entrusted with the responsibilities of the position for which he seeks election and ought to be supported. The next Council will have important matters to deal with. Let us mention a few. The Medical Curriculum. We have already in the QUARTERLY pointed out a few particulars in which the prescribed course of studies could be advantageously amended. We need not repeat them again.—Dominion Registration or Interprovincial Reciprocity—This is a most vital question and will demand the most serious consideration of the Council. We have already given our views in the QUARTERLY. We would prefer to see Dominion Registration if it be possible. We are not, however, wedded to this but would willingly accept any other scheme whereby the present anomalous state of affairs would be remedied. College Representation—Whether College representation is good or bad is not now the

question. College representation was a *sine qua non* for the formation of the Council. Without it the Council could not have been founded. It is a right granted to the colleges on condition of their giving up certain rights and privileges formerly held by them. To deprive any of the colleges of this right would be the grossest breach of faith. We are persuaded the profession as a whole would resent any such high handed act of injustice. We rely upon the profession electing only those candidates who will approach the consideration of those and all other questions in a broad, liberal and judicial spirit.

INTUBATION IN CUT THROAT.

A RECENT case has demonstrated the great value of intubation in cut throat where the larynx was very extensively injured. On the third of July last I was asked to see a patient who, with suicidal intent, had secured a small triangular piece of window glass. The incision through the skin was about half an inch in length, almost vertical and exactly in the middle line, beginning just below the pomum adami. The piece of glass had then been moved in various directions with considerable force so as to cut the alae of the thyroid cartilage into several fragments. The extent of the injury was not determined until the skin wound was enlarged. There was very little hemorrhage and the voice was not greatly affected.

To keep parts in apposition, and to prevent oedema and emphysema I decided to introduce a tube, which was done without difficulty. The smallest adult size was coughed out at once. The largest size was then used and retained without discomfort. The external wound was then closed. In a few days pus collected in a pocket necessitating a counter opening for drainage.

On the ninth day the tube was removed from the larynx, but dyspnoea came on at once and the patient would have been asphyxiated in a few moments had not the tube been hurriedly replaced. The closure of the external wound was complete on the nineteenth day and the tube was removed without any dyspnoea supervening.

The voice remained slightly husky. During the nineteen days the patient was fed by catheter through the nose.

The condition of the patient on the ninth day while the tube was out demonstrated the wisdom of its use from the first. There can be no doubt that lesions lower down in the larynx and in the upper part of the trachea can be simplified to a great extent by the use of intubation. With the tube in place the secretions are almost wholly kept out of the wound; air does not pass out and so emphysema is avoided; so much support is given by the tube to the injured parts that healing is facilitated, and the ill effects of coughing and deglutition neutralized; and lastly, as compared with tracheotomy for the relief of oedema which so often complicates these cases, it prevents any interference with the tube and so lessens the amount of restraint upon the patient.

J. C. CONNELL.

SPASM OF OESOPHAGUS.

THIS is a condition sufficiently rare to warrant the report of the following case which has in itself some unusual features.

Mrs. F., Aet. 26, in perfect health and with no neurotic history, took breakfast on a recent morning, and went about her household duties as usual. At noon, upon trying to take her dinner, she found it impossible to swallow, and for forty eight hours thereafter nothing whatever passed into the stomach. An examination was first made at this time—forty-eight hours after the onset. On attempting to swallow liquids there was an immediate regurgitation from the upper third of the oesophagus and persistent efforts to keep it down resulted in coughing, from the liquid finding its way into the larynx. There was evidently total inability to swallow. An uneasy sensation back of the sternum was the only other symptom.

An oesophageal bougie was at once used. The smallest size was first passed, there being considerable resistance through the middle third of the first passage. Then an attempt at swallowing water

resulted in failure. The third size was immediately introduced slowly through the stricture and then withdrawn with the same deliberation. After this some water was swallowed without difficulty and in a few minutes a light meal taken. There has been no return of the spasm.

The unusual features are—(1) the sudden onset without apparent cause; (2), the complete stenosis for the period, and (3) the total relief from dilatation.

Peristalsis of the oesophagus is controlled by the ganglionic plexuses which are connected with the medulla by fibres of the vagus. The function of the ganglionic nerves is motor, and the vagus is inhibitory. This is proved by the fact that section of the vagus produces continuous contraction of the oesophagus. Spasm of the oesophagus then may be caused—(1) by lesions involving the vagus and medulla; (2), by reflex irritations from other organs, and (3), by psychic influences, such as hysteria, and in sudden fright or passion. Careful enquiry and examination in this case failed to reveal any cause to which it might be assigned.

The complete stenosis, the uneasy sensation behind the sternum, and the amount of resistance encountered during the passage of the bougie would go to establish the existence of a tonic spasm of that portion of the oesophagus affected.

The largest bougie used to dilate the stricture measured half an inch in diameter and this passed slowly up and down was sufficient to overcome the spasm without the administration of any medicines.

J. C. CONNELL.

RODENT ULCER.

JUST two years ago I was consulted by an elderly gentleman about a small growth directly over the midsacral region, which he stated had been there for ten or twelve years. It had increased in size but very slowly, and had caused little or no inconvenience until recently, when the surface broke down and the consequent

discharge became a source of annoyance, chiefly on account of soiling his linen. The patient was about sixty-five years of age, a healthy looking man of very active habits. The history of tardy growth and the sudden breaking down of the surface, together with the clinical appearance—a sharply cut hard edge enclosing an oval raw surface, two inches in length by one inch in breadth—suggested the diagnosis, of that cancerous ulceration of the skin known as Rodent Ulcer, which frequently persists for years before developing malignancy. The patient was informed of the necessity for excision of the diseased portion of the skin and readily consented to the proposed operation. The situation of the Rodent Ulcer gave opportunity for free and complete removal by means of two elliptical incisions, going wide of the growth. This was done under chloroform anaesthesia, and the resulting wound stitched up without drainage. Recovery was rapid and firm union resulted. I saw the patient a few days ago. He is in perfect health and there has been no sign of any recurrence. The specimen was handed to Dr. W. T. Connell for pathological examination, and his report is as follows:—

“Specimens prepared for microscopic examination from the spreading edge and from the central part of growth. Examination of the spreading edge shows that line of incision has been made well outside of growth. The superficial layers of the derma show a slight amount of connective tissue proliferation passing nearly to line of incision. The stratum corneum and lucidum of the epidermis are greatly thickened and horny. There is a sharp line of demarcation between these layers and the layers of the rete Malpighii somewhat thickened and proliferated downward to a slight extent. The cells resting on the basement membranes are in active division.

“In the cutis vera we note irregular rows and clumps of cells almost certainly sudoriparous, arranged frequently perpendicular to skin surface. These clumps of cells are in places sharply defined off into alveoli by fibrous tissue, while in others they gradually shade off the outer edges of the clumps, being infiltrated with young round connective tissue cells. Deeper down and toward the part of section farthest away from line of incision we note a marked cicatricial subcutaneous tissue quite thick, with here and there sweat glands. Between this we note ordinary fatty lobules.

"In the specimens taken from the centre of the growth almost the same conditions were noted in the epidermis as in marginal specimens. The most superficial layers of derma were, as before, infiltrated with young connective tissue cells, while somewhat deeper we have again irregular clumps and groups of cells fairly well marked off into alveoli by plastic tissue. In these clumps of cells there can nearly always be noted what appears to be the duct of a sweat gland, the lumen occasionally patent, but usually filled with proliferated spherical cells, or at times cubical, and about this central duct are layers variable in amount of the same cells. These cells appear to be the same as those which commonly are found in the secreting portion of sweat glands. Here and there can be seen masses of these cells completely isolated and surrounded by dense fibrous tissue. Deeper we can note, in most specimens, isolated masses of such cells in an atrophic state. While here and there in the dense cicatricial tissue which underlies the cellular growth, can be seen groups of sweat glands embedded in fibrous tissue, each gland being as a rule separated from its fellow by a fibrous band.—Underlying cicatricial tissue we have ordinary fatty subcutaneous tissue.

