

## Technical and Bibliographic Notes / Notes techniques et bibliographiques

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

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

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

Continuous pagination.

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

# THE CANADA LANCET.

A MONTHLY JOURNAL OF

MEDICAL AND SURGICAL SCIENCE,  
CRITICISM AND NEWS.

Vol. XXII.] TORONTO, JULY, 1890. [No. 11.

## Original Communications.

PRESIDENTIAL ADDRESS, ONTARIO  
MEDICAL ASSOCIATION.  
JULY 11TH, 1890.

BY J. ALGERNON TEMPLE, M. D.

GENTLEMEN,—I owe you my best thanks not only for the honor you conferred upon me in electing me your president, but also for the pleasure you have enabled me to feel as I rise to welcome you to our tenth annual meeting. And, however great and sincere a pleasure it may be to welcome my friends from Ontario, they will pardon me if I experience an even keener satisfaction in offering in their name and my own, our warmest greeting to our guests from the United States and from the sister Provinces. We owe them a deep debt of gratitude for coming to take part in our deliberations and discussions. We cannot but highly appreciate the honor they bestow upon our Association by their membership during their stay. To all of you, gentlemen, I will express a hope that at the expiration of my term of office I shall in no way have forfeited your confidence, and that the interests of the Association will not have suffered under my care.

We have to lament that several of our number have been removed by the hand of death since we last met. To two of them I will briefly allude as being very worthy and distinguished members of the Association, Dr. Mackay of Woodstock, and Dr. Yeomans of Mount Forest. Both had occupied the position of Vice-President and took an active interest in all that tended to the welfare of the Association.

In the neighbourhoods where they lived they enjoyed the confidence of their patients, and were generally respected for their talents and honorable career. They were foremost in all undertakings

that aimed at our well-being as a body, and you will remember with what attention and pleasure we used to listen to them here. Our deep sorrow for their early death can be lightened only by the thought that they have left an honorable record behind them to keep their memory green, and to be an inheritance for the profession they loved and served so well.

A resolution was passed last year to memorialize the Hon. Minister of Finance, that all surgical instruments should be admitted free of duty. Acting on that resolution I wrote to the Minister at Ottawa, setting forth in as strong language as possible the desirability of having the duty abolished. I regret that we did not meet with success, as you have already learned from the reply to our communication that has been read by the secretary.

Another point raised by the committee on registration, was in reference to the registration in Canada of English registered practitioners. I have made very full enquiries of Dr. Pyne, the Registrar of the C.P.S., Ont., and I find that the College has been in constant correspondence on the subject with the English authorities. The C. P. S. is quite willing to register English graduates in this country, provided that a similar privilege of registration in England is accorded to graduates of the C. P. S. of Ontario, and it is a matter for regret that an agreement of this kind has, so far, not been arrived at. The English authorities, while fully recognizing the high standing of our examinations, are not willing to place our graduates on the English register. They offer us a colonial register which, in my opinion, the C. P. S. of Ontario was justified in refusing; for we should, by accepting it, have the appearance of placing our men on a plane of inferiority. While we cannot well agree to reciprocity on other than an equal footing, we may yet hope that a way out of the present difficulty will be found. When we consider that, for one Canadian who desires to register and practise in England there are probably five or more Englishmen who come to practise in Canada, it is evident that the English graduate has more to gain from a satisfactory settlement of the question than his Canadian fellow.

With reference to the examinations as conducted by the Ontario Council, I may venture to speak without presumption. After fifteen years experi-

ence in medical teaching, I do not hesitate to say that there is no country, not even England, in which a higher standard is required of the medical student than in ours. The diploma of the C.P.S. of Ontario is a guarantee that its holder is fit to practise in any part of the world. Indeed, our system of examination and graduation might well be taken as a pattern both in England and the United States.

I trust, gentlemen, that we shall not close our present session without appointing a committee to memorialize the authorities to have the law so amended, if possible, that in all suits for malpractice security for costs shall be given before commencement of action. It is scandalous that we should be obliged to pay not only our own costs in defence, but also in a majority of cases the costs of the other side. To render keener the injustice under which we suffer, it is notorious that in many instances where these actions are brought, the services of the physician have been given gratuitously, because the patient was too poor to pay for them.

I would also suggest that some action be taken towards securing a uniform licence for the Dominion. It borders on the ridiculous that a man who has graduated before the Council here, and wishes to settle in Manitoba, should be obliged to pass before the Manitoba Council as well. If each Province were represented on the board of examiners it could be easy to set this right, to spare the young student a hardship and his pocket an expense that he may be in no position to bear after the final outlay on his medical course.

In thus pleading the cause of the student, I feel confident of your sympathy and support.

There is one more subject I would wish to bring to your notice in the hope that some united action may be taken to rectify what I believe to be a positive injury to our profession, I mean the practice of attending lodges and clubs for an annual fee of so much per head. I regret to say that this custom is becoming more widespread every day in our midst. I do not speak from motives of jealousy or personal interest, because I myself have none of it to do, but because I have always condemned the practice as one lowering the standard of our profession. I sincerely believe that the man who indulges in this practice does himself a great injustice, by giving his services for a fee far beneath their value. He injures his fel-

low-practitioner by depriving him of the legitimate means of making his living, and he lowers his profession in the eyes of the public by allowing them to buy his services at their own price. Surely if the laboring man by united action can fix the price and value of his labor, and declines to work unless he gets what he believes he is worth to his employer, we, as a profession, ought to be able to maintain a uniform standard of fees. It is a subject I would earnestly commend to your most careful consideration, and see if some means cannot be devised to rectify the present evil.

After a very able and interesting *résumé* of the career of the Association the President continued:

I will now take advantage of the article of the constitution that allows the President the privilege of referring to anything of general interest to the profession, and ask your attention for a few minutes to the etiology of the so-called puerperal fever and the best *method of preventing rather than curing this dread complaint*.

Time will not allow me to enter into the subject as fully as its importance demands, and you must pardon me if I am particularly brief.

We are all general practitioners. We all have to do with midwifery and have all experienced the anxiety caused by cases of obstetrics, especially by those complicated with puerperal fever. It is time this rather vague name was dropped and one more definite adopted. The term "Puerperal Infection," as suggested by Dr. Garrigues, appears to me to be very suitable. Firstly, then, what is the nature of the febrile and inflammatory processes that frequently follow child-birth? And, secondly, are these changes due to some morbid condition generated within the woman's system, or do they come from without? If they come from within, why is not every woman similarly affected? If they come from without, what is the nature of the virus? Where does it come from, and how best can it be prevented?

These are questions I have frequently put to myself, and often indeed have I found them difficult to answer.

Firstly, I do not believe that the so-called Puerperal Fever is a specific disease peculiar to the lying-in condition, but that it is identical in every way with surgical septicæmia, or pyæmia, due to the activity and development in the system of micro-organisms, which, when introduced under

favorable conditions, produce the symptoms of childbed fever. These micro-organisms, being once in the woman's body, so overwhelm the system by their rapid development as to produce death. No pathological changes have ever been discovered in puerperal fever differing from septicæmia in general, except in situation. Different women are affected in different ways.

According to Pasteur, the innocuous micrococci that live in the vagina become dangerous if they are developed in great numbers, and the different symptoms are to be explained by the different organs to which these microbes are carried. Some go to a gland, become arrested, form an abscess and are evacuated. Some find their way into the general peritoneal cavity and from thence into the general system. Another explanation of the difference in the symptoms is the greater power of resistance of one constitution than another. That the symptoms are, in the majority of cases, due to the introduction from without of some poison is, I think, demonstrated clinically by the fact that since the introduction of antiseptics into midwifery we hear much less of puerperal fever and its fearful results. Undoubtedly the retention in the uterus of clots, pieces of membrane, or placenta, forms a starting point in many cases. But, on the other hand, look at the bruised, perhaps torn vagina; where we have a properly prepared ground for the reception and development of these dangerous organisms, especially so in the primipara.

Bacteriologists deny to-day that the woman herself can produce the poison. The germs must be brought from without to cause putrefaction and infection. We know of the existence of microbes in the vagina of a healthy woman. They however do her no harm, because the vagina and cervix are protected by their epithelium, and they cannot enter into her system. But when this protective covering is destroyed they find an entrance and may produce all the train of symptoms. If this is the case, it is our duty to prevent, by every means in our power, the introduction or development of these microbes. The altered condition of the patient's blood during pregnancy, the general plethoric condition, the increase of the colourless elements, and decrease of the blood corpuscles, the increase of the leucocytes and surplus of fibrine are strong predisposing causes to inflammatory

diseases. This poison may be brought from patients similarly affected, from decaying vegetable matter, from some of the zymotic diseases; from a dunghill, cesspool, sewer, or from stagnant water.

Dr. Goodell has lately suggested as a possible source of the poison, an infected closet on which the patient may have sat during labor for the purpose of evacuating the bladder or bowels, and he very properly warns us against this danger. The poison may be brought to the patient by the hands or instruments of the doctor, midwife, or nurse; by a sponge, or dirty, soiled rag, used to protect the bed. It will cling to our fingers under the nails, and on making the necessary vaginal examinations we introduce and deposit it in the vaginal canal, from whence it becomes rapidly absorbed.

I do not believe in the air being a medium by which the poison is carried from patient to patient. I do admit that the air in a badly drained and ventilated house, or over-crowded lying-in hospital, may become the medium; but it is because of the unsanitary condition of that particular place that the air may become so loaded with the virus as to readily infect those breathing and living in it. In speaking of the air as a medium, I allude to the air outside our dwellings, and my contention is, I think, proved by the fact that of two physicians living and practising in the same locality, one may have the disease among his patients while the other has not. The one carries the poison through the medium of his hands from patient to patient, because he fails to observe the strict rule of antiseptics. The other is scrupulously careful, and he has no cases. A living ferment, once introduced into the system, is capable of reproduction, providing the proper conditions for its development are present.

After this brief review of the nature of the disease, it remains for us to see how we can best prevent its onset and spread.

Firstly then, before making any vaginal examination, the physician should thoroughly wash and disinfect his hands in hot water and soap, with some disinfectant in it, carefully cleaning his nails. He should also be provided with some such lubricant as carbolized vaseline. He should have prepared a solution of perchloride of mercury of the strength of 1 to 2000, in which, before and after he has made an examination, he should immerse his hands, first washing them with soap and water.

He is then ready for his next examination. My own plan is as follows: On entering the patient's room, and previous to examination, I thoroughly wash and cleanse my hands and nails in simple hot water and soap. I then dry them and immerse them in the perchloride solution, which I have previously prepared. I next anoint my fingers with carbolized vaseline and make the examination. After its completion I again wash my hands in plain hot water and soap, and again immerse them in the mercuric solution. I may say that I never depart from this procedure when attending a case of labor. I am also particular that the nurse should be equally careful about herself. I absolutely forbid her ever to use a sponge or a soiled piece of linen or rag. I am aware that many practitioners advise the use of an antiseptic vaginal douche before delivery. I am not in the habit of doing so. They do it for the purpose of removing those microbes which are normally found in the vaginal mucus, so as to prevent their possible entrance into the system through rents and abrasions of the vagina.

After delivery, every portion of placenta, membrane, or clot, should be entirely removed, and firm uterine contraction secured. Careful inspection of the vulva for lacerations should then be made and if any exist, even though small, they should be carefully washed with a weak perchloride solution and brought closely together with sutures. This point in practice cannot, I think, be too rigidly insisted on, for I feel satisfied that the neglect to repair lacerations is frequently the cause of puerperal infection. By immediate stitching we secure primary union in the large majority of cases, and we seal up those open-mouthed vessels that so rapidly absorb all poison brought in contact with them. I also wash out the uterine cavity with a 1 to 5000 solution of mercury, when for any reason I have had to introduce my hand within it.

The after treatment consists in the use of disinfectant douches every four hours, for just as many days as there seems to be need of them. I will venture the opinion, in concluding this short monograph, that the physician who scrupulously follows out antiseptic midwifery in all its details, will very rarely indeed have to contend with puerperal infection.

The summary of the whole is this:—*Firstly*—Puerperal fever is a preventible disease in the

large majority of cases. *Secondly*—By strict antiseptic precautions the spread of the disease may be prevented. *Thirdly*—I believe it to be reasonably safe to attend a fresh case of confinement even when we have a case of puerperal septicæmia under treatment, provided before going to the bedside we change all our clothing and thoroughly wash and disinfect our hands and instruments in a solution of perchloride of mercury. *Fourthly*—I am of opinion that the most frequent channel of infection is *through rents and abrasions* of the maternal passages, and too much attention cannot be given to secure primary union in all cases of lacerations, even when they are small.

---

### PURPURA FOUUDROYANT.\*

BY DR. J. E. PICKARD, THAMESVILLE, ONT.

In bringing this subject before the Association, it is not with the expectation of adding anything to your store of medical knowledge, but rather from the hope of gaining some knowledge from your opinions and experience, which I hope will be freely given in the discussion.

I will introduce the subject by relating the history of a case that lately came under my observation, the only one of the kind I ever saw.

Charlie B., a bright child æt. fifteen months, had always been healthy, having never had any illness excepting a mild attack of measles when six months old. Was in his usual health upon retiring Saturday evening, April 19th; was apparently well upon waking early Sunday morning, but in about an hour after was suddenly taken ill, as was announced by a chill.

In my absence from home my esteemed *confrère* Dr. Fraser was called. He reported to me in a short time that he found the child in the following condition: Temp. 102, pulse rapid, and was to all appearances suffering from pain in abdomen. Child pale, and somewhat restless. Had been slightly constipated a short time. He gave the child some treatment and said he thought I had better visit the child when at liberty.

I saw the child at noon, found him very restless but not fretful, face quite pale and with a very

---

\*Read before the Ontario Med. Association, June, 1890.

anxious expression, tossed his arms and legs about considerably; temp. 102 $\frac{3}{4}$ , pulse 130. Just previous to my visit he had vomited some bilious matter; mind seemed perfectly clear, apparently recognizing what was said to him, took drink when offered. Though quite undecided as to diagnosis, I thought from the bilious vomiting, the chill and fever, that it was possibly nothing more than a malarial attack, and prescribed accordingly, and as he was constipated gave him a glycerin enema which acted nicely. Upon leaving I told his parents that on account of my indecision as to the nature of his illness, I would call again in a few hours.

About six o'clock the father came for me, and with the information that the child had broken out in a rash, and now I found well-marked purpuric spots, varying in size from a split-pea to a twenty-five cent piece, covering his legs. Some on abdomen and face, right ear almost one entire purple ecchymosis. Restlessness increased, apparent hyperæsthesia, tossing his head from side to side and moving his limbs about restlessly. No marked delirium, temp. 103, pulse extremely rapid and weak, pallor, pupils widely dilated, the left irregularly, but cannot say whether this condition was due to the disease or the near approach of death.

Gave an unfavorable prognosis, and having another case on hand from which I could not remain away long at a time left the patient. The child died at eight o'clock after an illness of only thirteen hours. No post mortem could be obtained.