"My opinion of this specimen is that it is that form of Chronic Cicatricial or Rodent Ulcer which grows from the sweat glands. A distinct rarity, even amongst Rodent Ulcers. Cicatrization is going on as fast as the new growth, and just as fast as the epithelial elements form, they are surrounded and closed in by young connective tissue cells, which limit their growth, finally leading to their atrophy and replacement by fibrous tissue. The process thus shown to be so chronic microscopically bears out the clinical history of this specimen."

SOME POST-MORTEM NOTES.

IN the course of post-mortem investigations one not infrequently comes across conditions which are both interesting and instructive. One here learns how life can accommodate itself to markedly changed conditions of its tissues or organs, more particularly if such a process of change be a slow one; and again one learns how little may suffice to terminate life. One finds, too, that it is not always possible by a post-mortem examination to clear up the cause of death and this, too, with the aid of microscopical, chemical and bacteriological processes.

It might, then, prove of some interest to cite a few notes from cases met with on the post-mortem table these past three years.

Amongst these notes I find three cases of injury to skull and brain, which are of some interest; two from the position of the accompanying haemorrhage; the third a gunshot wound, from the course of the bullet.

Case I., Post-mortem, Dec. 4th, 1895. This was the case of a man aged 35 years, who fell from a waggon while drunk, lighting upon the hinder end of the left parietal bone, over the parietal eminence, and dying 24 hours later, there being a serous discharge from right ear. At the point of contact there was a gash or, rather, a mass of pulped tissue about $\frac{3}{4}$ inch in diameter, the center of this spot being $1\frac{1}{2}$ inches outside mid line and $1\frac{1}{4}$ inches in front of lambdoid suture. A fracture line passed from an inch anterior to this backward and inward to the external occipital protuberance, thence opening up right limb of lambdoid suture, the parieto-mastoid, and then passed forward into squamous bone to a point just anterior to line of meatus. The petro-occipital suture was also opened up into the lateral sinus making at the same time a small opening through the dura mater. There was no extradural haemorrhage except a small clot—thimbleful—just under gash on left parietal bone. The right hemisphere of the cerebrum was found covered with from $\frac{1}{2}$ to $\frac{3}{4}$ inch of clot, most marked in the dependent portions. A thin sheeting was found about the cerebellum and the left middle fossa. The fracture, or opening of sutures, was thus mainly on the side opposite to which the blow was struck and was

due to the force of the blow being struck inward (i.e., toward mid line) and slightly backward and downward (in vertical position of body). The haemorrhage was subdural and markedly unilateral and came from the slit in the dura mater over the lateral sinus. All the other cerebral vessels including longitudinal sinus were found uninjured.

Case II., P. M., Feb. 11th, 1898.—Man falling from sleigh against a pole, striking right temple and right ear, dying 22 hours after. The right temporal muscle was found pulped beneath fascia. There was a most extensive fracturing of squamous plate and floor of middle fossa. There were two main vertical lines of fracture—one beginning 2 inches above and $\frac{1}{2}$ inch behind external auditory meatus passing down just in front of the superior border of the petrous bone to the foramen spinosum, thence to foramen ovale, and then passing forward to join second vertical line, sending one limb into the body of the sphenoid and a second into the sphenoidal fissure. The anterior vertical limb traced upward from in front of foramen ovale passes to hinder end junction of orbital plate of frontal with lesser wing of sphenoid, breaks off hinder $\frac{3}{4}$ inch of this plate and passes up in frontal bone, ending $\frac{1}{2}$ inch anterior to the termination of coronal suture (Pterion). These two lines were joined by horizontal lines at level of zygoma and through the centre of middle fossa. Short vertical lines passed between these horizontal ones breaking the floor of the middle fossa into 5 fragments. The bones of skull were markedly thin, being nowhere over $\frac{1}{8}$ inch thick. The middle meningeal was torn across at the foramen spinosum and there was extensive extradural haemorrhage reaching from midline in front and above to about 1 inch behind posterior fracture line, being $1\frac{1}{4}$ inches deep in middle fossa. There was no subdural or cerebral hemorrhage and no laceration of brain structure.

The advisability of operation was considered in this case but as compression symptoms were manifest from the outset, it was not considered feasible. Had such been done it would have been a difficult matter to control haemorrhage so deep seated without ligature of the carotid, and the extensive fissuring of the middle fossa would have militated against recovery.

Case III.—Post-mortem held Oct. 9, 1896, on a man shot with a 44 calibre revolver and dying in 4 hours. The bullet was fired at close range and entered $\frac{3}{4}$ inch below and $\frac{3}{4}$ inch to outer side of outer

canthus of left eye, passing through malar and superior maxillary bones crossing below middle fossa and entering petrous bone cut through it and the larger part was found protruding into lateral sinus at the point where it is joined by inferior petrosal sinus at the inner petro-occipital suture. About $\frac{1}{4}$ of the bullet had passed on cutting through left lateral lobe of the cerebellum and, rebounding from occiput, cut a slit through the tentorium and lodged in the hinder end of the left temporo-sphenoidal lobe. There had been extensive haemorrhage from the lateral sinus about the brain and externally through the external auditory meatus.

Cases of death while under chloroform are always of great interest. Not often do we find as well marked a cause of death as in the case appended, though it is a peculiar one. More often in such cases we find what are apparently trivial anatomical causes and not seldom do we find none at all.

Mrs. S., aged 59, expired in a dentist's office a few minutes after the commencement of chloroform anaesthesia for teeth extraction, the post-mortem being held June 15th 1897. Body weighed over 200 lbs. The heart weighed 12 ounces. The heart muscles red and healthy. The left chamber contracted on its contents and the valves competent. The aorta was considerably atheromatous. Just beyond the origin of the left common carotid artery, on the hinder portion of the transverse arch and the descending arch was an aneurysmal dilatation measuring 4 inches in the course of the aorta and being $1\frac{1}{2}$ inches wide. The walls were markedly diseased containing calcareous plaques and its walls were lined with a thin sheeting of fibrin. Where the sac came into contact with the spine it had eroded the 4th and 5th dorsal vertebrae and heads of 4th and 5th ribs—the 5th vertebra to the depth of $\frac{3}{4}$ inch. This aneurysmal sac had ruptured into left pleural cavity which contained 30 ozs. blood. Here then we had a pure accident, one which could not have been guarded against. For the aneurysm had never given any symptoms, and even were it looked for, its situation and size would make its detection by physical signs an impossibility. The coroner's jury brought in a verdict to the effect that the death was purely accidental and no blame was attached to the doctors for the administration of the anaesthetic.

Sometimes one notes cases in which putrefaction comes on very rapidly after death. A marked case of this I saw last Autumn (Sept.

29th, 1897) when I was called upon to hold a post-mortem on the body of a man found dead in bed. This man had been on a prolonged "spree" and according to the evidence of five men had been seen at five o'clock the evening previous, just before he went to his bedroom. At ten o'clock, two men who occupied the same room but different beds, came up stairs and found him snoring deeply. When they dressed in the morning they attempted to arouse the man and found him dead. They had heard no other noises during the night. I examined the body at three o'clock the same afternoon, i. e., within 17 hours after he had been known to be alive, and found it as advanced in putrefaction as we usually find a body in 48 to 72 hours in July weather. The temperature had not been above 72° F. Had the evidence of his being alive within 17 hours previously not been so convincing I would have sworn that death must have occurred at least 24 hours previously.

The post-mortem in this case was of some interest as the only evidences of the cause of death were the signs of suffocation, viz.:—the purplish discolored face and skin, the slightly protruded tongue, the froth in the mouth and throat, the engorged veins and the fullness of both heart chambers—both containing dark fluid blood. The tongue was clenched between the teeth and was slightly lacerated. There were not the slightest traces of any injury about the mouth, nose or throat; nor was there anything but froth in any part of respiratory tract. The body was found lying on its back with nothing over the face, but had been moved before I was called to see it. There were two possibilities; Death by gradual respiratory failure, owing to action of alcohol on the centres, or an epileptic seizure. I inclined to the latter, owing to the laceration of the tongue.

W. T. CONNELL.

CRANIAL INJURIES.

I DESIRE to present to your attention in this issue three or four cases of serious injury to the head which came under my notice in two consecutive summer's practice.

Case 1.—Harry W., a boy aged eleven, was thrown from a horse's back alighting on the top of his head on a hard macadamized road. I saw him one hour later and found a simple fracture of the left humerus and a compound fracture of the left parietal bone, the line of fracture extending down to the base of the skull. There was bleeding from the nose and ear, the right pupil widely dilated and complete unconsciousness. When I arrived a neighbor with a sloughing felon on his finger was engaged cleansing the wound on the boy's head. The dressings of the felon were saturated with water and were doing their share in the cleansing process. Every effort was then made to properly disinfect the wound, but the boy died on the 5th day from infection.

Case 2.—John W. S., a boy of seventeen, firing an overloaded shot-gun, the nipple blew out and the hammer was blown backwards with great force, striking the boy at the inner canthus of the right eye, breaking through the nasal bone and the nasal eminence of the frontal bone into the orbit. The orbital plate of the frontal bone was comminuted and the hammer was found firmly embedded in the orbit behind the eye-ball one and a half inches from the outside wound. It was carefully removed and brain substance was found adherent to the iron and was also noticed to escape through the fractured orbital plate of the frontal bone into the orbit.

Careful antiseptic cleansing with a loose packing of iodoform gauze was given the wound. The boy recovered consciousness in 24 hours and made an uneventful recovery without injury to sight or smell.

Case 3.—Mrs. C., aged 60, fell backwards down the cellar stairs and struck the back of her head on a large stone. There was a cut through the scalp one inch in length just below the occipital protuberance. Conscious for a few minutes, she soon passed into a state of semi-consciousness. Pupils reacted. There was no paralysis. Intra-cranial hemorrhage was suspected. The patient slowly regaining consciousness was able to recognize friends, when suddenly on the 5th day a rapidly extending paralysis, followed by death in a few hours, convinced me a further hemorrhage had occurred.

Case 4.—A. H., a young man aged 34, was thrown by a runaway horse head foremost on to a stone road and was carried into

his house unconscious. There was a very profound shock and bleeding from his nose, throat and left ear. Within a few hours he rallied from the shock. His nose, and throat, and ear were very carefully cleansed, antiseptically, and the ear carefully dressed with sterile gauze.

The following morning all the dressings were saturated with blood and large quantities of cerebro-spinal fluid were escaping and continued to escape for several days. On the second day there was considerable ecchymosis about the mastoid process anterior to it and extending upwards and backwards toward the occipital protuberance. The conjunctiva of the right eye became deeply injected, ecchymosis extending to the lids and out on to the face.

Diagnosis—fracture at the base of the skull, probably running through the petrous portion of the temporal bone, through the sphenoid and forward on to the orbital plate of the frontal bone.

The temperature rose from subnormal to normal on the 2nd day, subnormal on the second night and normal again on the 3rd day, and never went above 100° throughout his illness. Very careful antiseptic and symptomatic treatment throughout. The patient remained unconscious for three weeks, was very restless, at times requiring heavy doses of bromide and chloral. A gradual return to consciousness after the 3rd week, and by the 6th week he was able to recall the occurrences up to the date of his injury. Recovery is now complete.

The symptoms characteristic or diagnostic of fracture at the base would be following an injury either direct or indirect, to the skull, loss or partial loss of consciousness, hæmorrhage from the ear, and particularly escape of cerebro spinal fluid, which continues for some days, ecchymosis about the mastoid process usually not occurring for one or two days after injury, hæmorrhage from the throat and nose which is more continuous than ordinary nose bleed, but not so profuse. When the line of fracture involves the anterior fossa ecchymosis will appear about the second or third day under the conjunctiva of the eyeball and extend to the lids and frequently present the appearance of an ordinary black eye.

Upon no one symptom can a diagnosis be made, but usually when a fracture is present one can form a definite opinion

by the presence of several of these important symptoms. If compression exists the unconsciousness is more complete, the patient lies in any position placed and does not move unless a restless change of position of a leg or arm. He will not respond to questioning, does not talk. While in fracture without compression the patient, after shock has passed off, frequently talks incessantly, a senseless meaningless talk, and frequently moves and claws about the bed, and against any object within reach. In compression the pupils are usually dilated and do not respond to light, the pulse is slow, full and irregular with breathing slow and stertorous, but the symptoms which readily diagnosticate the condition are those of paralysis. The bladder and bowels are usually paralyzed and hemiplegia is common. The significance of localized paralysis is of great value in the diagnosis of the location of the lesion.

The treatment of fracture at the base may be simplified by remembering that a compound fracture exists, exposing a structure as sensitive as the peritoneum to the invasion of bacteria and that a toilet requiring even more attention than a laparotomy must be made if we expect to save our patient. The ear must be mechanically cleansed of blood and dirt and then disinfected by a stream of 1-1000 bichloride, then packed with sterile gauze and bandaged. At the same time as thorough disinfection as possible of the nose and throat will be obtained by thoroughly cleansing with sterile water followed by douching with a solution of Seiler's tablets in sterile water, and repeating the process daily. When compression exists, trephining under strict antiseptic precautions and elevation of the depressed bone will demand immediate attention. The field of cerebral localization is too exhaustive to admit of discussion in this article.

G. F. EMERY, M. D.

PRESIDENT'S ADDRESS.

KINGSTON MEDICAL AND SURGICAL SOCIETY, Oct. 3, 1898.

GENTLEMEN,—At this the opening meeting of my term of office, it has been thought advisable that I should address you, upon some matters which appear to me to be of interest to the practitioners of medicine in this Province. Before attempting to do so permit me to take this my first opportunity of thanking you for the honour you conferred upon me when you elected me your president. I must say that I would be inclined to doubt the wisdom of the choice then made were it not for the fact that by so doing I would be calling in question the good sense of those who deliberately and unanimously elected me as their executive head. Gentlemen, I assure you I appreciate the honour, and I will do all in my power to perform the duties of the office satisfactorily to you, and I trust that at the end of the year you will not have cause to regret your action in electing me your President.

With your permission I will now draw your attention to a few subjects which seem to me to be live questions, affecting the welfare of our profession.

In the first place I would ask your indulgence while I express my views upon the course of studies as prescribed by the Medical Council of Ontario. Believing that anything which affects the welfare and standing of the profession as a whole is of personal interest to each individual member of the profession, it appears to me to be the duty of each to express his opinions upon such matters and that in so doing he need not necessarily be actuated by a spirit of faultfinding. The best friend of the council, it appears to me, is he who, seeing where a change can be made that will be of advantage to the profession points it out, as I will endeavor to do, in a spirit of fairness and candour. A course of studies which ten years ago was the best that could be devised need not necessarily be the best that can be devised to-day. Especially is this true of medicine. Not only are new subjects of study coming into existence but the methods of studying some of the older branches of medical science have completely changed. A few years ago the science of Bacteriology was practically unknown; now it is a necessary part of every physician's store of knowledge. Pathology, until recently, was

studied in our schools from text books and lectures. Now the work is gone into in the laboratory. The same may be said of Histology. Medical and Surgical Anatomy, which a few years ago was considered as only of secondary importance, has now taken the place in the course of studies which its utility in the practice of medicine and surgery demands. Now all these additions and changes in the methods of teaching demand from the student a greater amount of application and a greater expenditure of time in the class room and, especially, in the laboratories. With this no fault can fairly be found unless it be that to some of these departments of study not sufficient time is allotted even yet. This criticism, I feel, may in all fairness be made as regards the time allowed in the curriculum for Pathology and Bacteriology. But, if the student had his time fully occupied before, how, it may well be asked, is he to accomplish his work now? In one of two ways. Either by decreasing the amount of work required in some of the departments formerly considered essentials of a medical education or of increasing the length of time a student is required to spend at college. As to the first alternative. Was there in former years any subject upon the medical curriculum which could, without impairing the course, be dropped altogether. The Medical Council has answered this question in the affirmative and has wisely dropped Botany. While no one will for a moment call in question the importance of Botany as a branch of a science education, I think it will generally be conceded that the usefulness of a physician of to-day is not impaired by his lack of knowledge of this branch of science. Can the amount of time required to be devoted to any other subject be curtailed not only without injury but with actual advantage. In my opinion, most assuredly yes. Under existing regulations the medical student, who wishes to practice his profession in Ontario when he completes his course, must devote no less than eighteen months to the study of Chemistry. I am of opinion this is more time than the relative importance of the subject demands and especially so when it is remembered that other and vastly more important subjects are allotted less time. I am not calling in question the utility of Chemistry as a subject of study even for medical students. I am free to admit that a certain knowledge of Chemistry is not only advisable but is actually essential to the medical student. Without a fair knowledge of the principles of Chemistry a student will not thoroughly understand