Now this was certainly a clear case of purpura. That it was not one of purpura simplex is evident on the face of it. Had it been purpura urticaria the patches would have been elevated and the disease non-malignant. There was not the slightest evidence that it was rheumatic. Nor was it scarlatinal in its character, and it could not have been from measles. Were it hæmorrhagic purpura, we should have expected some hæmorrhages from the mucous membrane or intestinal tract or some hæmaturia or something of the kind.

We must also exclude it as having been symptomatic of cerebro-spinal meningitis, because there was absolutely nothing to point to that condition other than the rash. No retraction of head or abdomen, no stiffness of spine, no epidemic prevailing. I frankly confess that my pronouncing the case to be one of purpura foudroyant does not throw much light on the subject, does not ex-

plain the pathology or make clear the etiology. It simply gives it the convenience of a name.

What think you was the condition, and what the cause? Was there an inflammatory irritation of the medulla, paralyzing the vaso-motor nervous system, thus affecting the walls of the blood vessels to such an extent as to permit the extravasations, or it is possible that it was a case of malarial or other blood poisoning so intense in character as to cause disintegration of the blood, thus facilitating its exudation? If the latter, I would have expected the other symptoms, chill, fever, etc., to have been more intense. I hope you will favor me with the benefit of your views on the case.

I have been able to find very little literature on the subject, unless it is included and classed as hæmorrhagic purpura. Reynolds, Pepper, etc., make no mention of it. In volume IV, 1889, "Annual of the Universal Medical Sciences," we find the following:

"Several cases of purpura foudroyant, as this shocking affection is called by the French, have been reported during the past year.

"Hervé was called on Nov. 5th, 1887, to see an infant of three months. Had been well until 24 hours previous to his visit, since which time she had appeared to be suffering. On examination, the little patient's face was pale and anxious, the respiratory movements frequent, and pulse rapid. Throat, heart and abdomen presented nothing abnormal. No diarrhœa or vomiting. A dozen hæmorrhagic patches the size of a ten-cent piece could be seen scattered over the legs, thighs and abdomen. About three hours later at 6 p.m., examination showed the hæmorrhagic patches much more numerous and extensive, covering the limbs and trunk and invading the face, particularly forehead and eyelids. The pulse was so feeble and rapid that it could not be counted. There was extreme agitation. No hæmorrhage into the mucous membranes. By ten p.m. the hæmorrhagic patches were really in sheets, the lower limbs being violet, with some œdema, and cold to the touch, while the abdomen was covered with enormous ecchymoses, and the face and hands with numbers of small ones. No malæna, epistaxis nor hæmaturia. Death occurred at midnight, nine hours after Hervé had first seen the patient and from the beginning of the eruption. Hervé calls attention to the rarity of this form of purpura."

Now this is a very faithful picture of my own case, and if the disease is a separate form of purpura, and so terribly fatal, and not so very uncommon, I cannot understand why such extensive systems of medicine as Pepper and Reynold's should not notice it at all.

"Three cases have been reported by Guellive, two by Henoeh, and one by Rinonapoli. The latter was that of a child of two and a half years old. Petechiæ were observed over thoracic and abdominal regions. Temp. nearly normal, pulse 114, surface sensitive to the touch. Next day all symptoms aggravated; the child died of exhaustion on third day."

Cases somewhat similar have been reported by Ström and Arctauders, these also terminating very rapidly and fatally.

Von Harlingen says, speaking of this disease: "Such rare cases are of interest as enabling us to form a mental picture of this striking and terrifying disease; but I cannot wonder at the apparent absence of any attempt to save the patients' lives."

---

### Correspondence.

---

#### OUR LONDON LETTER.

(From Our Own Correspondent.)

F. Swinford Edwards, F. R. C. S., gave a very interesting lecture last Thursday, at St. Peter's Hospital. His subject was "Electrolysis in Stricture and other Urinary Diseases." The attention of the profession has only been directed to this means of treatment for the last few years and different opinions are held as to its value.

Some say that it does no good, others that it may do good in a very limited number of cases, whilst others go so far as to assert that by it all forms of stricture can be successfully and radically cured.

Mr. Edwards does not hold the opinion of any of these, but his experience has shown that it is of the greatest benefit in certain cases, depending chiefly on the situation of the contraction, and that a radical cure may follow, but this is the exception.

In 1888, he treated 24 cases in the St. Peter's Hospital, with the following results: Two were cured, twelve improved, seven progressing favorably, but of these seven, four were being treated by

electrolysis combined with dilatation, and in three cases he failed to make any improvement. One of these three he has since cured by this method. The two cases out of these 24, that were unimproved, were multiple strictures of very long standing and ones which had relapsed after internal urethrotomy.

Since '88 Mr. Edwards has had excellent results; and his statistics show that the best results from this method of treatment are obtained in those cases, where the stricture is situated in the bulbous or membranous urethra; and the nearer the stricture is to the meatus the less kindly does it yield to electrolysis.

If non-dilatable stricture is within three inches of the meatus, he strongly recommends division. He has used electrolysis in a number of cases of prostatic catarrh, as shown by gleet and threads in the urine, and he reports 50% of cures. He has also tried it in chronic cystitis, with marked relief for a time.

Mr. Edwards maintains that electrolysis is potent in allaying spasm, and believes that it is to this property that many of the good effects which follow its use are due, as strictures in the sub-pubic region have more or less spasm superadded. The advantages he holds, for electrolysis in the treatment of stricture are many:

- 1st. No confinement to bed is necessary.
- 2nd. Little or no risk to life.
- 3rd. Can be employed without giving pain.
- 4th. No bleeding.
- 5th. If unsuccessful it does not interfere with urethrotomy being undertaken forthwith.
- 6th. A permanent cure may follow, which is the rarest thing by any other method.

The disadvantages are two:

- 1st. The time it takes for the successful issue of the plan.
- 2nd. The difficulty, amounting to impossibility in very tight strictures, of washing out the bladder afterwards, which in cases where the urine is foul is much to be desired. This however in the vast majority of cases is not necessary.

In conclusion, Mr. Edwards strongly recommended electrolysis in the treatment of deep seated strictures of whatever kind, which for some reason or other cannot be treated by ordinary bougieism. No harm will ensue and one saves one's patient much suffering and loss of time.

He does not anticipate that it will become a routine treatment in hospitals, for neither patients nor surgeons have sufficient time to devote to it; but in private he can imagine nothing better, and feels satisfied that when it becomes more generally known it will enjoy a large amount of professional and public favor.

The method he employs is as follows: He passes an insulated electrode down to the stricture; in case of a very tight contraction, he first passes a guide to which he screws his electrode. This electrode is connected with the negative pole of a Leclanche battery, the positive pole of which is placed on the sacrum or thigh of the patient. The negative pole being lightly held in contact with the stricture, a current of from three to seven milliamperes is turned on. In from five to thirty minutes the electrode will pass the stricture almost by its own weight. No force should be used. After it has once passed it should be slowly withdrawn through the contraction and then passed backwards and forwards over the position of the stricture three or four times. An electrode two sizes larger is then passed, and in a week or fortnight's time the operation is repeated. He continues this treatment until he is able to pass a No. 22 to 26 bougie, French gauge, which the patient is instructed to pass for himself, regularly once a week for a time, but subsequently the interval may be increased in many cases to once a month. G. S. R.

---

### Reports of Societies.

---

#### THE ONTARIO MEDICAL ASSOCIATION.

The tenth annual meeting of the Ontario Medical Association opened on the morning of the 11th June, at the College of Physicians and Surgeons, Bay and Richmond streets, under the presidency of Dr. Temple, and was we think the most successful that has yet been held. The association was founded in 1881 with 132 members under the presidency of Dr. Workman, and it has steadily grown and flourished under the management of such men as Drs. Covernton, of Toronto; Macdonald, of Hamilton; Clark, of Toronto; Worthington, of Clinton; Tye, of Chatham; Richardson, of Toronto; Rosebrugh, of Hamilton, and Henderson, of Kingston. At the last meeting there were 219 members pres-

ent out of a total of 568, and this year the attendance was still larger, an excellent proof that the objects of the association commend themselves to the profession. The main objects of the association are the cultivation of the science of medicine and surgery, and the advancement of the character and honor of the profession, and in both of these important aims it has accomplished much.

The morning session was devoted principally to consideration of the reports of committees on papers and business and of arrangements. Several distinguished members of the profession in the United States—Dr. Emmet and Dr. Andrew Smith, New York, and Dr. Tremaine, Dr. Cronyn, Dr. Lathrop, and Dr. Hubbell, of Buffalo, Dr. Trenholme, of Montreal, were among the most distinguished guests, and they were all accorded a hearty welcome.

Dr. C. Trow, of Toronto, read a paper on "The Diagnosis and Local Treatment of Tubercle or so-called Phthisis of the Larynx." He devoted most of his time to the question of local treatment, and dealing with the results of that treatment he held out favorable prognosis in a certain percentage of cases, believing that in a few the disease was capable of being cured. Dr. Jenner, of Kingsville, followed with a paper on (1) "Morton's Method in Spina Bifida." (2) "Poisoning by Antifebrine." Interesting discussions followed the reading of each paper.

In the afternoon, after routine business the President's address was delivered. As the major portion of it appears in the present issue of the journal, we need say no more than that it was characterized by its practical nature, and that it was received with the most noted attention. The vote of thanks which followed was unanimous, and was we are sure the expression of the full meeting that the address was a masterly one. Dr. Emmet, then read, before the whole association, a paper upon the operation which bears his name—his mode of treatment for the repair of the lacerations of the cervix uteri. He defined accurately the cases in which it may be done with good hope of success. He also mentioned those for which it was unsuitable. The address was listened to with the greatest attention. It was regarded as a valuable contribution to medical knowledge, coming as it did from the most brilliant pupil of Dr. Marion Sims, who practically created the surgery of women in America.

A discussion followed the paper, in which Dr. Ross, Toronto; Dr. Rosebrugh, Hamilton; and Dr. Temple took part.

The Association then divided itself into Medical



and Surgical Sections, papers being read in the former by Dr. J. H. Duncan, Chatham, "Duodenal ulcer"; Dr. A. McPhedran, Toronto, "Arthritic Hæmoptysis"; Dr. W. Irving, Kirktown, "The Vomiting of Pregnancy and its treatment"; and Dr. H. J. Saunders, Kingston, "Paroxysmal Hæmaturia."

In the surgical section a paper was read by Dr. T. R. Dupuis, Kingston, on "Traumatic Tetanus," and its treatment. A brief discussion followed.

Dr. B. E. McKenzie, of Toronto, made some interesting remarks on the arrangement of Talipes. The doctor showed cases in different stages of treatment, and explained the operations necessary for the relief of extreme deformity.

Papers were also read on a case of "Convergent Strabismus, with crossed Diplopia," by Dr. A. B. Osborne, Hamilton, and on "Scrotal Tumors," by Dr. Welford, Woodstock.

#### EVENING SESSION.

At the evening session, which was presided over by Dr. Temple, an interesting discussion in surgery on "Hernia" was opened by the Hon. M. Sullivan, Kingston. He was followed by Dr. F. Le M. Grasset, Toronto, and Dr. Waugh, London, who contributed some information valuable to the profession. "Empyæma, with Mechanical Results of Opening the Thorax," was the subject of a paper by Dr. Andrew Smith, of New York. The lecture, which was illustrated by apparatus, was listened to with the greatest attention, and at its close Dr. Smith was cordially thanked.

Dr. G. M. Alyesworth, of Collingwood, read a paper entitled "A plea for a more liberal and scientific spirit of investigation on the part of the regular or Rational School of Medicine." He was followed at some length by Dr. Richardson, of Toronto, who entirely dissented from the reader's idea, that we of the regular school are intolerant, and that there is much in Homœopathy which we might investigate to our advantage. Dr. Ross, of Barrie, also spoke on the paper.

#### Thursday morning.

The Association resumed business at 9:30 a. m. After routine business was disposed of the Association divided into two sections. The surgical section was presided over by Dr. Burt, of Paris. Dr. Groves, Fergus, opened the discussion by reading a paper on "Perityphlitic and Pelvic Abscess," which was received with much interest.

Dr. Ross, Toronto, read a paper on "Some cases of Extra- and Intra-peritoneal inflammation with and without abscess formation; a plea for the operative treatment of peritonitis." The reader strongly argued that an operation should in all cases be performed, as many lives were sacrificed through hesitation or want of prompt action. The meeting was, in general terms, agreed

with the Dr. The third paper, entitled "Abdominal Nephrectomy for Hydronephrosis," was read by Dr. J. Wishart, London, who detailed his experience in the course of two operations. The morning session was concluded with a treatise on "Ruptured Perineum," by Dr. C. M. Smith, Orangeville.

In the medical section Dr. Sheard, Toronto, presided. Dr. J. L. Addison, St. George, read an excellent paper on the "Treatment of Pneumonia." He referred to the fact that during the past year this disease had been more prevalent than usual. It taxed the skill and judgment of physicians, and they had need to be very cautious.

Primary pneumonia, he said, was generally admitted to be a self-limiting disease, and would run its own course in spite of any treatment; yet judicious treatment would make patients more comfortable, and possibly reduce the rate of mortality. The first essential in treatment was rest in a well ventilated room. Good, nutritious food in fluid or semi-fluid state should be freely given. The shoulders should be protected with cotton batting, and over the seat of trouble might be placed a linseed meal poultice. He then gave a list of the medicines which he would use in such cases. The treatment of complications that frequently arise, such as pleurisy, hyperpyrexia, delirium, coma, jaundice, diarrhœa, malaria, abscess of the lung, was also given.

Secondary pneumonia was stated to generally occur in connection with or as a complication of influenza, measles, whooping cough, or typhoid fever, and sometimes in bronchitis and septicæmia. The treatment in secondary pneumonia was said to be similar to that given in the primary, the difference being in some of the medicines prescribed. Dr. Addison summarized his remarks by saying: "I prefer the expectant plan of treatment, sustaining the vital powers, watching complications and treating them as they arise, making every case a special study, the very cautious use of opium, digitalis in moderate doses as a heart tonic, with free stimulation for heart failure."

An interesting discussion followed the reading of the paper.

The next subject dealt with was "Some Recent Treatments in Diabetes." Dr. A. Jukes Johnson, Toronto, led in the discussion by reading a paper on the same. After a number of those present had given the result of their experience in the treatment of the disease, this section adjourned, to meet again during the afternoon.

#### AFTERNOON SESSION.

In the afternoon, after some preliminary business was transacted, Dr. G. S. Ryerson, of Toronto, was called upon to read a paper before the general session on "The Ophthalmoscope in Relation to Diseases of the Nervous System." The views ad-

vanced by the doctor were very well received. He emphasized the correspondence between the development and functions of the brain and those of the optic nerves, since these last were generally direct and early outgrowths of the brain. It was also notable that the eye and its appendages received the whole or parts of six out of the twelve pairs of cranial nerves. These things pointed to the intimate relationship that existed between the eye and the rest of the body. No other organ of the body contained so many different kinds of histological elements or textures of so high a quality as the eye, and hence the immediate participation of the eye in general and constitutional diseases. From the facts he had stated the doctor drew the following conclusions:—

1. That diseases of the brain and spinal cord are frequently associated with ocular disturbances.

2. That serious eye trouble may be present without subjective symptoms.

3. That eye troubles often precede and give warning of impending nerve disease.

4. That diseases of the optic nerve and retina are of great diagnostic value in nervous diseases.

5. That it is the duty of the physician to examine the eye and its muscles in all cases of nervous diseases.

Dr. Hubbell, Buffalo; Dr. L. L. Palmer, and Dr. D. J. G. Wishart, Toronto, spoke briefly on the subject introduced by Dr. Ryerson, and expressed themselves in accord with the views advanced by him.

Dr. A. T. Carson, Toronto, though feeling unwell, exerted himself and led in the discussion on Obstetrics. He became quite enthusiastic in the advocacy of his opinions, which were very well received by his brethren. Dr. R. W. Powell, Ottawa; and Dr. Allen Baines, Toronto, continued the discussion for a short time.

The President read the report of the Nominating Committee, which was adopted without amendment. The officers for the year 1890-'91 are as follows:—

Dr. W. H. Moorehouse, London, President.

Dr. Charles Sheard, Toronto; Dr. J. W. Gibson, Belleville; Dr. Powell, Ottawa; Dr. J. Wishart, London, Vice-Presidents.

Dr. J. Gibb Wishart, Toronto, General Secretary; Dr. W. P. Caven, Assistant Secretary.

Dr. E. J. Barrick, Toronto, Treasurer.

Dr. Shaw, Hamilton; Dr. Lowry, Acton, Committee on Credentials.

Dr. W. J. Charlton, Weston; Dr. Farley, Belleville, Committee on Public Health.

Hon. M. Sullivan, Dr. Waugh, London, Committee on Legislation.

Dr. J. L. Davison, Toronto; Dr. A. Primrose, Toronto, Committee on Publication.

Dr. Griffin, Hamilton; Dr. Carson, Toronto, Committee on By-laws.

Dr. A. R. Harvie, Orillia; Dr. J. F. W. Ross, Toronto, Committee on Ethics.

After the officers were declared elected the President announced the election of the following as honorary members:—Dr. T. A. Emmet, New York; Dr. E. M. Moore, Rochester; Dr. Joseph Workman, Toronto; and Dr. William Mickle, London, Eng.

Dr. Mickle is a Canadian by birth and education. He is Superintendent of Grove Hall Asylum, Bow, London, England.

Dr. Moorehouse, the newly elected President, is a graduate of Trinity Medical College of the class of 1875, and has been a member of the Association for the past six years.

Before the afternoon adjournment, the Association again divided into sections, and papers were read by Dr. Moorehouse, London, "Influenza"; Dr. Bray, Chatham, "Typhoid Fever"; Dr. Atherton, Toronto, "A case of Hystrectomy for Fibrocystic Tumor." Exhibition of patient and tumor; Dr. Howitt, Guelph, "Case of acute Suppuration of the Knee-Joint, with complete restoration of function"; and Dr. F. W. Strange, Toronto, "Stone in the Female Bladder." The members then adjourned to meet again at eight o'clock for the closing session.

#### EVENING SESSION—CLOSING BUSINESS.

Dr. Temple occupied the chair at the evening session, which was opened with the reading of the only remaining paper, "Discussion in Therapeutics—Expectorants," by Dr. J. L. Davison, Toronto, who was followed by Dr. Spencer, Toronto, and Dr. Moorehouse, London. Various reports were read. A case quoted in the legislative committee's report, dealing with an alleged contravention of the Act in South Waterloo, evoked a discussion on the conduct of chemists and quacks prescribing medicine. The committee recommended that the matter be referred to the Council of the College of Physicians and Surgeons to deal with it as they in their wisdom thought fit. This was adopted on the motion of Dr. Aikman, seconded by Dr. Lundy. The income of the Association for the year was \$594.74 and the expenditure \$450.95. With the installation of officers the Medical Convention of 1890 came to a close.

#### Selected Articles.

#### EXCESSIVE DYSMENORRHOEA. CHRONIC OVARITIS.

GENTLEMEN,—The first case I show you this morning is one of excessive dysmenorrhœa. The woman is unmarried, and twenty-four years old.

Her puberty began about the age of fourteen with painful menstruation, and it has been going on from bad to worse until now her sufferings have become so great that her life seems a burden to her. Cases like this are not confined to the experience of the specialist. Each one of you who engages in general practice will meet with them. Therefore you should know how to treat them.

I have not yet examined her, but let me tell you what I expect to find. I am nearly certain that there will be found an ante flexion of the uterus, with a stenosis of the cervical canal. This ante flexion of the organ is the natural condition of the virgin uterus, but its exaggeration makes the flexion pathological. The cervical canal being bent, does not allow the fluid in the uterus to come away as rapidly as it exudes from the mucous membrane, so that it accumulates both in the womb itself and in a portion of the cervical canal above the flexure, producing greater and greater pain, until by dilating the parts it straightens the obstructive bend, and thus gains an avenue of escape.

For this affection the remedies that I use are either medical or mechanical. Among the former I put antipyrine foremost. This drug is of especial value, because in these cases much of the pain is not traumatic, but sympathetic. My plan is to give ten grains at once and then five grains every hour or half hour until twenty to thirty grains have been taken. If this affords relief, I know that I am on the right track, and continue this method of treatment *pro re natâ*. But if this plan fails to give relief, I adopt some other method of treatment. Instead of giving this remedy by the mouth, it is often best to administer it by enema, in twenty grain doses, until sixty or ninety grains have been given. This will as fully test its efficacy as the twenty grain doses by the mouth. If this fails, I resort to other remedies, hoping to find one that is of avail. A tentative empiricism, founded upon sterling common sense, is not quackery. The second medicine that I generally give is the hydrobromate of hyosine. One-fourth of a grain is dissolved in four ounces of water and one teaspoonful of the solution, viz., one one-hundred and twenty-eighth ( $\frac{1}{120}$ ) of a grain is taken every hour until either relief is secured or its physiological effects, which are extremely like those of atropine, become manifest.

But I think this is a case of mechanical dysmenorrhœa, and now let me see whether my off-hand diagnosis is correct. Upon making this physical examination, I find that I was nearly right, but not quite. She has a comparatively rare uterine displacement, which may, at first, sound in your ears like a paradox, viz., she has retroversion of an ante flexed womb. That is to say, the ante flexed womb as a whole has fallen backward. This mechanical obstruction—the ante flexion—by

not allowing a perfectly free exit for the uterine secretions, causes primarily their accumulation, and secondarily their decomposition before they exude from the body, so that women often have foul-smelling discharges during painful menstruation.

The treatment here is rapid dilatation of the cervical canal, which should be performed as follows:

First, I cleanse the vagina by syringing it out with a 1 : 2000 bichloride solution. I now introduce my speculum, which reveals a cervix exceedingly small, and an os imperfect or developed in character. Again is the vagina swabbed and syringed out.

During this time my instruments have been lying in a 1 : 2000 bichloride solution. From this solution I take my slender dilator, which, with its curvature in the posterior direction, I shall pass up into the cervix until it meets with resistance. Then I shall turn the chord of the curve toward the opposite direction, in hopes thereby to pass the obstruction at the internal os. I fail to get the dilator to pass the angle of flexure, so I stretch open the canal with it and try again. Twice I fail in the attempt, but at the third time I succeed in passing the dilator into the uterus by carefully feeling my way.

Before going any further, let me stop for a moment to do what I should have done before beginning the operation, and that is, to introduce into the rectum a suppository of one grain of the aqueous extract of opium. This is done because after she recovers from the effects of the ether she will suffer a good deal of pain, and she may indeed need another suppository in addition to this one.

Having now passed the instrument well into the womb, I am ready to dilate slowly and carefully up to its full extent. This little instrument having done its work, the time has come to introduce a larger and stronger dilator with furrowed beaks so as to prevent slipping. I find I have a good deal of difficulty in getting this larger instrument into the womb. When it passes the internal canal its blades are slowly dilated, generally up to one inch and a quarter. But since this cervix is smaller than usual, I shall rest contented with one inch.

Having accomplished this, and with rather less trouble than I had expected, I now complete the antiseptic process by thoroughly syringing out the whole vagina and cervical canal with bichloride solution. The cervical canal being now dilated, there is not so much danger of the bichloride remaining in the womb and thus causing uterine colic, as there would be with a very small canal, which might retain the mercurial solution.

This is the three hundred and forty-second case of rapid dilatation that I have made, and the re-

sults have been most satisfactory. I happen to have these numbers at my tongue's end, because I am just now writing an article on the subject for our *University Medical Magazine*.

The *rationale* of rapid dilatation is as follows:

Just as a piece of India rubber will, when over-stretched, contract again, but never to its original length, so this cervical canal will contract, but never to its original small calibre. Hence I can assert with great confidence, that the woman will be greatly benefited, if not cured. I say if not cured, because there are in the world to-day thousands of women who have never consulted a physician, and yet who suffer more or less acutely at their menstrual periods. Absolutely painless menstruation is indeed the exception.

The last thing I do is to put into the vagina a ten-grain suppository of iodoform. This is done after thoroughly cleansing all the parts once more with the sublimate solution. I have in this case torn the cervix a trifle, but it will add to the success of the dilatation, and it is of no consequence considering the antiseptic precautions used at the operation. I once made a tear as long as a third of an inch, but it was followed by no bad consequences. Indeed, until comparatively recently, the knife was constantly resorted to for the purpose of enlarging the cervical canal throughout its entire length. The medicine that she will take will be ten grains of the bromide of ammonium and five grains of the chloride of ammonium in one teaspoonful each of the compound tincture of gentian and water before meals. If much pain follows the operation, another opium suppository will be administered.

Beginning to-morrow morning, she will have twice a day a ouche of 1:4000 solution of the bichloride of mercury. When the vaginal injections are used, some of the fluid will be retained on account of the curve in that canal and mercurialization may ensue. Therefore I shall direct the nurse, when she gives this douche, to press upon the upper edge of the perineum and carefully thereby expel all the fluid remaining in the vagina, the curve of which is straightened by this manœuvre.

For nervous dysmenorrhœa I give the following mixture:

R.—Chloral	- - -	2 drachms.
Potassium bromide	- - -	4 "
Camphor water	- - -	6 ounces.—M.

One tablespoonful three times a day. If the pain is great, I add to this mixture three grains of the sulphate of morphine, and in some severe cases it may be necessary for a patient to take this remedy even more frequently; but I make it a rule to use the morphine as little as possible, as it deranges the stomach and digestive apparatus.

Let me here give you the benefit of a useful observation. There are many women and men who will

tell you that they cannot take opium, in any form, because it disagrees with them. They will, it is true, suffer greatly from the after-effects of opium provided it is given for any nervous condition or for any nerve pain. But let them have traumatic pain—due to an accident or to an operation—and opium will perfectly agree with them. I have verified this fact so many times, that I never hesitate to give opium after a surgical operation, in defiance of a patient's protest or of that of her physician.

The causes in general of dysmenorrhœa are as follows: 1. Anteflexion, which I have just discussed. 2. Retroflexion, especially when it is congenital. Both these causes are often cured by pregnancy. 3. Stenosis, for which mechanical dilatation is the great remedy. 4. False membranes blocking up the cervical canal. For this I used to apply nitric acid, but now I prefer dilatation followed by curetting and intrauterine applications. 5. Polypi, which act like ball valves and demand removal. 6. Those cases of neurasthenia that are characterized by an irregular distribution of nerve force. Such undue discharge of nerve force may occur in other groups of muscles, especially of the circular muscles or sphincters. Thus we may have asthma from spasm of the bronchioles; aphonia from spasm of the vocal muscles; constipation from spasm of the sphincter ani; or irritable bladder from spasm of the vesical and urethral fibres. The treatment of nervous dysmenorrhœa is rest in bed, massage, electricity, and tonics of iron and arsenic.

#### CHRONIC OVARITIS.

This woman has been brought to me for a diagnosis of her disease. She is thirty years old, has been married six years and some years ago had one child. After this labor she had a serious leucorrhœa, which I fear was specific in character. She is now suffering from dysmenorrhœa, retroflexion, and backache, and has an irregular body behind the uterus, which feels a good deal like an ovary. Some months ago she was treated at our dispensary for a time, and improved while under treatment; but she afterwards relapsed into her former condition, and has now come to be examined with reference to the advisability of having her ovaries removed. She will be etherized, as the examination would cause her considerable pain, and I shall, while she is being etherized, take the opportunity to tell you that the woman upon whom I performed a double ovariectomy two weeks ago, on account of adherent appendages, suffered for a while with the same character of pain as if the organs were still present. This was a form of neurasthenia, and it lasted only a short time. It has disappeared and she now feels much better than for a long time.

Our patient now being unconscious, I find upon examining her, *per vaginam*, that there is an im-

movable body in the left broad ligament, which I believe to be the left ovary, that is adherent high up behind the uterus. The right ovary, too, is enlarged and plainly adherent, so that they are both giving her more or less pain and destroying her health.

I shall feel justified in removing her ovaries under these circumstances, if she desires to have the operation done after I have explained to her the results. I tell women in these cases that they will probably gradually lose in a measure their sexual feeling, although it will not cause in them so much difference as castration does the opposite sex. The popular idea, that if a woman has her ovaries removed her voice will change and hair will appear on her face, is a mistake. Such changes do not take place when the ovaries are extirpated after puberty.

It has been stated that in fifteen per cent. of the cases oöphorectomy there is a loss of all sexual desire. It is difficult, however, to arrive at the true statistics, because women do not like to be approached on this subject. It is often the case that many women, after having their ovaries removed, will have for awhile greater sexual desire than they had felt for a long time. This is because the ill health, resulting from the long ovarian suffering, has been cured by the operation. But in a few years' time there will be a lessening of sexual feeling, and in some a complete loss. In the opposite sex after castration the sexual desire may remain for some time, also the power of erection and ejaculating a prostatic fluid, which, of course, contains no semen. Analogous sexual capacity is observed in oxen, geldings, and in other altered animals long after castration.—Dr. Wm. Goodell in *Med. News*.

### THE CLAMP AND CAUTERY OPERATION FOR HÆMORRHOIDS.

My object in presenting this subject to-night is not that the procedure is particularly novel or original, but because it is practiced to such a slight extent in this country that its merits are by no means appreciated. Believing it to be by far the best operation in its general application to all varieties of internal hæmorrhoids, I now propose to describe its technique in some detail and to point out what I regard as its chief merits.

The instruments required are five in number—the pile-clamp, a Paquelin cautery, a speculum, a tenaculum forceps, and a pair of scissors.

The operation is simple. Anæsthetize the patient, put him or her in the lithotomy position, stretch the sphincters with the fingers so as to be able to secure room to work, but without any idea of causing a temporary paralysis, and put in a speculum, so as to get a perfect view of the lower

rectum. Having now determined upon the amount of tissue to be removed, the speculum may be thrown aside. In fact, I now seldom use it at all, as the fingers answer the purpose perfectly well. I generally begin on the pile nearest the posterior median line, so as not to be interfered with by the bleeding.