the incompatibilities of drugs and consequently will never master the art of prescribing; without such knowledge he will not fully comprehend the physiological action of the secretions of the body in health, nor be able to adequately explain their pathological import in disease; without such knowledge he will not be able to satisfactorily make tests of the various secretions and excretions of the body—a process which has now become such an important means of diagnosis. Granting that all this is true, it does not prove that Chemistry is entitled to receive more time than most other subjects on the curriculum. The general principles of Chemistry ought to be mastered in one course of six months. The methods of applying these principles to the practical purposes for which a doctor requires a knowledge of Chemistry ought to be mastered in a course of three months. This would reduce the time devoted to Chemistry by one half. This, it seems to me, would improve rather than impair the value of the course of studies now required of our medical students. Devoting less time to a minor subject the student would have more time to devote to those of much greater importance and utility. Especially am I forced to this conclusion when I remember that much of the practical Chemistry required by a physician is actually taught in other branches of the course. The incompatibilities of drugs is taken up in the class on *Materia Medica* and Practical Pharmacy. The modes of analyzing the various fluids and excretions of the body is fully gone over in the class on Pathology. With an elementary knowledge of Chemistry the student is capable of understanding and of satisfactorily making these tests for himself. I am, therefore, of opinion that much less Chemistry would be a great improvement in the medical curriculum.

The other way of making time for the extra work now required of a medical student is either to increase the length of the session or to increase the number of sessions. I will, with your permission, consider the latter alternative first. If by the fifth year of study were meant an extra session at some school or college not much exception would be made to the proposal. But that is not what is required. The regulation now is that "of the fifth year six months may be spent with a registered practitioner in the Province of Ontario and six months in some hospital, laboratory, etc." Now for the student who is fortunate enough to secure an

appointment in some of our hospitals the regulation is all right. There he gets a good practical clinical experience. But for those who do not receive such appointments (and they are by far the greater number) the case is different. In the majority of these cases, I venture to say, the fifth year is largely wasted. It may be objected that I am a school man and, therefore, prejudiced in favor of making the student attend another session at college. Allow me to say at once I am not in favor of a fifth year as prescribed by the Council or as suggested here as an improvement on the Council's requirements. I am strongly of opinion that four years are ample for an average student to acquire a fair knowledge of our profession. What I do maintain, however, is if we are going to exact from the student five years study, let us insist that his whole study shall be done at college, where his studies will be supervised and where he will be compelled to work.

The other proposal, that of increasing the length of the session, has met with more general approval. It is not, however, free from objectionable features. I think the advisability of keeping young men at a mental strain for eight or nine months continuously may fairly be called in question and especially so when by so doing we must necessarily have the beginning or the end of the session in warm weather. This, however, is not an objection which should override the other advantages of the proposal. Another objection to the lengthened session I consider as more serious. This is as yet essentially a poor man's country. As is well known many students, medical as well as others, acquire the necessary funds for the winter session by their labors during the summer months. Without disparaging those students who have not to work for the means whereby they are enabled to attend college, I think I will be borne out by those who have had opportunities of judging and who have considered the matter that as a general rule those students who have to earn the means which enables them to prosecute their studies are the best students. Now by having an eight or a nine months session you deprive these young men of the possibility of adding to their finances during the summer months. Of course it may be urged that any young man who has the right stuff in him will overcome even this difficulty. This may be true. But have we any right to add to the difficulties of these young men who, fortunately or unfortunately, were not born of rich parents?

I think not. Let us make the course as difficult as the requirements of the profession demand in the way of studies. But let us not pile up financial barriers against the poor but deserving student. Of the two ways of increasing the time of study, I must confess I am in favor of a fifth year provided we are sure that that year is actually devoted to study.

At the present there appears to be a general feeling amongst the medical practitioners throughout the Dominion that the existing system of registration is anomalous. As a consequence we find that the various Provincial Medical Societies and the Dominion Medical Association have been discussing and appointing committees to confer with each other regarding the possibility of obtaining reciprocity of registration between the various Provinces composing our Dominion. Could this be obtained on a basis satisfactory to each of the Provinces and on terms and conditions likely to be permanent, I am of opinion that it would be greatly in the interests of the profession as well as of the general public. Frankly, however, I must confess that I am not sanguine of such a consummation being attained. The requirements for registration in the various Provinces are at present greatly at variance. In order to bring about reciprocity each must yield a little. Those whose requirements are higher than others must be willing to come down and those whose requirements are lower than others must be prepared to come up. Even if by this process of leveling reciprocity were obtained, I am dubious of its success and permanency. Should any one Province in the near future wish to raise or lower its standard would it have the power of doing so without consulting the other Provinces or would it have to wait until it could persuade the other Provinces that such a raising or lowering of the standard was in the best interests of the profession. In the former case we would soon be back to our present condition; each Province would have a standard of its own differing from that of all others. Would the agreement then hold? I fancy not. In the latter case, no matter how anxious one Province might be to raise the standard it could not do so until it had brought the others to its way of thinking. I am much afraid in that case the standard would have to remain as originally agreed upon and advancement in the requirements for registration would practically become an impossibility. Were it possible to obtain it, a Dominion Licensing Board would be much better. Nor do I see

any insurmountable difficulties in the way of obtaining such a Board. I am well aware that at the time of Confederation all subjects pertaining to education were left under the control of the individual Provinces, and that the licensing of medical practitioners has always been regarded as an educational matter. No change can be made in this arrangement without a change in the British North America Act. Is this impossible? Were the Dominion Medical Association and the various Provincial Medical Associations that are favorable to the scheme of a Dominion Board to circulate petitions among the practitioners of their respective societies and were they to use their influence in educating the profession up to this idea, I am persuaded that soon a vast majority of the doctors in the Dominion would sign such a petition. Would the Provincial Legislatures, would the Dominion Parliament disregard such petitions if at all unanimously signed? These bodies, then, recommending to the Imperial Parliament that in the opinion of the medical practitioners of the Dominion (with which opinion they agreed) it would be advisable to amend the British North America Act so as to place the power of licensing medical practitioners in a Dominion Board, would the Imperial Parliament refuse to grant such a request? This appears to be the only means whereby a Dominion Board could be established. A Dominion Board would be much better than Provincial Boards with reciprocity. In the former case the Board could make changes in the requirements for a license whenever it saw fit to do so—progress would be easily attained. In the latter case, as I have endeavored to point out, the requirements for a license would either remain as originally agreed upon or we would rapidly revert to the state of affairs existing before reciprocity was established. More than that, Canadian practitioners, were there a Dominion Licensing Board, would be granted privileges throughout the British Empire which they are now denied. In all respects, it appears to me, a Dominion Licensing Board is to be preferred to Interprovincial Reciprocity.

Another matter which I desire to bring to your attention is the representation of the profession in the Council. We are about to have another election. As many matters of prime importance are likely to come before the next Council it appears to me that now, as never before, should we be careful in our selection of representatives. No local, no school prejudices, should be allowed to warp

our judgment in this election. We want men of known probity ; men of large and liberal views ; men of wide experience ; men who are conversant with the requirements of the profession ; men who will approach the consideration of all questions coming before the Council in a judicial rather than in a local or party spirit. In our profession many such men are to be found. Let none others be elected. The next Council will undoubtedly be asked to consider the question of college representation. As you know at the last meeting of the Council the right of the Medical Schools to send representatives to the Council over and above the representative of the University with which each Medical School was affiliated or of which it formed an integral part was attacked and an attempt was made to deprive those schools of their right to representation. The argument of those members of the Council who were opposed to the Medical Schools being represented was, as far as I could understand it, as follows :—When these schools were separate and distinct institutions they were entitled to separate representation but now that they have become integral parts of the Universities with which they were formerly affiliated they had forfeited that right—the University representatives becoming their representatives To illustrate : Queens University was entitled to a representative. The Royal College of Physicians and Surgeons, affiliated with Queens, was entitled to a representative. Now, however, the College has become the Medical Faculty of the University and, therefore, the University and the College are together entitled to only one representative. Surely this is not good logic. If the individual parts of the whole were entitled to representation (and this is apparently granted) surely the whole is entitled to as much representation as were its component parts. Again those opposed to College representation alleged that by becoming the Medical Faculties of the Universities the colleges have lost their identity and have given up their rights and privileges as conferred upon them by charter. Not so. To illustrate again : The Royal College of Physicians and Surgeons, Kingston, is now the Medical Faculty of Queens University, but it is still the Royal College of Physicians and Surgeons and as such exercises the functions conferred upon it by charter. It still, as formerly, grants its Diplomas totally independent of the University. Even, therefore, by the reasoning of the opponents of College representation the Royal College of

Physicians and Surgeons is still entitled to its representative. I, however, deny the truth of the position taken by the opponents of College representation. Two separate bodies were at the formation of the Council guaranteed representation. These two bodies have agreed, upon certain conditions, that it would be mutually advantageous to them and to the cause of medical education—to combine their forces—the one becomes the Medical Faculty of the other. The united body is entitled to all the rights and privileges to which its component parts were formerly entitled. Such representation was guaranteed to the Colleges at the time the Council was founded and, if this representation had not been so guaranteed, the Council would never have existed. To deprive these Colleges now of their representation because they have entered into closer relations with their respective Universities for the benefit of medical education and, therefore, for the benefit of the Profession, would be a high handed act of injustice and a gross breach of faith. Such action, I am persuaded, the Profession at large would never endorse nor the Legislature permit.

And now, gentlemen, allow a few words regarding some of the present day fads and forms of quackery. My opinion is that the general public are more interested than we. They are the sufferers. I think it was Barnum who said the people like to be gulled. In no other department are they more easily "taken in" than in the healing art. No matter how monstrously absurd the mode of cure proposed may be, there will be found some ready to pin their faith to it. And this reliance for cure upon absurdities is not confined to those who are ignorant in other departments of knowledge.

I have known a gentleman learned in the law wear a metal ring upon his little finger to keep away the rheumatism. I have known a successful merchant of more than ordinary intelligence carry a horse-chestnut in his pocket for the same purpose. When such manifold absurdities find favour with those who by education and intelligence would be expected to know better, can we wonder that associations composed of those who are ignorant of the first principles of medicine but who preach some mode of cure as miraculous as it is ridiculous and organizations of men who make a business of preying upon the credulity of the people readily obtain followers and dupes. Again as we read in the daily press the wonderful accounts of cures effected by the use of this or that

proprietary medicine, need we wonder that people who are anxious to be gulled readily swallow both the stories and the medicine. What should be our attitude to all these? Let them alone. They will have their day and will be succeeded by fresh fads and new nostrums. With the people who deal in these fads and proprietary medicines I have no particular quarrel. They are playing upon the credulity of the people and are in this way making their living. While it is our manifest duty to refrain from the use of any preparation the exact composition of which we do not know and to warn the laity against its use whenever our opinion is asked, I do not think we are called upon to enter upon a contest with the proprietors of such preparations. These people are making their living out of these nostrums and in my opinion are not so much to be blamed as are those who constitute themselves their unpaid agents. Most of you, no doubt, have been informed in the course of your professional duties that So and So has recommended such and such a preparation. These unpaid agents are not always the illiterate or the ignorant. Let me give one instance: A pastor calling upon a lady member of his flock finds that the baby is fretful and restless as it is undergoing the painful process of cutting its teeth. He recommends the mother to give it a certain proprietary medicine and is informed that her husband and the doctor object to baby's taking any such medicine. He at once replies never you mind just give the medicine. While not questioning this pastor's faith in his favorite nostrum, I must say I doubt the propriety of a minister of the Gospel advising a wife to act contrary to the expressed wish of her husband. How would he like it if the doctor would endeavor to persuade his wife to act in this way. There is an old saying that the cobbler should stick to his last. In the same way, it seems to me, the preacher had better stick to his preaching and leave the practice of medicine to the doctor. This is but one sample of what I would call free advertising of proprietary medicines and of gratuitous interference with a profession which requires a special training. This sort of advertising I do not wish to imply is confined to the clergy. I have merely recounted this incident as a sample of what you know is going on every day. Many people know all about the practice of medicine until they become really sick themselves. I do not attempt to point out a remedy for this state of

affairs. When we rid humanity of superstition, we will cure them of their faith in fads and nostrums.

Finally, allow me to make a few remarks upon the conduct of members of our own profession. We are not all, I am afraid, entirely free from the suspicion of quackery. Occasionally we read in the daily papers glowing accounts of wonderful operations performed by such and such a doctor and of miraculous cures effected by some other member of the profession. If medical men are capable of performing these great feats in the healing art, they do not require such advertising. Their deeds will speak for them. Again, gentlemen, ours is supposed to be an honourable profession and the members thereof ought to be honourable men. Every now and then, however, we hear murmurs that such and such a doctor has acted unfairly toward another member of the profession. Surely this is not as it should be. I am well aware that many of these little frictions would be avoided, if the parties concerned could only come together and talk the matter over. The mountain, in many cases, would be found to be only a mole-hill. Our motto so far as concerns our relations with other practitioners should be "Do unto others as ye would that others should do unto you."

Now, gentlemen, I have perhaps wearied you. If so, I apologize. My aim has been to bring under your notice a few matters which appear to me to be of importance to members of our profession, and this I have done mainly in the hope that what I have said will provoke discussion. In your remarks I trust you will be as frank as I have endeavoured to be. Gentlemen, I thank you for your attention.

NOTES ON OPERATIVE WORK IN SOME OF THE NEW YORK HOSPITALS.

THE following notes of surgical cases were made during a recent visit to New York Hospitals.

Asepsis :— Most of the surgeons use rubber gloves and these are sterilized either by placing them in cold water and raising it up to the boiling point or by washing in alcohol and keeping them in 1-1000.

bichloride. The hands are rendered aseptic by mechanical cleansing, using also in some, as in the Presbyterian and St. Luke's the chlorinated soda method and in others the ordinary alcohol, bichloride, and sterile water. I did not see the permanganate method in any of the hospitals visited. The instruments are exposed dry on a sterile towel during an operation and very little douching is employed, generally only a pad out of sterile water.

At the Roosevelt hospital I saw Abbe, who usually exhibits the patients he has operated on at the previous clinic. The first case presented was a patient on whom he had operated the week before for tubercular disease of the ankle. The parts looked exceedingly well in view of the extensive operation performed, as he had scraped away the astragalus, lower ends of tibia and fibula and the greater part of the os calcis. He stated that a common cause of the recurrence after these operations was the form of curette employed. The ordinary instrument grinds the tubercular material into sound bone thus starting up new foci, and this he avoids by using a flushing curette.

The next patient was a boy who had been at the clinic the previous week with a depressed fracture of a very slight character, but who had marked cerebral symptoms—apathy, slow pulse, etc., so he trephined and, on raising the bone a considerable quantity of bruised cerebral tissue exuded. The great injury to the cortex and the slight injury to the bone was explained by Abbe by considering the cranium as a rubber ball which, when struck, is indented, but which quickly springs back again. The head to day presents a hernia cerebri and the patient will require to be watched, as the danger in his condition lies in the formation of a subcortical abscess and hence any symptoms of increased pressure must be met by inserting an aspirating needle into the cerebral tissue to give exit to any pus formed.