Now grasp the tumor with the forceps and draw it well down and out, and with the scissors loosen it from the margin of the skin, just as in the old ligature operation. In the groove thus made grasp the base of the pile with the clamp, and while the enucleation is thus controlled, cut off the tumor, apply the cautery to the stump, and remove the clamp. There are two points here to be emphasized: In applying the clamp, especially where a large grip is necessary, include the tissues so as to leave the resulting scar placed longitudinally in the bowel, and, in cutting off the redundant tissue, do not fail to leave pedicle enough for a thorough cauterization. Deal with other piles in the same way, and the operation is complete. A simple dressing, consisting of a firm gauze or picked lint pad over the anus and a tight T-bandage, easily controls all hæmorrhage from the external scissors cuts.

This operation takes about two to four minutes, more or less, in my hands, although if there was any hurry it could be done in less time.

It is apparent from this description that the operation is identical with that of the ligature, except in the means of controlling hæmorrhage. In one the base of a vascular tumor is constricted by a tightly tied string, while in the other the open mouths of vessels are secured by an application of the actual cautery. In both the amount of tissue removed is the same, and in both the process of cicatrization gives the same ultimate result.

The question naturally arises, Has the clamp and cautery any advantage over the old and universally popular ligature? I think it has, and I base my preference entirely on experience, apart from any theoretical considerations. The radical cure of varicose conditions, whether in the rectum or in any other locality, can be accomplished on well-known surgical principles. Varicose veins of the leg are best treated by multiple ligation or by complete resection of varices. The operations for varicocele all aim at the more or less complete obliteration of the diseased veins of the spermatic cord, and varicose veins of the rectum differ only in locality. The rational surgical treatment is removal more or less complete. All operations are but different methods of reaching a desired result, and the best is that one which cures with the least amount of danger, pain, and delay.

Of the various dangerous complications, the most frequent is undoubtedly hæmorrhage. I speak of secondary hæmorrhage, coming on any

time during the first week, while the sloughs are separating—bleeding, sudden, profuse, concealed, but always serious in the extreme. I have the records of upwards of two hundred cases of the clamp and cautery without a single instance of bleeding.

Right here let me again urge the thorough cauterization of the stump at the time of operation, for, as hæmorrhage is the first serious complication to be feared, every precaution should be taken to avoid it.

Unquestionably the same security can be obtained from the ligature when carefully applied, but that fact in no wise militates against the efficiency of the cautery as a hæmostatic.

The second grave complication that may occur is septic infection, showing itself primarily in phlebitis, and subsequently developing any or all of the phenomena of pyæmia. Of course an occurrence such as this is always within the range of possibilities in any operation—certainly in such procedures as involve the obliteration of masses of veins, and I know of no precaution that will absolutely exclude all danger of this accident. In rectal surgery thorough and complete asepticism is not possible, on account of the normal functions of the organ. As a matter of fact, the clamp and cautery operation shows up quite brilliantly in its comparative immunity from septic complications. I myself have never seen it, and in all the cases in my immediate reach there has been no such instance.

The principal advocates of the cautery, here and abroad, all strongly insist that no other method has given such results. Theoretically this is to be expected. Certainly thorough cauterization with a red-hot iron of all cut surfaces inside of the sphincter is very unlikely to convey infection.

I have dwelt on the question of hæmorrhage and infection because of their genuine importance, they are not likely to occur except from carelessness, but must always be borne in mind as possibilities. In my own fifteen cases and in the two hundred others upon which I am writing there as been no such trouble; so I think I am justified in speaking with confidence.

There are, however, a group of exceedingly annoying symptoms that are likely to follow all rectal operations. I speak of pain and various reflexes dependent on it. Spasm of the sphincters and levator ani are the cause of nine-tenths of the distress accompanying rectal lesions, and, curiously enough, the size of the lesion bears no relation to the degree of pain. However, the question at issue—whether the clamp and cautery operation is less liable to be followed by these disorders—is a matter of experience. In my own cases I can say, without hesitation, that there has been little or none. Not a single patient has been given more than a quarter of a grain of morphine all told, and most of them got

none, for the simple reason that there has been no reason for using it. The usual history of a case after operation is about as follows:

In five or six hours the perineal pad is removed, and, if there is any soreness, hot applications are applied. The patient is allowed to get out of bed to pass water as soon as the desire shows itself. After that no dressing is required unless there is an external wound from the original scissors cut, and in that case a loose pad of absorbent gauze is sufficient. Often hot applications to the perinæum are very soothing, and in that way the patient generally obtains a good night's sleep without the use of anodynes. Suppositories of iodoform, belladonna, etc., serve very well to amuse the patient, but I doubt their usefulness, and, as a rule, dispense with them entirely. The one point of importance in the after-treatment is the early opening of the bowels. My rule is to give a laxative on the second night, so as to get a free evacuation forty-eight hours after operating. This occasionally causes more or less pain for an hour or two, but if put off four or five days is far more painful, and may even require the aid of an ether cone and the handle of a spoon. Keeping the bowels open from the beginning prevents much congestion around the wounds and renders the patient comfortable twenty-three out of the twenty-four hours. One is frequently asked, either by the patient or by the family physician, "When is the pain going to begin?" and as a rule, it does not begin.

Rarely indeed is it necessary to use a catheter except in cases of cystitis from enlarged prostate, urethral stricture, etc., and in those cases retention occurs from very slight causes.

So far as diet is concerned I make little or no change, unless for special reasons, but keep the patient in bed as long as possible, which generally means till the third or fourth day.

Sloughs separate entirely by the end of the first week, and then convalescence has begun. In an average case the ulcers are about healed in three weeks, but, unless the patient has been kept very quiet during that period, complete cicatrization may take much longer of course.

Undue contraction of the anal orifice may follow this operation as from any other, and for the same reason—the removal of too much tissue. This, however, is the fault of the operator alone. There is one simple rule by which it can always be obviated: Put on the clamp in such a way as to leave a band of mucous membrane half an inch or so in width between the several grips. In other words, use the same care in this as in any other operation.—Blair Gibbs, M. D., in *N. Y. Medical Journal*.

## THE ABDOMINAL DISTENSION OF TYPHOID FEVER: ITS DANGERS AND TREATMENT.

Among the many complications which tend to increase the dangers and anxieties inseparable from a severe attack of typhoid fever, none are more formidable than those which are the direct outcome of the bowel lesion. Among the dangers thus induced, none causes more anxiety, or more gravely affects our prognosis, than the extreme abdominal distension with which in severe cases we every now and then have to deal. A moderate amount of tympanites is a common symptom, and does not call for special treatment, but in severe cases it may become immoderate; the abdominal distension may be so great as to not only cause considerable distress, but, by its upward pressure on the diaphragm, to materially increase the danger of an already sufficiently grave illness. What adds to the gravity of this complication is the fact that it comes on late in the case, when the patient is already pulled down by two, three, or more weeks of fever. The condition essentially consists in great distension of the large bowel. Sloughs and sloughy discharges from the lesion in the small bowel have been slipping through the ileo-colic valve into the cæcum. As a rule, the diarrhoea which accompanies the process leads to their early discharge by stool; but they may be detained in the cæcum or colon, or if very abundant may not be got rid of with sufficient rapidity to prevent the colon from getting distended by the gas formed during their rapid decomposition. The evil is constantly being added to by the descent of sloughs and putrid discharges from the ileum, and by-and-by the bowel gets paralyzed from over-distension. The condition is not unlike that which has frequently to be dealt with in the case of the bladder; and, as in these cases of bladder distension in the typhoid state, a certain amount of urine may dribble away, occasionally leading the attendants to think that the bladder has been relieved, so in the cases of distended bowel a certain amount of flatus and fluid may pass away without any real relief being given. So long as the muscular coat of the bowel retains the power to contract the danger from distension of the colon is not imminent, and relief may be given by the administration of a stimulant enema—turpentine, carbohc acid, etc. But the distension may be so great as to paralyze the muscular coat of the bowel. Under such circumstances no enema can make the bowel act; and from such treatment no good, and possibly harm, may result. When such a point is reached the patient is in imminent danger. The colon may become, from absence of the usual resistance of its muscular coats, very rapidly distended; such distension,

besides causing much distress, produces pressure on the diaphragm, impeding its action, and embarrassing that of the heart and lungs. Such pressure, if not relieved, is likely to cause death; for be it borne in mind, it occurs only in the advanced stages of bad cases in which the typhoid state is marked, the cardiac systole feeble, and in which the addition to the already existing troubles of any other complication readily turns the scale against the patient.

Such extreme distension of the colon, with its attending dangers, may be developed very rapidly. It calls for prompt treatment. To give enemata is useless; for the muscular coat of the bowel is so distended that it cannot act. Nay, it is worse than useless; for it is only adding to the contents of an over-distended bowel. There are only two ways of giving relief—to tap the colon by a fine trocar, or to pass a long tube into it by the rectum. The former proceeding, though attended with very little danger, cannot be said to be free from risk. The passing of a long tube up the bowel is not only void of all danger, but, as a means of relief, is much more speedy and efficacious; for not only does the flatus pass away more readily and freely through the tube than through the cannula, but there passes away with it much of those putrid and sloughy contents of the bowel, whose retention and decomposition cause the whole mischief. The following cases illustrate the beneficial effects of this method of treatment.

CASE 1.—A gentleman, aged thirty-six, of full habit and previous good health, had a severe attack of typhoid fever. Tympanites became a marked symptom early in the third week, and by the eighteenth and nineteenth days it was sufficiently great to increase the patient's restlessness and to cause some anxiety. Enemata of turpentine had been given without affording any relief. On the twentieth day there was great distension of the abdomen, the skin being quite tight; the patient was wandering and very restless; breathing was short and hurried, 42 per minute, pulse 120, feeble; temperature 103.4°. The tongue was dry in the centre; there was slight hiccough. A little dark-colored fecal discharge, with some flatus, was passed involuntarily in bed. Nourishment and brandy were taken frequently and in small quantity, and were occasionally rejected. The patient was in much distress and in imminent danger. A long tube was without difficulty passed into the bowel; there at once passed away a large quantity of flatus, and about a pint of dark-colored liquid, fecal matter, having scattered through it a number of shreddy particles, evidently the remains of sloughs. The patient seemed much relieved. Half an hour after it was noted that he was quieter and much less restless, the abdomen was less tensed, the respiration had fallen to 36, the pulse was 116, and the temperature had drop-

ped to 102·2°. This was at 4 p.m. At 10 o'clock the temperature was a 102·8°; pulse 116; respiration 36. The tube was again passed; a good deal of flatus and a small amount of dark fluid again coming away through it. The patient passed a better though still restless night. On the following morning there was some return of the abdominal distension and the restlessness, though neither was so marked as before; the tube was again passed with the like result, a large quantity of flatus came away, followed by nearly a pint of dark fluid fæces with sloughy shreds scattered through it. For several days the tube was passed three times a day; by this means the distension was kept down, the bowel was relieved of its offensive contents, and the patient was freed from the most pressing danger. Coincidentally with the relief thus afforded there took place an improvement in his general condition. The pulse, temperature and respiration all fell after the tube was used for the first time, and never again rose to the same point; hiccough ceased entirely, and the patient retained all his nourishment. On the twenty-ninth day of the fever there was a marked fall of the temperature and a little all-round improvement; the abdomen was less full; the expression was improved; the tongue was moist all over. On the thirtieth day the improvement was maintained, and on the morning of the thirty-first day the temperature reached the normal. From this time progress was uninterrupted.

CASE 2—Miss L., aged 20, had a severe attack of typhoid, with all the symptoms well marked. In the fifth week of the disease the abdominal distension, which had been a sufficiently noticeable feature for some time became rapidly very great, and the patient was extremely distressed and apparently sinking. When I saw her there was great distension of the abdomen, the skin of which was quite tense; the patient was prostrate and wandering, restless, and breathing in a distressed and irregular manner, about 44 per minute; the pulse was 128, feeble; the temperature 103·9°. She was evidently suffering from pressure on the diaphragm. There was no long tube at hand, and matters were urgent, so I cut the valvular extremity off from the tube of a Higginson's syringe, and introduced the tube into the bowel as far as the ball. There passed away a great quantity of flatus with about a pint of dark liquid fæces with a number of sloughy-looking shreds floating about in it. The patient was at once much relieved; she became less restless, the respiration dropped to 36, and became more regular, the pulse improved, and the temperature fell to 102°, a fall of nearly two degrees, within an hour after the passage of the tube. A proper tube was obtained, and passed several times daily for nearly a week. The patient slowly improved, and made, after a long time, a perfect recovery.

CASE 3—A young man, aged twenty-three, had much abdominal distension in the third week of attack of typhoid. On the twenty-first day there was extreme distension and great prostration, with muttering delirium, dry tongue, feeble pulse, and a temperature of 104·1°. The abdominal distension had rapidly increased, and its increase was accompanied by a corresponding prominence in the urgent symptoms. He was restless, muttering, very prostrate, and rejected all nourishment. A long tube was passed into the bowel. There at once came away a large quantity of flatus and dark-colored fluid fæces, with here and there shreds of sloughy-looking matter scattered through it. All the urgent symptoms were distinctly relieved, the temperature in half an hour fell to 103·2°, nourishment was again retained, and he slowly gained ground, though the tube had again to be used on several occasions. The abdominal distension never became again a source of anxiety; but the case continued in rather a severe form till the patient died of perforation on the twenty-ninth day of disease.

In the first and second cases I believe that the timely passage of the tube saved the patients lives, for in neither could the pressure on the diaphragm have gone on for many hours longer without causing death. Many cases there are, of course, in which the passage of the tube, though it relieves the urgent symptom for the relief of which it was used, cannot save the patient from the other dangers of the disease. By relieving the pressure on the diaphragm, however, it saves him from that danger, and gives him one more chance of life. Case 3 illustrates this.—Dr. McLagan, in *Lancet*.

## THE ANATOMY OF THE THORAX AND LUNGS IN RELATION TO CERTAIN POINTS IN PHYSICAL DIAGNOSIS.

BY J. WEST ROOSEVELT, M.D.

Although so much has been said and written about physical signs and their causes, great difference of opinion exists in regard to the subject. If ever it be possible to establish physical diagnosis upon a rational basis, this basis must rest upon anatomical study. Both the anatomist and physiologist usually look upon the thorax and lungs from a point of view so different from that of the physical diagnostician, that their studies are of little value to him. The first is apt to be too much interested in details of structure, the second in questions of functions. The physical diagnostician, must regard the anatomy and physiology of the chest as he would the component parts and action of a piece of machinery, any disarrangements of which can be appreciated by the senses.



As most of the derangements are appreciated by the ear, the acoustical properties of the thorax are of much importance.