He presented a patient next who, eleven days before had fractured the patella of right leg. In Abbe's opinion the advantages of surgical interference over the expectant plan are not enough to warrant the former, unless the surgeon is absolutely certain of his asepsis. The best time to operate is the tenth or the eleventh day, as by this time the inflammatory processes have about subsided. He made an incision across the patella and between the fragments. The aponeurosis covering the patella was found torn across and the

edges of it drooped over and covered the fractured surfaces. This is what is usually found in the fracture and explains the want of bony union so common at this point. The edges of this aponeurosis he trimmed, washed out the clots from the joint and tissues around the joint, and, with catgut, united the lateral expansion of the aponeurosis and that portion covering the bones and completed the operation with mattress sutures of catgut, using a drain at each angle, of rubber tissue. This drain is removed in three days and passive movement allowed in four weeks.

The next was an appendicitis. He mentioned as an important diagnostic sign of appendicitis the rigidity of the lower part of rectus as compared with the upper part rigidity found in gall bladder trouble. In removing the appendix the top was torn off as it was adherent and in walling it off with the gauze he stated there was always a possibility of causing adhesion and strangulation if we were not careful in using the gauze against the small intestines, but as far as the large is concerned no such danger exists. His treatment of the stump was to invert the mucous membrane after ligating the mesentery and dividing the appendix and then with two Lambert sutures of black silk to close the serous layer.

The next patient was a soldier who had been wounded at the charge of San Juan Hill—A Mauser bullet having comminuted the left clavicle and lodged somewhere in the chest. An X ray showed it to be near the sternum and in the first intercostal space. To locate its depth he probed with an electric bullet finder whereby one can hear a click if the probe—a sterilized hat pin—comes in contact with the bullet. The hat pin must have been frequently passed during the search through the larger blood vessels, and on two occasions he remarked, "Gentlemen, the pin is now through the aorta as I can feel the impact of the blood current." The procedure is apparently harmless if the needle be aseptic, as I saw the patient at the clinic the following week and he had suffered no ill effects.

Abbe, in doing the suprapubic operation does not use either vesical distension or the rectal bag and as the next two cases were vesical calculi we had an opportunity of seeing the operation done. He, with blunt scissors and his forefinger, works down behind the pubic bone and raises up the peritoneum and prevesical plexus of veins. The catheter inserted in the incision is sutured to the skin and

clamped with a safety pin and through it the bladder is irrigated twice a day.

The next operation was on a female about 60 with a faecal fistula connected with the transverse colon and sigmoid. He dissected the edges of the fistula down to their margin and inverted the flaps so that the raw surfaces were in contact and then sutured them.

At the German Hospital I saw Kiniali do two gastrostomies by the Witzel method. After exposing and incising the stomach he inserted a large catheter and proceeded to sew up the serous coat of the stomach until three tiers of sutures were built up alongside the tube and then the serous coat was sutured to the marginal peritoneum. The first was done under Schleich's method of local anaesthesia and the second under general anaesthesia.

At St. Luke's, Curtis did an abdominal hysterectomy for uterine fibroid and three appendicitis operations. The next patient was a child aged 4 who the evening before had presented some abdominal symptoms but this morning showed evidences of collapse. He opened the abdomen at the linea alba. There was a general septic peritonitis present, but the appendix was not involved so he made two counter openings one in each flank and douched out the cavity thoroughly. Before and during the operation the child was almost moribund, but was revived by occasionally washing the stomach out with hot saline solution (no doubt for its stimulating action on the solar plexus, as well as, for the amount absorbed which, however, would necessarily be very little from the weak state of the circulation).

The next two cases were for curettement and perineorrhaphy. In one there was a considerable rectocele so he built up the perineum by buried sutures of catgut. In the latter he also did an Alexander operation. After freeing the round ligaments he, by an ingenious little instrument called an Abbe holder, somewhat like a Cleveland suture carrier, used the round ligament as a suture and with it sutured the sides of the external ring.

A female patient with a vesical calculus was the next. This patient had also prolapse of the urethral m.m.—the so called urethral caruncle. He removed the stone by litholapaxy and treated the caruncle by excision of the m.m. as in Whitehead's operation for

piles. The last was a herniotomy in which he did a McEwen operation by twisting the sac up with a catgut suture, and, making a depression for it under the internal oblique at upper end of wound, held it there by a stitch through the skin with the end of the catgut suture he employed for the sac.

At the Ruptured and Crippled Hospital Coley in his usual skillful manner did several herniotomies (Bassini's). He told me that he and Bull had done 525 Bassini's with only 5 relapses—three in adults and two in children. One can see a great variety of orthopaedic work at this institution also. At the N. Y. School of Clin. Medicine, Valentine illustrated his method of urethral irrigation for gonorrhoea. The operation is simple and the procedure apparently harmless. He uses 1—3000 permanganate for ant. urethra and 1—6000 for post urethra and bladder. He considers that many cases of gonorrhoea, which are apparently cured, but which suddenly break out again, are due to foci in the vesiculae seminales and prostate, and for this condition he illustrated massage of these structures.

At the Post Graduate Lloyd did two herniotomies (Bassini) and three appendicitis operations. In the latter he sweeps the finger towards the caput from the outer side and hooks up the appendix. He treats the stump by incising the serous coat $\frac{1}{2}$ inch from base before division and folds it back like a sleeve. Then, taking two sutures through the mucous membrane to hold the appendix up, he cuts it off and touches the lumen with ac. carbol. Next he tightens these two sutures and inverts the folded back peritoneum by Lambert's suture, and to make all secure folds the whole of the base by Lambert's suture back into the caecum. At the same institution Phelps did an excision of the hip for tubercular trouble and exhibited a child on whom he had operated the week before for congenital dislocation.

At the City of New York Hospital Stimson did two operations for appendicitis in the usual manner and a sarcoma of the nasal mucous membrane, which had penetrated the super. maxilla and orbital plate.

At the Polyclinic, Tuttle used Kelly's rectal tube by which an ulcer high up in the sigmoid could be clearly seen, as well as the entire mucous membrane of that portion, and Van Arsdale

treated indolent ulcers by a thick pad of sterile gauze, on which diachylon oint. had been spread, and fenestrated to expose the ulcer and over this, to cover the ulcer, another thick pad of gauze with castor oil and Peruv. Bals. The whole was then firmly bound to the limb.

Ether was the anaesthetic used in all the above institutions with the exception of the German Hospital, at which ether and chloroform mixed according to their molecular weight were used. The abdominal toilet was as follows: The peritoneum was sutured with catgut, then the muscular planes with chrom. gut and the skin with catgut. Nothing was allowed to touch the wound but the instruments and the sponges and the latter were not used a second time during the operation but were immediately cast aside, Iod. or plain gauze next, and then, thick pads of sterile cotton were placed on the abdomen. Broad strips of adhesive plaster firmly hold the dressings and over all a scultetus.

I did not see any of the operators examine the stump of the appendix with a probe to ascertain whether it was patent or not.

D. E. MUNDELL.

ANEURISM OF THE AORTA—A REMARKABLE CASE.

THE following case of aneurism is remarkable principally in its mode of causing death. As far as I can learn no similar case is on record.

The subject, J. G., male; age at death 62 years, was an inmate of Rockwood Hospital for the Insane during the last twenty-eight years of his life. He had been a soldier of dissipated habits and had an undoubted history of Syphilis. More than this of his previous history is not known.

For over twenty years he was one of the most trusted, tidy and useful patients in the institution, and was very active, taking daily walks of several miles in all kinds of weather. His duties were not arduous, being those of cook and dining room man.

About the year 1892 a spreading ulcer appeared on the forehead which resisted all treatment until the Iodides of Potash and Mercury were given when it rapidly healed. The treatment was continued for several months and there was never any reappearance of the trouble. With this exception he had not an ailment during his long residence in the Hospital and it is not recorded or remembered that he was laid up for even one day by sickness, until the day of his death. Latterly, however, he lost much of his old time energy and for some months took his accustomed walk only when the weather was fine, but he never complained and performed his usual duties the day before he died.

On the morning of May 28, 1898, he complained of a severe pain in the lower part of the left side of the chest. Examination revealed that he was suffering from an attack of acute pleurisy in its first stage. Temperature 100° ; pulse 80; respiration, 25 per minute. At noon the pain was so severe that it was necessary to give him Morphia, gr. $\frac{1}{4}$ hypodermically to quiet him and keep him in bed.

This with counter-irritation had the desired effect and he became comparatively comfortable, but did not sleep or even become drowsy. The heart's action was very strong, each contraction causing the chest to vibrate in a very noticeable manner. The organ was thought to be hypertrophied, but percussion the patient would not allow. At ten o'clock, p.m., he was restless, the pain having returned in a moderate degree. He was given a second $\frac{1}{4}$ gr. Morphia by the nurse who then left him for a minute to get him a drink. On her return she found him profoundly unconscious and breathing very irregularly. The condition was at first naturally attributed to the Morphia, but after reflection this idea was abandoned for the following reasons: The pupils were normal; the whole quantity given ($\frac{1}{2}$ grain) had been administered in two doses with ten hours interval between; the first dose had produced very little effect; the onset of the unconsciousness was so very sudden and it was profound from the first.

The temperature was still 100° ; the pulse 80 per minute, regular and strong. The respirations were slow, irregular and laboured, 10 or 12 per minute. After continuing in this state for seven hours he died, the heart's action continuing strong almost to

the last. The urine had been drawn by catheter and found normal, 2% urea being present.

Post Mortem Examination—six hours after death. Head—Dura Mater thickened and adherent generally to the surface of the brain; Sub-arachnoid fluid in abundance (These are the conditions found in a greater or less degree in most autopsies of the chronic insane). No gross lesion of the brain itself was found. Abdomen—Old peritoneal adhesions were very numerous throughout the abdominal cavity. No fluid present. Kidneys—gross appearance, normal. Liver—51 oz. A typical “nutmeg” liver. Thorax—The right lung was with difficulty removed, old pleuritic adhesions being present everywhere. The lung weighed 30 oz., was very much pigmented and oedematous. To the lower part of the outer surface of the left lung were delicate adhesions as the result of a recent pleurisy. The lung, almost black in color from pigmentation, could not be detached without tearing from a hard mass felt behind. When detached it was found very much atrophied and weighed but 12 oz. Otherwise it was normal.

The heart, viewed in situ, was found slightly enlarged and slightly displaced to the right. Pericardial fluid was normal in quantity.

To avoid injury the heart, thoracic aorta and left lung were removed together, dissecting the artery from the spine from below upwards. The last structure to be divided in the removal were the common carotids and subclavian arteries. They were, when divided, the most dependent portion of the mass as it was held. Immediately a stream of almost pure pus issued from the vessels. Removing the lung two large distinct aneurismal dilatations of the thoracic portion of the descending aorta were exposed and it was to these the lung had been so adherent. From a small cut in the upper aneurism pus issued. Enlarging this opening an extensive abscess cavity was found occupying the position between the vessel wall proper and the fibrin deposit, and at the lower part where the deposit was thinnest, and resistance least, the separation between the vessel and the clot was complete, forming a communication between the abscess cavity and the lumen of the artery. It is evident that a large quantity of pus suddenly found entrance to the blood-stream and the coma and speedy death of the patient are

thus explained. Blood-pressure being diminished in the aneurism the pus would more readily enter into the circulation.

No erosion of the spine existed and the left lung was the only organ which showed pressure effects. Dr. Clark made an excellent photograph of the specimen and from it was obtained the accompanying illustration which will convey a better idea than words of the form and size of the aneurisms.

DESCRIPTION OF THE SPECIMEN.

The heart is slightly enlarged and fatty, the valves normal. The aorta is atheromatous and the arch dilated, its lumen measuring $1\frac{3}{4}$ inches in diameter. The first aneurism occupies the highest portion of the descending aorta. Its length is 5 inches; greatest breadth 5 inches and greatest thickness $3\frac{1}{2}$ inches. Although no microscopical examination of the walls has been made it appears to be a true fusiform aneurism and contains a well organized, laminated, coagulum through which the blood-stream flowed. The clot is quite decolorized in the outer part but not so much as towards the centre, and the innermost layer was easily detached. It is $1\frac{1}{2}$ inches in thickness, anteriorly by $\frac{1}{2}$ inch latterly and posteriorly. The lumen is $3\frac{1}{2}$ inches in its transverse and $1\frac{1}{2}$ inches in its antero-posterior diameters in the largest part. The vessel wall is very atheromatous and friable. The second aneurism is situated immediately below the first and is four inches in length, two inches in thickness and in breadth at its largest part. It also contains a well organized clot $\frac{3}{4}$ inches in thickness anteriorly but only $\frac{1}{2}$ inch latterly and behind.

The clots themselves, apart from the vessel, form strong tubes, and the patient would undoubtedly have lived for a very considerable time had it not been for the accident of suppuration of the sac. The abscess had apparently commenced behind and extended latterly on both sides, so as almost to encircle the coagulum. Its origin can only be conjectured. There is no history of an injury to the back of the patient.

The specimen has been presented to the museum of Queen's College.

JOHN WEBSTER.



THE AMERICAN PUBLIC HEALTH ASSOCIATION.

THE twenty-sixth annual meeting of this Association was held in Ottawa September 27th to 30th. This Association comprises members from the three divisions of this continent, Mexico being represented at this meeting by seven delegates, Canada by about twenty, and the remainder of the 70 members coming from the various States of the Union. The sessions were held in the Railway Committee Room, of the Parliament buildings under the Chairmanship of the President, Dr. Chas. A. Lindsley, Secretary of the State Board of Health of Connecticut.

On the first day the Association proceeded to a discussion of methods of sewage disposal, the subject being considered more particularly in reference to the prevention of water pollution by permitting untreated sewage to flow into rivers, streams or lakes. Dr. Bucke, of London, Ont., described the method of disposal of sewage at the Insane Asylum there, where the sewage flows upon the farm (properly underdrained). The system works admirably, and even in winter months filtration goes on (under a surface scum of ice), the heat of the sewage sufficing to keep the ground open. Various methods in use in other cities, such as filtration over coke, coal, etc.; precipitation and other chemical processes were described. No one method could be passed upon as being the best, as different localities required different methods. It was reiterated that methods which prevented pollution of air and water supply, while at the same time they retained as much as possible of the manurial value of the sewage at the least expense consistent with efficiency were the methods which should be adopted.

Professor Shutt, of Ottawa, in reading a paper on the Farm Well says that the vast majority of these wells show organic pollution, while quite a large percentage furnish water which is but little better than that from cesspools. It can be readily seen in view of recent researches that once such a disease as typhoid fever establishes itself in a rural community—it will find in such farm well and in the surrounding polluted soil, conditions under which its microbe may remain alive and continue to be for years a point from which the disease may be propagated.

Yellow Fever occupied a great part of Wednesday's morning session, but to us it is non-interesting. The committee on the

causes and prevention of Infant Mortality, amongst other items, unhesitatingly condemned the long tubed nursing bottle. Here in Ontario, long ago, we recognized the impossibility of keeping this appliance clean and did not permit its use by our patients. In a paper and discussion on Bovine Tuberculosis, but little new was brought out. Dr. De Schweinitz demonstrated a new method of staining tubercle bacilli by the use of an 80% alcoholic solution of Sudan III for 5 to 10 minutes, followed by washing in 70% alcohol. This method stains the tubercle bacillus only—but the doctor did not state its action on *B. Leprae*. A differential stain can be employed with it.