In this paper I regard the thorax and lungs purely from this mechanical stand-point. I venture to bring forward the subject not so much that what I have to say is new, but because I believe it to be true. Every sign mentioned has been observed by myself, and the anatomical statements are based upon dissections, corrosion preparations, or sections made by me. I do not know that any observation is original; I know that many are not. I have tried to study objectively—to see what *is* not what has been said to be. How far I have succeeded I do not know. I hope that, at least, I may present some of it in a new light. This is my only excuse for writing.

Much of the confusion regarding physical signs has been caused by the use of incorrect diagrams. The usual diagram of the air-vesicle and terminal bronchus, for instance, is preposterous. The average diagrams representing pleural effusions are absurdly incorrect. Both have had their influence in producing false ideas of physical diagnosis, since they gave false impressions of the mode of production of physical signs. This is no theoretical matter. A man who does not have a clear idea of physical conditions cannot progress in the study of physical signs. He who thinks that bronchial breathing necessarily indicates consolidated or compressed lungs, or cavernous breathing a cavity, as many diagrams would tend to show, is not a trustworthy interpreter of pulmonary signs. The same is true, in lesser degree, of one who supposes that the level of pleural effusions is always horizontal when the patient stands, or that it usually shifts when the patient lies down, or that absence of evidences of change of level with the patient's change of position indicates pleural adhesions, or that the lung is under actual pressure from fluid save when the quantity is very great, or, finally, that the lung is compressed or contracts directly and symmetrically toward its root when fluid is present.

The air-vesicles do not in the least resemble the usual diagrams. Active pressure upon the elastic lung, until fluid is very abundant, is, as Garland has shown, impossible. The same author has demonstrated why the fluid level does not always change with change of posture. That the lung cannot contract toward its root is evident when one looks at the *ligamentum latum*. Yet all the ideas mentioned are common.

*The Air-vesicles.*—In regard to the anatomy of the lungs, for the present purpose we are mainly concerned with the bronchial and vesicular portions. The former is better understood than the latter. The description which follows is the result of much study of corrosion preparations. It corresponds with that of Delafield, in his "Studies

in Pathological Anatomy." This description (of Delafield's) had been generally discredited. Among others who doubted its accuracy was the writer of this paper. A good deal of work has convinced me that Delafield's view is correct. It may be said that there are two different ideas in vogue regarding the anatomy of the pulmonary lobule; some regard the air-vesicles as attached to the terminal bronchi like a raspberry with its interior hollow. Hence many time-honored diagrams representing fine *râles*. Others give a more elaborate description of infundibula, etc. When one looks at perfectly injected cast of ultimate bronchus and air-vesicles (which looks like a berry), and breaks it up (observing it with a low-power lens), it becomes evident that the interior of the berry is made up of spheroidal bodies which are attached to one another at two or more points. These are the true air-vesicles, and the important point for us in Delafield's account is that these vesicles communicate freely with one another. This they do, since it is possible to break off a number together, and then, by further breaking, to show that there are many which present corresponding rough surfaces at the line of fracture. Delafield further points out that the bronchi enter the lobules in an irregular manner, sometimes from the side, sometimes from the distal end, etc. It is perfectly easy to reconcile the two other descriptions if this view be adopted. Kolliker, Klein, and others describe imperfect injections. Those who are responsible for the usual diagrams, probably studied well-injected specimens imperfectly broken up, and also sections of lungs which seem to bear them out. Delafield describes "air-passages" which, he says, "seems to be made up of a succession of large vesicles opening into each other, or of an irregular, large canal, made up of vesicles into which other vesicles open from all sides. These air-passages branch and anastomose. . . . They are given off from the ends of terminal bronchioles, or from the sides of small bronchi" ("Studies in Pathological Anatomy," vol. i., p. 102). In Delafield's "air-passages" we have, "the infundibula," the "respiratory bronchioles," and the terminal bronchi with vesicles opening into them. The main fact which Delafield demonstrates is the communication between air-passages.

*The Bronchi and Blood-vessels.*—The bronchi divide and subdivide, until finally the ultimate bronchioles terminate in the branching and freely communicating air-passages and vesicles. This arrangement exposes a very large surface to the air in the lobules; it also makes room for much elastic tissue, and it must cause a very great amount of motion in the air within the lobules and bronchioles with the respiratory movements. It is interesting to note that the bulk of the air-vesicles is always greatest where the chest motion is

greatest, and that, as I demonstrated in this Society at a previous meeting, the bronchi and arteries run in such a direction that they tend only to lengthen and shorten in respiration.

The veins pursue a different course from the arteries. They lie as far as possible from the bronchi, while the arteries accompany these tubes. Their course also is more tortuous. They are surrounded by elastic pulmonary tissue, attached loosely to their walls. The mechanical advantage of this arrangement has not, I think, been pointed out. It is evident that the veins are so placed as to tend to be held open during inspiration and expiration, by the tendency of the elastic tissue to contract toward the bronchi. They are so placed as to be practically uncompressed by the atmosphere. In fact, they may be said to run always through those parts of the chest in which there is a nearly perfect balance between the contractile power of the lung and the atmospheric pressure.

Ewart, in his remarkable monograph, "The Bronchi and Pulmonary Blood-vessels," describes the course of the veins with the same exactness and detail which characterize the rest of his work. He views the veins, however, as a part of the pulmonary framework. In this he is, I think, only partly correct. He is right, as far as he goes, in looking upon the veins as part of the pleural and pulmonary connective-tissue system; but the vein only lies in, and does not form a part of, the sustentacular system, running in the latter because it is necessarily best placed, as far as possible from the centres of expansion and contraction of the lung. I cannot speak too highly of this work of Ewart. It fills a practically unexplored field of pulmonary anatomy with a thoroughness which leaves nothing to be desired. It has vastly simplified my own work, and rendered the publication of much of it needless. To it I am indebted for the first correct idea of the pulmonary vein. My view of the subject is purely mechanical, and Ewart's anatomical, hence we interpret differently.

*The Attachments of the Lungs.*—The structures forming the roots of the lungs are not so much concerned in holding the organs in place as is usually assumed. Far more important are the pleural folds known as the *ligamenta lata*. These broad ligaments are arranged in such a way as to fasten the lungs, for a considerable part of their inner surfaces, firmly to the vertebral column, pericardium, and diaphragm. Their folds are so separated above as to leave free room for the bronchi, vessels, etc., and so protect them entirely from injury or pressure during respiration. Except these broad ligaments, the rest of the pleuræ of the lung and thorax are interesting for our purposes in so far as they glide over one another.

*The Thorax and its Contents.*—The thorax is an expansible cavity, partly enclosed by rather rigid

walls, composed of bone, connective tissue, and muscles, partly by the very elastic diaphragm. The cavity is divided into two compartments for the lungs by the mediastina and the pericardium contents. These structures make a fairly rigid column, attached above to the deep neck fascia, below to the diaphragm. The central parts of the latter are thus held nearly motionless at all times.

The chest moves in respiration in such a way as to enlarge or diminish every diameter (roughly speaking) in proportion to the bulk of lung-tissue lying between every part of each half of its surface and the main bronchus of the corresponding lung. The movements of the thorax cause not only expansion of the lungs, but also gliding of the pulmonary over the parietal pleura.

Every structure within the thorax, save the lungs, is subjected to a varying negative pressure by the elasticity of these organs. During inspiration this pressure is of course most marked. It is this which causes the diaphragm to arch up and the intercostal spaces to curve inward. It is this which determines the position and shape of fluid masses in the pleural cavities, and the displacements of viscera in pneumo-thorax.

*Fluid in the Pleural Cavities*, as is beautifully demonstrated by Garland in his paper on "Pneumono-dynamics," does not assume a "hydrostatic," but a "hydrodynamic," level. That is: because of the negative pressure of the lungs, the surface of the fluid is made to take a peculiar shape. It is not level, as it would be under the influence of gravity alone, but is drawn up so as to apply itself to the surface of the contracting lung. The line of flatness at the fluid-level is not straight, but curved. Moreover, the same negative pressure may prevent any great change in the fluid-level with change of posture. Garland illustrates these facts by means of simple and ingenious apparatus. He also calls attention to the fact that active compression by fluid of an elastic body like the lung is impossible, until the elasticity of that body is overcome. The fluid allows the lung to contract, does not press upon it until the chest is very full and the contractile power of the lung exhausted. Of course, as far as the effect upon the blood circulation and air movement within the lung is concerned, it does not make any difference whether the elastic tissue contracts, or the fluid compresses it; but it is very important to remember that, until this negative pressure ceases, the intercostal spaces will continue to be depressed, and the abdominal viscera will not be much displaced. Not so with the heart, since the elasticity of the lung on the sound side produces a negative pressure which causes its displacement toward that side when fluid is present in too small quantity to do so.

All this is so obvious, when once stated, that it is needless to discuss it. The position assumed by the lung when actively compressed by fluid, or

when pneumothorax allows it to contract, is usually entirely wrongly shown in diagrams, and is misunderstood by many writers. It is a common idea that the lung under these circumstances contracts towards its bronchus. This is not so. Held by the broad ligament, it contracts so that (unless there are old, firm adhesions) it lies along the spinal column in the vertebral groove. That this is the case can sometimes be demonstrated during life by pretty hard percussion, which will show dulness near the spinal column from about the spine of the scapula to the bottom of the chest, while flatness will be found everywhere else in cases where there is a great amount of fluid. In some cases in the same region the subcrepitant râle is heard. Post mortem the lung is usually found in this situation if the contraction or compression is sufficiently marked. If not, the position of the lung is partly determined by its elasticity, partly by its attachments, and partly by its power of floating because of the air contained in it. These various factors modify the physical signs.

*Physical Signs.*—I shall speak only of a few physical signs, and the probable mode of their production, since this paper is already very long. It is necessary to define some terms for the sake of clearness. On percussion, we find over different parts of the normal chest and abdomen, in different cases, pulmonary, tympanic, or vesicular resonance, with certain modifications thereof, as tubular resonance, flatness, bony resonance, the cracked-pot sound, and certain combinations or modifications of the above, as vesiculo-tympanic resonance, and dulness. Pulmonary and tympanic resonance, with their modifications, and in the cracked pot sound, flatness, and bony resonance, have each one distinguishing feature, namely, quality.

*Dulness* has none. It is merely some type of resonance modified more or less, usually by an increase of the flat tone which is always audible to trained ears in any percussion-note. No absolutely pure percussion-note save flatness exists. By flatness is meant what is sometimes called "absolute dulness," namely, the note obtained on percussion over the thick muscles of the thigh, or over a large fluid accumulation in the chest or abdomen, etc. This note is high-pitched, short, and of little intensity, and of a quality called flat. It is impossible to describe sound quality. When anyone can describe the taste of potatoes, possibly he can describe the quality of a sound. Neither of these things has yet been successfully reduced to writing. I believe, as has been said, a flat, short, high-pitched tone always accompanies any other type of percussion-sound. It is produced by the pleximeter and the solid tissues which cover the organs producing the more pronounced sound. Dulness is produced when this flat note becomes more, while the pulmonary note becomes less, intense.

It is difficult to distinguish, in all cases, a rise in pitch from a change in quality. Where the lungs, for example, cover with a thin wedge-shaped edge the liver, the pulmonary note certainly rises in pitch. It is also duller, and to the writer this dulness seems due to a change in quality produced by diminished pulmonary, and increased flat, tone.

*Flatness* is a tone possessing an absolute quality, but not an absolute pitch. In pulmonary and tympanic or any other resonance the quality is not pure.

In percussion it is well known that the direction of the blow changes greatly the resulting note. It is not, however, usually appreciated how great a range of notes may thus be obtained. In the intra-clavicular region of healthy adults the writer has frequently obtained notes running through one-fifth and even one-sixth of a musical scale, simply by directing the blow toward the trachea, then gradually more and more backward, then toward the external wall of the chest; the pleximeter always being held in the same position.

*Pulmonary or vesicular resonance* is heard over a large part of the normal thorax. It is a tone whose predominating quality is produced by the cavity of the chest with the contained sponge-like lung. It is produced neither by the air-filled lung alone nor by chest cavity alone. The former produces a much lower-pitched and feebler, the latter an amphoric or tympanic note. The spongy lung dampens the thoracic tone, and the thoracic cavity, with, to a certain extent, its walls, resound with the lung, and together they produce what we call pulmonary resonance. The pitch of this resonance varies with the elasticity of the chest-wall and with the size of the thoracic cavity. A large chest usually gives a deep tone. A smaller, elastic one does the same. The note of a large chest is, I think, of greater volume or intensity than that of a smaller, elastic one.

*Bony resonance* is heard over the sternum, and in some cases, especially in old people, over a large part of the chest. It is interesting to note, in connection with the statement that dulness is usually a mixed tone, that the heart produces on gentle percussion a dull note where it lies under the sternum, but on stronger percussion, when the force of the blow causes the whole bone to resound, it obscures the flat heart-sound.

*Tympanic resonance* is produced by hollow viscera, by consolidated and compressed (or contracted) lung, and by cavities in the lung.

In all cases save those in which this note is heard over solidified, contracted, or compressed lung, its mode of production is sufficiently clear. In the latter cases, so far as I know, the quality and pitch of tone is always the same as that produced by percussing the trachea, if the upper part of the chest gives it out; if the lower, either this note or that of the abdominal viscera. It has been

suggested that the contracted lung over fluid is in a physical state resembling hollow viscera, and produces a note more by the vibration of its contained air than the mixed tone of its air and its stretched pulmonary connective tissue, etc. Possibly this is so. As far as I have observed, however, it has seemed to me that the note is identical with that of the trachea and large bronchi, or abdominal viscera. In children, the relatively large size of the bronchi and trachea compared to the vesicular part of the lung, together with the very elastic chest-walls, makes the occurrence of this note, under the conditions we are considering, very common.

*The cracked pot sound* is heard frequently beneath the clavicles of healthy children, as well as over cavities, consolidated and compressed or contracted lung, and in pneumothorax. The fact that it is heard so often over normal lungs in the infraclavicular region in children throws, I think, much light upon the mode of its production. The walls of children's chests are elastic, the bronchi and trachea relatively of large size. The sound is best heard when, the mouth being opened, a rather heavy blow is struck, the plexor being allowed to remain upon the pleximeter. This annuls, as far as may be, all thoracic vibration. The blow is really a pushing one, which is calculated to compress the lung and drive a good deal of air into and through the large tubes, larynx, and mouth; this causes the sound. It may be fairly imitated if, when a patient whispers, the chest be suddenly squeezed just as a word is being uttered, both hands of the observer having been placed over the lower ribs. In the case of consolidated lung, or lung over fluid, is it not probable that precisely the proper degree of elasticity may, in some cases, obtain to admit of drawing air out in a similar way? In pneumothorax also, with free opening into a large bronchus, and in some cases of cavity, this explanation seems reasonable.