On Thursday's session one of the Mexican delegates read a paper calling for compulsory vaccination. The consensus of opinion was that while the State could not properly force parents to have their children vaccinated, yet the method adopted in several States and in our Provinces (though not enforced) of preventing the attendance at school of non-vaccinated children was worthy of adoption. At the afternoon session the important question of disinfection and disinfectants was discussed. The reports on the conditions of greatest efficacy of various disinfectants were quite voluminous. Prof. Robinson, of Maine, simply gave a short abstract and in it he touched upon the well known fact that dry sulphur gas has no disinfectant properties, but depends for such on the union of the sulphur dioxide with water forming sulphurous acid, which is disinfectant. So that to disinfect with sulphur one requires to turn steam into the apartment or at least to have all possible surfaces, moist. Dr. Johnston, of Montreal, and Dr. Hill, of Boston, showed quite ingenious and easily adaptable means of testing, practically, the efficacy of disinfection. Dr. Ghermann, City Bacteriologist, of Chicago, spoke of the methods used to disinfect tenement houses and rooms by the use of Formaldehyde gas. The method adopted is to close up the room, hanging a large sheet through the centre and spraying on sheet with atomizer about 120 to 150 c.c. Formalin, taking care to keep the small drops of Formalin discrete so as not to soak the sheet, as in the latter instance the solid polymer paraform is formed in some amount and a portion of the gas is thus lost. The room is closed for four hours. Dr. Ghermann describes the method as fairly efficient, rapid, comparatively cheap, and well suited for room and surface disinfection.

At Friday's session the first paper dealt with Flies, particularly the house fly, as a means of spreading diseases, more particularly Typhoid and Dysentery, in which the infective agents are given off in the excreta and which are caused by infection of the food or water supplies. These reports dealt with several local epidemics of these diseases believed to have been so spread. The recent report of the United States Commissioners on the outbreak of Typhoid in the soldiers, at the Chickamauga Camp, as is well known, ascribed to flies the role of infection carriers. Last August the reporter examined into the causation of an outbreak of "bad" cheese in a factory in the county of Northumberland and it was patent that flies were in this case the carriers of certain putrefactive bacteria to which the foul cheese was due. Nearly all the remaining papers of this, the closing session, were read by titles only, owing to scarcity of time. All will be published in full in the transactions of the Society.

The city of Ottawa officially, and the citizens privately, did all in their power to make the Association welcome, and right well did they succeed.

THE KINGSTON MEDICAL AND SURGICAL SOCIETY.

THE Society resumed its monthly meetings after the summer vacation, on Monday, October 3rd, the President, Dr. Herald, in the chair, and 14 members present. The report of the committee appointed to formulate bye-laws to govern the Society in matters of general medical defence of its members was adopted, viz:—That a clause be inserted in the constitution of this Society pledging support to any member thereof, against whom an action may be instituted for malpractice, or for damages on account of an opinion expressed in the discharge of his professional duties; provided that in each case this Society, or a committee thereof, on investigation, find such charges to be ill, or wrongfully founded. The Committee on an open meeting were unanimous that such a meeting should be held and advised a date in January as the best period to hold such. To this meeting practitioners from the sur-

rounding counties are to be invited. Drs. Garrett, Abbott, Ryan, Forster and the President, were continued as a committee to conclude arrangements for such meeting.

Dr. Herald showed a case from his ward of grave anaemia, with marked venous bruit over neck and abdomen, and aortic (abdominal) pulsation. The blood showed the characters of a pernicious anaemia.

Dr. W. T. Connell showed a specimen from a man aged 70, showing carcinoma of prostate and vesiculae seminales upon which acute suppurative cystitis leading to the surgical kidney had supervened. The pelvic and retroperitoneal glands were the seats of metastatic deposit and were also suppurating. The veins of the vesical and prostatic plexuses were thrombosed (suppurative phlebitis).

The President then delivered the annual address, which is contained in full in this issue of the QUARTERLY. This paper provoked a spirited discussion amongst the members. All present agreed that Chemistry occupied an undue proportion of the curriculum in relation to its importance. Dr. Wood believed that 6 months on theoretical and 6 months on practical would meet all requirements, but he would not have the time further reduced. Dr. Forster thought that the time for theoretical chemistry was previous to entering upon medical studies. Dr. Clarke thought Dr. Herald did not go far enough in his paper. He believed that only teachers should examine upon medical subjects—and pointed out how impractical and in some cases absurd questions at times appeared on the Council examination papers. Dr. Clarke's views were accepted by all present.

BOOK REVIEWS.

MCFARLAND "Text Book of the Pathogenic Bacteria" second edition, 1898. W. B. Saunders, Philadelphia. Price \$2.50 — In this volume of 475 pp. the author has presented us with a very readable book in which the study of the Pathogenic Bacteria is presented in a clear and systematic manner. Dr. McFarland has

thoroughly confined himself to the pathogenic species and describes as fully as will be required by student or practitioner the known species found in the various diseases. One might, if desirous, quarrel with the author in his classification of these bacteria into "phlogistic, toxic and septic" more particularly where the student is concerned. For many of these bacteria can be placed now in one, now in another class. For instance, if we take the common microbe of acute abscess formation—the staphylococcus pyogenes aureus—not only do we find it acting as a local inflammatory agent, but by the absorption of its toxic products we not infrequently have constitutional disturbances, and again by its invasion of the blood we will have a septic, i.e., septicaemic action. Yet the author has seized upon the main characteristic of each species of bacterium and so constructs his classes.

Dr. McFarland is very accurate in his details and is thoroughly up to date. We would point out one omission, viz: his statement that tetanus bacilli have no flagella. Drs. Kanthack and W. T. Connell in the Journal of Pathology and Bacteriology, London, June, 1897, point out the multiflagellate nature of this bacillus.

This book is well illustrated, chiefly with standard cuts, and is printed in large, clear type. It can be recommended as an up-to-date text book on the subject.

PURDY'S Practical Urinalysis and Urinary Diagnosis.—We have just received a copy of the fourth edition of "Practical Urinalysis and Urinary Diagnosis," by Charles W. Purdy, M.D., L.L.D. The mechanical part of the work is unexceptional; the paper is good; the type is clear; the cuts well brought out. As the name implies the work is divided into two parts. Part I deals with the constituents of the urine, first in the normal condition and secondly in the abnormal. Part II treats of diseases of the urinary organs and urinary disorders and the urine in other diseases. In Appendix A we have an outline of the methods of examining the urine for life insurance. Of the whole work we can say the arrangement is good; the information is reliable; the treatment of the various subjects is concise and clear. It is a work well calculated

to be of service to the medical student and most practitioners will find it of great assistance. We congratulate Dr. Purdy upon his work and upon the success it has so far met.

THE Patent on Diphtheria Antitoxine. From time immemorial it has been the crowning glory of the Medical Profession that any discoveries made in the causation, treatment or prevention of disease by any individual member of the fraternity, at once became the property of the whole profession. Medical practitioners the world over have avoided the appearance of secrecy. The methods they employ and the composition and preparation of the drugs they use have always been open for investigation, and the manufacture and sale of medicinal supplies has ever been free to all who wished to engage in the business. The doctor has ever been a worker for humanity. At the close of this nineteenth century, (with shame be it confessed) a German scientist has lent his name to a proceeding which trails in the mud the honour of our philanthropic profession. A patent on the mode of manufacturing Diphtheria Antitoxine has been granted for the United States. Application for this patent had been made five times previously and five times refused. Persistent effort, however, had its effect upon the authorities and the patent has been issued. Now we have no hesitation in saying that Prof. Behring, in whose name the patent has been issued, cannot prove before any body of men competent to judge of such a question, his claim to priority in the manufacture of Diphtheria Antitoxine or in its application to the cure or prevention of diphtheria. Many investigators had given their labour to serum therapy long before he did and this preparation was being manufactured in different parts of the world long before he set up any claim to priority of discovery or invention. But even granting him priority in this matter, what shall we say that will be strong enough to express our condemnation of this attempt to confine the manufacture of this serum in the United States to those to whom he grants permission for a consideration. Fortunately no other country has granted a patent; fortunately for the honor of the profession no one else has asked for a patent. For the credit of the United States and for the good of humanity we trust this patent will not be upheld by the Courts.