*Precautions to be observed in Percussion.*—Probably many good auscultators exist for one good percussor. The note obtained in percussion is often very complex and difficult of analysis, the more difficult being of short duration. Pitch and quality are hard to separate. Moreover, percussion is usually badly taught by instructors. Not to weary you with the well-known advice regarding the mode of striking, etc., and the necessity of striking a quick blow, I wish to call attention once more to the great need of comparing the results of lighter and heavier blows, and also of examining the patient standing, and with the body naked when possible. I wish also to emphasize the value of the much-neglected study of the sensation conveyed to the finger used as the pleximeter. By this finger the sensation of resistance will often give a better idea of the level of fluid than the ear. In children's chests the sensation is of

especial value, since their elastic chests often give notes from both sides. It is, moreover, remarkable what slight differences of pitch and quality may thus be appreciated.

*Auscultatory Signs.—Bronchial Breathing.*—There is no doubt that this sound is produced by the air-currents in the larger bronchi and trachea, and possibly the larynx, nose, and mouth. It is heard normally over the trachea, the sternal notch, and upper part of sternum, and sometimes in the vertebral region near the scapular spines. It is also usually heard over consolidated and compressed or contracted lungs (especially, in the latter case, at or near the level of fluid, and sometimes below this level), over cavities, and over tumors (including aneurism) pressing upon the larger bronchi.

Its characters need no description, but, for reasons which will appear later, I wish to remind you that in it there is a pause between inspiration and expiration, and that expiration is prolonged and higher-pitched than inspiration. In cases of consolidation (as pneumonia), it seems probable that the solidified lung conveys sound better than the normal lung, and therefore is much like a stethoscope applied directly to a bronchus. The usual propagation of this sound at or near the level of fluid is explained, partly by the fact that here we have practically solid lung, and partly, probably, by the reflexion of the sound from the fluid. The absence of all sounds in most cases below the fluid-level is probably due to the fact that, though sound travels well through liquids like water or serum, or through solid tissues like compressed or solidified lung, it does not readily pass from solid to fluid media, or *vice versa*. Thick masses of fluid, therefore, usually prevent its transmission from the lung, while the contracted lung, at and near the fluid-level, forms a good sound-carrier.

It remains to speak of two conditions: where there is absent breathing over solidified lung, and where there is bronchial breathing below the level of fluid.

Absence of breathing over solidified lung may be found where the whole or a part of a lung is involved. In the former case it is possible that practically no air enters or leaves the larger tubes. In the latter, possibly a plugged bronchus may account for the phenomenon; possibly at times the consolidation is of such character as to transmit sound badly, resembling more or less in physical character oedematous exudate. Possibly in some cases the diminished movement of the affected chest may explain it.

Bronchial breathing is often heard below the fluid-level in adults with a very full chest, and in children. In the latter the relatively large size of the bronchi seems to explain the fact. In the former, with over-full chests, the fluid and compressed lung together are practically like consoli-

dated lungs, forming a good medium for sound transmission. The fluid pressing upon the lung-tissue is like the stethoscope pressing upon the chest-wall. The bronchial sounds go through it in the same way. Vocal resonance is carried in a similar manner, but vocal fremitus with its larger waves is checked by the fluid (probably because of the inertia of the latter).

The vesicular murmur, or normal pulmonary respiration, has been the subject of much dispute. As this paper is already too long, I shall only speak of a few points in regard to it. First, unlike bronchial breathing, its expiratory sound is lower pitched than the inspiratory, and there is scarcely any pause between the two. Second, both in pitch and quantity, both sounds differ from the bronchial type. Third, it is absent when from any reason air does not move in the vesicles, and the latter, therefore, do not dilate or contract. Finally, the murmur is no more distinct in places where there is most movement of the pulmonary over the costal pleura (*i. e.*, over the anterior lower parts of the chest). The sound can, therefore, not be due to pleural movements.

Now, this murmur might conceivably be the bronchial note modified in its transmission through the lung tissue; but if so, the modification is certainly peculiar, since it fills in the pause between two sounds, lowers the pitch of one relatively to the other, alters the absolute pitch of both, and utterly changes the quality of both. Moreover, if the sound be simply transmitted and altered, the plugging of a bronchus or other obstruction to vesicular movement should not abolish it. Recent experiments (which are rather crude), made upon lungs removed from the body, show that this murmur may be heard when all bronchial sounds are annulled, by introducing a loose cotton plug into the trachea.

The vesicular murmur must be produced in the lobules of the lung. The air-currents and the elastic tissue of the lung, or both, may cause it. That much motion of the air in the lobules, and therefore of the walls of the vesicles, occurs, cannot be doubted, if one considers the relative bulk of the vesicles to the bronchi, the position and direction of the latter, and the thoracic movements. The air rushes through narrow tubes into and from much larger passages. In so doing one would expect it to cause a sound. The expanding and contracting vesicular walls also, like any elastic substance alternately made more or less tense, must do the same. One or both of these must be the cause.—*Med. Rec.*

It has been shown by Bastian that complete transverse section of the spinal cord abolishes the reflexes of the lumbar enlargement of the cord, instead of increasing them.

## PHYSIOLOGICAL ACTION OF CHLOROFORM.

Professor H. C. Wood, conjointly with Dr. Hare, has communicated a paper upon Physiological Action of Chloroform to the *American Medical News* of Feb. 22nd. The authors criticise the work of the Hyderabad Commission, and are led to adopt very different views concerning the action exerted by chloroform upon the heart. Moreover, they take exception to an observation made by us in the *Lancet* of Jan. 18th, p. 139. We said in speaking of the Hyderabad Commission: "The practical outcome of the research would appear to be that deaths are not inevitable. They are therefore preventable, and by due care in its administration they may be certainly avoided." Professor Wood and his collaborator do not appear to recognize that in using the above words we were expressing the conclusions of the Commission rather than our own. We were careful to add: "The conclusions of the Commission are sweeping, and without abundant evidence cannot be accepted." We have spoken with no uncertain sound from time to time concerning the dangers attending the use of chloroform, dangers which unquestionably in temperate climes manifest themselves through the heart. A careful perusal of the report of the Commission will, we think, amply justify us when we assert the outcome of its teaching is that heart failure does not occur, and deaths are, if ordinary precautions are adopted, quite preventable. We may, however, quote the final word of the Commission in confirmation of this. It says (the *Lancet*, Jan. 18th, p. 159): "The Commission has no doubt whatever that if the above rules be followed, chloroform may be given in any case requiring an operation with perfect ease and absolute safety, so as to do good without the risk of evil." The rules, we may remark, are simply those which every competent chloroformist has, since the days of the English Chloroform Committee, known and practised. But the really important part of Professor Wood's paper is that in which he narrates his own experiments. The work of Professor Wood, as that of a tried and skilled experimenter, and one who has investigated the action of chloroform upon the heart more than once, must command the utmost attention. In reviewing modern physiological research on this subject, he justly says it is unanimous in averring that chloroform given diluted to the lower animals kills *qua* the respiration—*i. e.*, as Snow has well explained, by cumulation; given in concentrated vapour, it kills by provoking paralytic arrest of the heart. This result also obtains when chloroform is injected. The heart, further after this arrest, is found relaxed and incapable of responding to stimulation. Professor Wood states

this result is so constant that he has repeatedly demonstrated it before his class. It has been the custom to destroy dogs in the laboratory by chloroform, and Professor Wood has "often noticed that death has been produced by primary cardiac arrest." Although possessed of these facts as the result of several years' work in the laboratory, it was determined, upon the publication of the Hyderabad Commission's report, to reinvestigate the matter. This was done with the result that Professor Wood became more than ever impressed by the fact that chloroform can and does kill directly through primary arrest of the heart. One series of experiments went to show that the heart is *directly affected* and not reflexly, the view now commonly held by experts. A second series proved that although when large doses are given respiration and the heart's action may cease synchronously, yet frequently the cardiac action ceases a perceptible period before the respiration comes to a standstill. The conclusions founded upon these experiments are well worthy of very careful consideration. The authors say "chloroform acts as a powerful depressant poison upon both respiration and circulation: sometimes the influence is most felt at the heart, and death results from cardiac arrest; in other cases the drug paralyzes primarily the respiratory centres, while in other instances it seems to act with equal force upon both medulla and heart." And, further, they are led to formulate "that cardiac arrest is specially prone to occur when chloroform is administered rapidly and in concentrated form in the human subject in which the heart ceased some while before arrest of respiration took place. They suggest that if the report of the Hyderabad Commission is not materially modified in its main contention—viz., that chloroform does not cause primary cardiac arrest—the explanation may be found in some peculiarity of Indian pariah dogs, since European and American dogs unquestionably succumb to primary heart failure when allowed to inhale an unduly strong chloroform vapour.

In the *Lancet* of Sept. 21st, 1889, we made the same suggestion as Professor Wood does now, and pointed out the possibility of the animals experimented on in Hyderabad being peculiarly resistant to the action of chloroform, and also indicated that differences in resisting power might also exist between the inhabitants of different cities. We further indicated variations in temperature as another possible cause of difference in the results of chloroform administration. There may be other factors still unknown, and which may be ascertained by further experiment. We have no doubt that the experiments of the Hyderabad Chloroform Commission and those of Drs. Wood and Hare were made with equal care, and the apparent discrepancies between the results will in the end only lead to a fuller and more perfect

knowledge of the truth. But we have foreseen that it is quite impossible to come to a final conclusion regarding the action of chloroform on man from experiments, however numerous and however careful, on the lower animals. Such experiments are of great value, but the question must also be worked out from the clinical side, and it is for this reason that we have sent out a request for information regarding the results of the administration of anæsthetics. We trust that the difficulty of arriving at exact conclusions without a very large basis of facts will induce all those who can give us information to do so as fully as possible, and also to remember the proverb, "*Bis dat, qui cito dat.*" When we have received these returns we purpose to them collated and to devote careful consideration to the whole question of the action of anæsthetics, from its clinical as well as its experimental side.—*Lancet*.

MEDICAL NOTES.

For *œdema of the vulva* during pregnancy, Prof. Parvin directs that numerous punctures be made.

*Pharmaceut Era*, Feb., 1890, suggests the following *Dandruff Pomade*:

- R.—Acd. salicylic., . . . . . gr. xxx
- Sodii borat., . . . . . gr. xv
- Balsam Peru., . . . . . ℥xxv
- Olei anisi . . . . . gtt. vj
- Olei bergamot., . . . . . gtt. xx
- Vaselin., . . . . . ʒ vj—M

The following is suggested as an injection in *Gonorrhœa in the Female* (*Jour. de Med. de Paris*, Dec. 1st, 1889):

- R.—Creolin, . . . . . ℥xxx
- Extract. hydrast. canad., . . . . . fʒ iiss
- Aquæ, . . . . . fʒ viij.—M

Sig.—Add a dessertspoonful to a pint of water, and use as an injection.

In the treatment of *Chronic Gonorrhœa*, Dr. Breima (*Riforma Med. in Med. News*, Feb. 15th, 1890) recommends the following injection:

- R.—Creasot . . . . . ℥x
- Extract. hamamelis fluid., . . . . .
- Extract. hydrast. canad., āā . . . . . ℥xv
- Aquæ rosæ, . . . . . fʒ iv. M.

This should be slightly diluted with warm water before using.

Dr. S. Cohen gave the following as a pleasant form of *diet* in cases where milk was being used:

- Completely peptonized milk, 4 oz.
- Juice of one lemon,
- Sugar, . . . . . ½ oz.

To be placed on ice until cold; is then ready for use.

In treating *obstruction of the nose*, quinine and belladonna or cocaine will relieve the congestion; the patient also should snuff up the nose a mixture of camphor and boric acid; a cold bath to be taken each morning, to prevent taking cold. Dr. Jurist.

Prof. DaCosta, for a case of *muscular rheumatism*, prescribed as follows: Dry heat to part, and Dover's powder with nitrate of potash. Should the case linger, give colchicum and potassium iodide. In the more chronic cases, give:

R.—Morph. Sulph. . . . gr.  $\frac{1}{6}$   
Atropine, . . . . gr.  $\frac{1}{80}$ .—M.

To be given hypodermatically.

Prof. Parvin directs the following in cases of *threatened eclampsia* in pregnancy; a purgative pill—

R.—Extract aloes,  
" colocyth, āā gr.  $\frac{3}{4}$ .—M.

To be given frequently enough to keep the bowels freely open; also a hot bath each day, with a glass of hot water to be drunk while in the bath. After the hot bath, the patient must be put to bed, and wrapped in blankets. Milk diet.

Prof. Parvin made the following remarks upon *dysmenorrhœa*, while treating a young woman for this affection before the clinic: Frequently in young women, *dysmenorrhœa* disappears at puberty or soon after, with full development of the uterus. Exquisite sensitiveness of the internal os, is an indication for dilatation. Relief by dilatation, is not from the fact that the os is made larger, but the sensitive nerves are stretched. Or if *dysmenorrhœa* result from a uterus under size, with great sensitiveness of internal os, then antipyrin, five grains every hour for six hours, or sodium salicylate, gr. xv to xxx, every four hours. Antipyrin seemingly lessens the flow.

Dr. Von Harlingen treated a clinic patient with *acne*, as follows: Apply *sapo viridis* and rub in with fingers, then thoroughly wash away all the soap and apply starch. If the *sapo viridis* be left in for a long time, it will cause inflammation of the part.

In a case of *endometritis* with the following history, Prof. Parvin pulled down the uterus with a tenaculum forceps, curetted, and made applications of Churchill's tincture to the lining of the uterus. Woman thirty-six, married, three children, four miscarriages, menstruation at times very profuse, leucorrhœa, pain in inguinal and lumbar regions, patient quite weak.

For a case of *menorrhagia*, Prof. Parvin prescribed as follows: Rapid dilatation, application of Churchill's tincture, after pulling down the uterus with the tenaculum. The operation under ether.—*Coll. and Clin. Rec.*

## THE SONG OF THE KNIFE.

With fingers weary and worn,  
With eyelids heavy and red,  
A student sat, in a student's gown,  
Dissecting a neck and a head.

Work, work, work!  
While the cock is crowing aloof,  
Work, work, work!  
Till the cats run over the roof:  
Oh! worse than any slave,  
Dissections are things I shirk,  
The student has not a soul to save,  
If this is Christian work.

Work, work, work!  
Till the brain begins to swim:  
Work, work, work!  
Till the eyes are heavy and dim.  
Vein, and muscle and nerve,  
Nerve, and muscle, and vein,  
Till the arteries all get running about  
Like cobwebs over the brain.

Oh! examiners dear,  
Men with money and wives;  
It's not the patients you're wearing out,  
But lots of students' lives:  
And the fees they are so rough,  
Twelve and sixpence at a go:  
Oh, that human flesh should be so dear,  
And human minds so low.

I wish we were more like death,  
Mere phantoms of grisly bone:  
It would not take more to read them up  
Than a single night at home.  
Cut, cut, cut!  
And now I lose all reserve,  
And slit at once, with a single slash,  
A vein as well as a nerve.

Work, work, work!  
My labor never flags,  
We are always either cutting to bits  
Or sewing up old hags:  
And you know when I get home,  
There are books on floor and chair,  
That my shadow I thank,  
As it seems to read them there.

Read, read, read!  
From weary chime to chime.  
Read, read, read!  
As much as you can in the time.  
Quain and Ellis, and Gray,  
Gray, and Ellis, and Quain—  
Till you get a heart, a liver a spleen,  
All stuffed away in a brain.

Cut, cut, cut!  
In the dark December night—  
Dissecting gets very bad  
When the weather is warm and bright  
And just outside my rooms  
A man falls into the gutter,  
And so to show I know my work,  
I go boldly out with a shutter.

Oh! but once to smell the breath  
Of rum and whiskey neat,

With the stage upon the floor,  
And the foot lights at your feet,  
Oh! for one short hour,  
To feel as I used to feel:  
Before I knew how, when bandaged up,  
Babies will kick and squeal.

Oh! for one short hour,  
For just one little spree,  
And forget that just a month to-day  
The "College" is wanting me:  
A little drinking would ease my heart;  
But in their sawdust bed  
The bottles must stop, for every drop  
Hinders the work, as I said.

With fingers weary and worn,  
With eyelids heavy and red,  
A student sat, in a student's gown,  
Dissecting a neck and a head:  
Cut, cut, cut!  
Up men bereft of life:  
Singing alone in a dolorous pitch,  
And hoping examiners would never get rich,  
He sang the Song of the Knife.

T. E., in *Hosp. Gaz.*

**INFANT FEEDING.**—In a paper read before the New York Academy of Medicine, Dr. A. Seibert makes a suggestion with regard to infant feeding which we think will be likely to prove of great value. His point is that the quantity of food given should not depend upon the age of the child, but upon its weight, as it is far more likely that the capacity of the stomach will be in relation to the size of the child than to its age, and the extent to which children of the same age can vary in size and weight is almost without limit. For a child weighing less than eight pounds he orders three ounces of food at a time; the child to be fed every two hours during the day time, and twice during the night. When the weight is nine or ten pounds, four ounces should be given at a time, the intervals of feeding being the same. When between ten and fourteen pounds in weight, it may have five ounces at a time, and be fed five times during the day and twice at night. When weighing between fifteen and sixteen pounds, six ounces may be given at each feeding at the same intervals. When between seventeen and eighteen pounds, seven ounces may be given at a time, and it need only be fed once during the night. When weighing more than this, eight ounces would be given for each meal and at the same intervals. The proportion of milk is gradually increased from one in three to all milk at the last mentioned weight. To ensure the carrying out of his method, he has had a series of bottles made of the different sizes and graduated to show how much milk is to be put into each. Full directions are given for sterilising the milk by steaming. The principle upon which Dr. Seibert acts appears to be sound, though perhaps it would not be wise to adhere too rigidly to all the details.—*New York Med. Jour.*

**BATHS AND BATHING IN THE EAST.**—From the very day of his birth every Japanese has a hot bath at least every two or three days, in most cases every day, and in many cases several times a day, usually at a temperature of 110° to 115° F., often as high as 120°, and sometimes 130°. Young girls may be seen stepping and sitting down into a bath that will scald one's fingers, and even babies that are too young to walk are dipped in the same. Europeans used to this dangerous habit have come to alter their opinion; they, too, acquire the habit of enjoying a bath at from 110° to 120° F. The old fashioned and English notion that it is dangerous to go into a bath at a temperature over blood heat (say 98° F.) is declared, for instance, by Mr. Burton, to be like a good many other old ideas—an entirely mistaken one. He says:

"The ability to go into a bath at a temperature that would at first seem simply sufficient to parboil any human creature is easily acquired. It is only necessary to have a little perseverance, increasing the temperature of the bath by a degree or so a day. I have thus myself acquired the ability to go into a bath at a temperature of 120° F., although I much prefer one ten degrees less hot.

"One who has not tried it can have no idea how refreshing a very hot bath is, and especially in hot weather. One can remain in it for only three or four minutes at the outside; there is none of the enervating effect that there is from the tepid or so-called 'hot' bath of England, but, on the contrary, a feeling of increased vigor.

"A thing I cannot understand is that, whereas in very cold weather the effect of a very hot bath is to so warm the body that one can sit in comfort for some two or three hours after coming from it, even in a Japanese room, without feeling the cold, in summer the effect is (from reaction, I presume) distinctly cooling."

Foreign medical advisers had, in virtue of their superior knowledge, induced the issue of an edict keeping down the temperature of public baths to 100° F., but this proved very distasteful to the natives; and, moreover, the foreign medical advisers have come to see the error of their ways, and now themselves take baths at 100°, and find them agreeable, and, it is said, beneficial. Kusatsu is a famous mineral spring of a temperature of 54° C. (a little under 130° F.); that is, about the limit of enjoyable hot water, even for the inhabitants of the far East. Perhaps there is here a hint for our own physicians, and a subject for investigation.—*Br. Med. Jour.*

**HYDRASTININE IN GYNÆCOLOGY.**—In a late number of the *Therapeutic Gazette* Dr. Edmund Falk, of Berlin, gives an account of this new alkaloid, C<sub>11</sub>H<sub>13</sub>NO<sub>3</sub>, which is formed, along with opianic acid,



by gently heating a mixture of hydrastine and nitric acid and precipitating with an alkali. The alkaloid itself is perfectly white and contains a molecule of water of crystallization, but its salts are free from it and most of them are readily soluble in water. The physiological action of the drug differs, it is said, very materially from that of hydrastine. It is not a spinal irritant, and is a heart stimulant instead of a paralyzer of that organ; it also sustains persistent contractility of the vascular system without the paralysis which has been known to follow the use of hydrastine. Dr. Falk has made repeated demonstrations with hydrastine, and suggests it as a remedy in the treatment of uterine hemorrhages as being much more prompt and sustained in its action than ergotine. Report is made of twenty-six cases systematically and successfully treated with it. The twenty-six patients received in all four hundred injections of hydrastine hydrochloride in the form of a solution varying from five to ten per cent. There was no noticeable local irritation following these injections at any time. The patients were unanimous as to the painlessness of the applications and the freedom from that subsequent discomfort which so often arises from the use of ergotine. The discoverer is making further investigations, the results of which are to appear in due course in the *Archiv. fur Gynäkologie*.—*N. Y. Medical Journal*.

**RECIPE FOR CONTRACTING GONORRHEA.**—Should one desire to contract this malady, the following remedy will be found infallible: Take a pale, lymphatic woman, blonde rather than brunette, one with a tendency to leucorrhœa; dine in her company, commencing with oysters on the half shell, followed by asparagus; drink dry white wine during the repast, finishing up with champagne and coffee; waltz afterwards with your companion until you are overheated. Take beer before retiring, and on awakening next morning, be sure to indulge in a hot bath and do not neglect a prophylactic injection. This programme, conscientiously followed, will induce the malady unless you are under the protection of special Providence.—[*Ricord.*] *Cincinnati Lancet-Clinic*.

**CACTUS GRANDIFLORUS IN HEART DISEASE.**—Dr. Orlando Jones publishes his experience of cactus grandiflorus, which he claims is likely to prove a useful adjunct to our resources, especially in asthenic conditions of the heart. Digitalis, strophanthus, and convallaria are not always reliable in the varied conditions of the heart with which we daily meet. The action of digitalis is not infrequently disappointing when we are dealing with a feeble heart, especially if that feebleness is excessive and of long duration. In such instances cactus grandiflorus may fill a gap where other remedies appear to be lacking. The action

of this remedy seems to be the very opposite of that of digitalis, that is, in the final stage it strengthens the heart.—*Brit. Med. Jour.*

**PERCHLORIDE OF IRON IN LEUCORRHEA.**—Of all remedies for simple leucorrhœa, the old tincture of perchloride of iron is the best, combined with hyoscyamus, opium, hop or Indian hemp, when the mucous membrane is in a state of irritation. Tepid or cold water injections, cold hip baths, etc., are useful local applications, with rest: and avoidance of occupations involving prolonged standing or pedal exercise.

Sometimes tannin, zinc, or alum are valuable additions to the injections. When the discharge emanates from the glands of the os uteri, local applications of belladonna and bicarbonate of potash are serviceable, two ounces of tincture and a teaspoonful of the alkali to about a pint of water.—*Ed. in Pharm. Era*.

#### ONTARIO MEDICAL COUNCIL.

Want of space will prevent our giving an extended account of the proceedings of this body at its recent meeting. The chief points of interest are, however, summarized in our editorial columns.

The election of officers for the current year resulted as follows:—

President—Dr. Moore, Brockville.

Vice-President—Dr. Williams, Ingersoll.

Registrar—Dr. Pyne.

Treasurer—Dr. W. T. Aikins.

The following gentlemen have been appointed examiners for the ensuing year:—

Dr. Grasett, Toronto—Anatomy, descriptive.

Dr. Saunders, Kingston—Theory and practice of medicine, therapeutical, general pathology.

Dr. W. J. Wilson, Richmond Hill—Midwifery, operative and other than operative, with puerperal and infantile diseases.

Dr. Anson J. Fraser, Sarnia—Physiology and histology.

Dr. Burt, Paris—Surgery, operative and other than operative.

Dr. W. Waugh, London—Medical and surgical anatomy.

Dr. Oldright, Toronto—Chemistry, medical, practical and toxicology.

Dr. A. McKinnon, Guelph—Materia medica and pharmacy.

Dr. W. H. Emory, Toronto—Medical jurisprudence and sanitary science.

Dr. C. O'Reilly, Toronto—Assistant examiner to the examiner on surgery.

Dr. E. Hooper, Kingston—Assistant examiner to the examiner on medicine and pathology.

Dr. F. D. Canfield, Kingston—Homœopathic examiner.

# THE CANADA LANCET.

**A Monthly Journal of Medical and Surgical Science  
Criticism and News.**

*Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice. Address, DR. J. L. DAVISON, 12 Charles St., Toronto.*

*Advertisements inserted on the most liberal terms. All Letters and Remittances to be addressed to DR. C. SHEARD, 320 Jarvis St., Toronto.*

AGENTS.—DAWSON BROS., Montreal; J. & A. McMILLAN, St. John, N.B.; GEO. STREET & Co., 30 Cornhill, London, Eng.; M. H. MAHLER, 23 Rue Richer, Paris.

---

TORONTO, JULY, 1890.

---

*The LANCET has the largest circulation of any  
Medical Journal in Canada.*

---

## THE FIRST MEETING OF THE NEWLY ELECTED MEDICAL COUNCIL.

The first annual meeting of the newly elected Medical Council of the College of Physicians and Surgeons of Ontario, met in the College building, of which the entire profession may well be proud, at 2 p.m. on Tuesday the 11th ult., according to notice. All the members, excepting Sir James Grant, were present. The first business done was to elect officers. The list of these will be found in another column. A Committee was appointed to strike Standing committees, and one to inspect the credentials of members—for in this as in larger bodies it is necessary to see that each member has been duly elected to his seat. The Standing Committees consist of one on Education—one on Registration—one on Rules and Regulations—one on Finance—one on Discipline—and a Property Committee. These committees having been appointed, the Council adjourned till next day (Wednesday) at 10 a.m. This adjournment is required in order that the several committees may be called together and begin work—for the principal work of the Council consists in receiving, discussing and adopting the respective reports of these committees—the Council modifying them in any way a majority of the members may direct. On Wednesday the 11th the Council met and did a good deal of routine and other business. After discussing the Meerkhum prosecution case, it adjourned that the Com-

mittees might get to their work. W. Webb was re-appointed prosecutor for the Council.

Other business was done next day (Thursday) and the case of Jas. Cook Bright having been considered it was decided to leave it in abeyance for the present. The usual direction was given for calendars to be printed for the current year, 1890-91, which will contain a full and correct report of the business done throughout the session of the Council. A by-law was passed for levying the annual assessment, the amount being \$2 per annum. The Council ordered the Registrar to ascertain, as far as possible, the conditions on which reciprocity with the various Provinces of this Dominion can be arranged for. The information so obtained is to be laid before the Council at its next annual meeting.

A by-law was passed appointing Drs. Day, Bray, and Logan, the Discipline Committee.

After doing a good deal of routine work at its morning and evening session, the Council again adjourned to meet Friday the 13th, at 10 a.m.

Resolutions referring to a variety of matters were, as usual, relegated to Committees, to be considered and reported on.

The Council, at its afternoon session on Friday, ordered the Registration Committee to prepare a code of ethics to be signed by all students upon receiving the license, and to present the same for approval at the next session of Council.

The Education Committee recommended very few changes to be made in the curriculum this year. Several of these being only slight verbal changes in the calendar. One was of consequence as marking the unanimous intention of the Council to prevent frauds of any kind by candidates at examinations by every means which can be employed. The regulation as it stood in the calendar, bearing on this subject, was as follows:

“21. Any infraction of the above rules will lead to the exclusion of the candidate who is guilty of it from the remainder of the examination; and he will not receive credit for any examination papers which he may have handed in to the Registrar previous to his being detected in such misconduct.”

It was ordered that the words “and be debarred from further privileges at the discretion of the Council,” be added to this regulation. It is gratifying that there have been but few cases in which fraud has been attempted, and it is due to good, honest students that parties capable of attempting

to cheat, should be promptly and severely dealt with, and it is the intention of the Council that they shall be.

A resolution regarding the matter of decreasing didactic lectures having been referred to the Education Committee, was considered, and it was decided to do nothing in the matter for the present.

It was recommended that the examiner in chemistry be directed to make the examination bear, as much as possible, on Medical Chemistry.

The list of Examiners for the coming year appears on another page of this number.

The report of the Finance Committee was adopted, and amongst other recommendations contained one, increasing the salary of the Registrar to \$1800, which will be generally approved of, for it is no flattery of that gentleman to say, that he has well earned this increase, and that it would be by no means easy for the Council to obtain the services of a registrar who would discharge the many responsible duties of that office as well as these are discharged by Dr. Pyne.

On Friday, the 13th, the report of the Property Committee was adopted and was very satisfactory.

A resolution, having for its object the obtaining of useful information to be laid before the Council at its next annual meeting, was adopted. It is as follows:

"That the Registrar be directed to place himself in communication with the authorities of the Canadian and British Universities and Canadian Medical Colleges, also to obtain the circular of the leading Universities upon the Continent of Europe, and that a committee be appointed to whom this information so obtained is to be submitted."

It was also resolved that the Council petition the legislature for power to increase the annual fee, and also for power to erase the names of parties from the register for non-payment of the same; their names to be reinstated, upon payment of all fees due. Yeas and nays demanded; 13 for, 4 against.

The case of Dr. B. H. Lemon was before the Discipline Committee and it was agreed that the proceedings in this case be staid until the next meeting of the Council.

The case of Dr. N. Washington was also considered and it was agreed that in consideration of a letter received from the said Dr. Washington and the promise therein contained, proceedings against him be suspended until the next meeting

of the Council. The Council desire to have it distinctly understood that they do not thereby approve of the form of advertisement contained in Dr. Washington's letter, nor of any form of advertisements, nor of advertising.

In the case of John McKeown, owing to the fact that his whereabouts cannot be ascertained, he has not been served. The Registrar was instructed to have him served as soon as he is located.

Mr. B. B. Osler, Q.C., was appointed Solicitor.

It was also agreed that the Discipline Committee should be allowed the privilege of employing a Solicitor when required as in former years.

An Executive Committee was appointed consisting of the President, Vice-President and Dr. Henderson.

Dr. H. H. Wright was appointed Warden of the Council buildings and Custodian of the Council property, with the Property Committee as an Advisory Board.

The bylaw fixing the salary of the Registrar at \$1800 per annum was passed.

The Credential Committee's report was adopted ordering an election to be held in accordance with bylaws, in the Malahide and Tecumseh division, and declaring Dr. Russell, of Hamilton, elected for the Burlington and Home, and Dr. Rogers for the Bathurst and Rideau Division.

A resolution of thanks to the Council officers and to the President was unanimously adopted and the Council adjourned *sine die*.

## THE CURABILITY OF PHTHISIS.

Before the discovery of the specific nature of phthisis, the medical world sought, but sought in vain for some remedy to combat the ravages of this dread disease. Their remedies have been almost entirely empirical, as indeed, from the nature of the case, they must have been. It was known and recognized as a principle of treatment, however, long before the bacillus tuberculosis was demonstrated, that a patient suffering from consumption, who could eat heartily, digest and assimilate his food, was capable of being cured.

Since the acceptance of the microbic nature of the disease, medical savants the world over have sought, but again we fear we must say, sought in

vain, for a remedy which may be introduced into the lungs, and which will prove destructive of the living cause of the disease. Begeon's treatment by  $\text{Co}_2$  introduced into the rectum, which created such a furore, and the benefits of which were attested by so many reported cases, has long since become a dead letter. The medical world was at the time considerably impressed by these reports, and not a little enthusiasm was evoked all over the civilized world by the thought that at last a means of escape from the disease had been found, and that based upon rational principle. Alas! the cold and relentless steel of every-day experience soon proved that  $\text{Co}_2$  was—at any rate when administered by the rectum—powerless to destroy the silent workers in the pulmonary alveoli.

Quite lately, within the present year indeed, Dr. Hugo Weber has proposed to administer the same remedy by the stomach. One would need to have a high order of belief in the miraculous selective powers of the  $\text{Co}_2$  molecules, or a considerable degree of ignorance as to the habitat and life history of the germs of consumption, before he could convince himself that the said molecules can make their way from an effervescing mixture poured into the stomach, to the tuberculous masses in the lungs, penetrate them, and destroy the bacillus.

The absurdity of this plan of treatment will be apparent, when we consider that it is in close ill-ventilated and "mephitic" tenement-houses, city slums and alleys that this scourge is most at home, though there the amount of  $\text{Co}_2$  is in excess, showing that it is no preventive of consumption.

The hot air plan of treatment, which is of later date, and which attracted many adherents, seems to have been proven, so far as the hot air is concerned, quite valueless. The idea originated in Germany a few years ago; Halter and Weigert being its founders, and is being carried out to a considerable extent in America at the present time. The theory is that the disease germs may be either destroyed, or rendered innocuous by a temperature slightly above that of the body; so that it only remained to heat them to get rid of them and their noxious influence, and so cure the disease. In this case again, the interest in the successful maintenance of the theory was widespread, but again it is to be feared the plan will have to go by the board. Not only has large experience with this method of treatment failed to prove its use-

fulness to any degree commensurate with the plausibleness of the theory first propounded, but physical experiment has demonstrated the impossibility of raising the temperature in the lung by the inhalation of hot air. So that the apparently easy conditions laid down by Halter are impossible, even if, which again has been shown not to be true, a temperature of  $41^\circ\text{C}$ . is competent to destroy the bacillus. It would seem then, that the theory has not a leg to stand upon and we may expect to have it relegated to past methods, along with so many others which have "had their day and ceased to be."

We have said that lung temperature cannot be materially altered by the inhalation of hot air. Numerous experiments have proved this, and we append the conclusion of Dr. Ernest Sehrwald, of Jena (*Deutsche Med. Woch.*) as to this point.

1. Dry air can be inhaled through the nose, while the temperature of the air is gradually raised from  $50^\circ$  to  $350^\circ\text{C}$ .; the temperature in the pleura at the same time only rises  $1^\circ\text{C}$ ., even though the experiment be prolonged for one hour and a half.
2. An equal rise can be obtained by rapid and forced respiration.
3. The mucous lining of the trachea is much more sensitive to hot dry air than is that of the mouth and nose, for in the former the temperature of the air cannot be raised above  $80^\circ\text{C}$ .
4. When hot dry air is inspired, the frequency of the respiration rises from 80 to 144 in the minute.
5. The temperature in the lungs rises at the same time, but only  $1^\circ$ .
6. Halter's view that the tubercle bacilli are killed by a temperature of  $41^\circ$  is not proved to be correct.

Space will not permit us to follow this interesting subject further, in this issue, but it will be again considered in our next.

---

#### ONTARIO MEDICAL ASSOCIATION.

The tenth annual meeting of this Association was held in the College of Physicians and Surgeons' building, Toronto, June 11th and 12th. It is gratifying to note that the influence of this body is gradually being extended. The membership this year has increased by about 70, making a total of 653. There were present at this year's meeting 244 members, which is certainly a goodly number, showing the active interest taken in the

work of the Society. The place of meeting offers many advantages over the theatre of the Normal School, where all previous meetings have been held. Not only was the number in attendance large, as shown by the register, but the attendance at all the meetings of the various sections was more than usually good. The papers were, we think, above the average, as to merit, and there was no dearth of them, some excellent ones being taken as read, owing to want of time. These will, however, appear in one or other of the Toronto Medical Journals at some time during the year, so that valuable contributions to the current medical literature of the day will not be lost.

It is to be regretted that Dr. Goodell, of Philadelphia, was compelled to send a regret at the last moment, at not being able to be present; for the Association as a whole looked forward to welcoming so distinguished a man, and to having the pleasure of listening to his words of wisdom. But the presence of the veteran gynecologist, Dr. Emmet, of New York, did much to dispel the feelings of disappointment occasioned by Dr. Goodell's absence. Another distinguished visitor, Dr. Smith, of New York, gave *éclat* to the proceedings. His paper will shortly appear in our columns. The division of the Association into sections enabled a good deal more work to be got through with, though of course, everyone could not hear everything that was being done.

Discussion on the various papers was up to the average, during which much information of a valuable character was elicited.

The choice by the nominating committee, of Dr. Moorehouse, of London, as President for the ensuing year, seems to have been a popular one. We congratulate the doctor on the honor conferred upon him. To the activity of the secretary, Dr. Wishart, much of the success of the meeting was due, and we are sure he has the gratitude of the Association. Indeed, the Association has been fortunate in the selection of all its leading officers.

We have before referred to the desirability of more Ontario practitioners joining their forces with this central organization, but the statement will bear reiteration, that nothing but good can come to any medical man who takes an active interest in the work done, year after year at the meetings of this, perhaps the most important Medical Society in Canada.

### THE PERSONAL ATTACK ON THE DEAN OF TRINITY MEDICAL COLLEGE.

Attacks of a purely personal character are always to be avoided and never justifiable, and the recent one upon the Dean of Trinity Medical College made in the *Canadian Practitioner* of recent date is no exception, and the effort made through such attack to injure Trinity Medical College is equally unworthy. The Minister of Education is a government official and hence his course is fully open for criticism, and criticism by an open letter is perfectly parliamentary, and can not, with any fairness whatever, be construed into an attack on the Provincial University. We are pleased to be in a position to know and assert that financial considerations were never made a ground by Trinity Medical College for maintaining her separate independence. We feel that when a case requires for its support the opening up of old sores (as is aimed at in the reference to Queen's University) the causes of which were proven years ago to be foundationless rumors, circulated by the rivals of Trinity, it must needs be a weak one, and when such tactics are resorted to by an organ acknowledged to be the organ of the University of Toronto, labouring in the cause of higher medical education, we regret the example. When we see medical men in open competition for lodge practice, thereby cutting directly into the tariff of their colleagues, we have little faith in such ever being able to do much for pure science, even though an act of parliament authorizes them to try.

---

THE ACTION OF CLIMATES OF ALTITUDE IN CHEST AFFECTIONS.—Lendet, in a report to the International Congress of Hydrology and Climatology, terminates his report, *Med. Age*, as follows:

1. The climates of altitudes have, on the affections of the chest, an incontestable action; all powerful when it is a matter of *preventing*; relative or *nil* when it is a matter of *curing*.

2. When the disease is infectious and virulent, they are great modifiers of the culture soil (*terrain*); they do not touch the germ; they do not destroy the ferments.

3. Their *immunity* relative to pathogenic germs is neither real nor absolute; it is accidental and contingent.

4. Their vivifying and tonic action seems to

depend on multiple conditions, some of which, like the freshness and the purity of the air, its transparency and its immobility, have an incontestable importance, and of which, one only, the rarefaction of the air, is really specific.

5. The delicate of bronchi and of lung, those menaced by and predestined to phthisis, will derive a decided benefit from a prolonged sojourn on high table-land and mountainous regions, providing that they are not irritable, and that they have been methodically trained to live in the climate of mountains.

6. The confirmed tuberculous may, with advantage, pass the winter in the Sanitaria of Switzerland, provided that they are neither congestive nor hæmoptoic, and that they are strong enough to devote themselves every day to gymnastic exercises which require a keen and bracing air.

TREATMENT OF ALBUMINURIA.—Dr. Waugh (*Med. World*), in speaking of this condition, says:—For a number of years I have been accustomed to prescribe the following mixture as a routine practice in albuminuria :

R—Potas. acetatis, . . . . . ʒ j.  
 Chloroformi, . . . . . ʒ ss.  
 Acid. benzoici, . . . . . ʒ ss.  
 Aquæ, . . . . . q.s. ad. ʒ viij.—M.

Sig.—ʒ ss every four hours.

This combination has proved available, but sometimes fails, and in that case I have not found it easy to find a better. Quite recently, I was attending a four-year-old boy with albuminuria, which appeared without any discernible cause. At intervals the anasarca became extreme, the whole body being swollen to the utmost extent, with the concomitant discomfort and suffering. Then the swelling would gradually subside, and the child become comparatively comfortable, though the albumen never entirely disappeared. When, at the height of a new attack of anasarca, the prescription given above failed to give any tangible benefit, I then substituted the following :

R—Potas. acetatis, . . . . . ʒ ij.  
 Acid. benzoici, . . . . . gr. xx.  
 Sach. lactis, . . . . . ʒ iv.  
 Aquæ, . . . . . q.s. ad. ʒ ij.—M.

Sig.—ʒ j. every two hours.

The result was that within two days the dropsy

almost completely vanished, leaving the child in excellent condition, and free from all traces of albumen in his urine. This did not prove permanent; but, in view of the difficulty of securing relief, the rapid and decided action of the lactose deserves attention.

THE DUKE OF CONNAUGHT AT T. G. HOSPITAL.—

His Royal Highness was shown over the building, which was thoroughly inspected, and the party then proceeded amid loud cheers to the hospital, by way of Church, Gerrard, Jarvis, Wellesley and Sumach streets. The institution was gaily decorated with flowers, bunting, etc., and on entering the structure every one was struck with its remarkably clean and tidy appearance. Dr. O'Reilly did the honors and did them well. The whole building was inspected from top to bottom, and His Excellency seemed to be impressed with the satisfactory state of affairs which existed. He closely questioned several of the patients, among whom was the unfortunate jockey Douglas, who, it will be remembered, had his leg broken at the races on the 24th, and by his thoughtful demeanor won more than one grateful glance and smile from the suffering patient. Dr. Kilkelly was immensely taken with the hospital and could hardly be induced to return with the remainder of the party. Before leaving, His Royal Highness shook hands with Dr. O'Reilly, the house surgeons and several of the nurses, and inscribed his autograph in the hospital book as follows :

I have been very much pleased and interested with my visit.—Arthur, May 30, 1890 12 noon.

CHOICE OF HYPNOTICS.—Prof. Germain Sée, gives (*Med. Age*) the following classification of hypnotics, according to the cause of the insomnia :

1. *Insomnia from Pain*: Morphine, or antipyrin, acetanilid or phenacetin; sometimes bromides. If visceral, opium or belladonna.
2. *Digestive Insomnia*: Hot, alkaline water laxatives, regulation of digestion.
3. *Vascular, Cardiac and Dyspnoic Insomnias*: Secure ventilation, relieve asthma, by iodides, ethyl or pyridin; morphine, if iodides fail. Amylen, chloralamid, and especially sulphonal are safe; not chloral and bromides. In cardiac lesions urethan and sulphonal may suffice; probably not, but they are safe. In angina they are dangerous.
4. *Cerebro-spinal Insomnia*: Sulphonal, amy-

len and chloralamid can be advantageously alternated in agitated and persistent insomnias of organic diseases or insanity. Functional affections have insomnia from cerebral anemia. Hypnotics, if given, must be watched.

5. *Physical Insomnia*: Sulphonal, paraldehyde, chloral succeed best if the loss of sleep be due to worry.

6. *Overwork Insomnia*.

7. *Genito-urinary Insomnia*: Rare Use iodides, cold douches, antipyrin and hypnotics rather than narcotics; with proper regimen.

8. *Febrile, Auto-toxic Infectious Insomnia*: Often diagnostic. Treat cause; antipyrin in diabetes.

9. *Toxic Insomnia*: From opium, alcohol, coffee or tobacco.

THE INFECTION OF THE MOTHER BY A SYPHILITIC CHILD.—One of the most important of all pathological facts, says the *Br. Med. Jour.*, is the transmission of syphilis from father to child without infection of the mother (Collis' Law). Many men aware of this fact, and already victims of syphilis, hesitate to marry, almost entirely on account of their future offspring rather than their future wives. The extinction of the syphilitic virus in well-fed patients is one reason why the disease is not often seen in its hereditary form in children among the prosperous classes of society, as Paget has had occasion to observe. The immunity of the mother is a question which deserves the closest investigation. According to a well-known law, first laid down by Colles and afterwards confirmed by Baumès, a mother who suckles her syphilitic child never thereby acquires syphilis. Diday, Jonathan Hutchinson, and others have established this law; and the exceptions are so few as almost to prove the rule, if not themselves "suspects." Dr. L. Merz has published notes of two exceptions in the *Archives de Toxicologie* for January.

LARGE VESICAL CALCULI.—At the last meeting of the Montreal Medico-Chirurgical Society, Dr. Hingston exhibited two large vesical calculi, one of which, weighing 5 oz. 5 drachms (an engraving of which was to be found in vol. vi. *International Surgery*), the other, removed recently, weighing a few grains over five (5) ounces. The

latter also had been removed by the lateral perical section. Dr. Hingston stated, that although both operations had been extremely satisfactory, yet the difficulty experienced on both occasions in the extraction of such bodies, led him to think that the supra-pubic method might in many cases be easier of performance and perhaps not more hazardous.

RUBBER CEMENT.—As a little rubber cement will we think be frequently useful in the repair of many instruments in daily use by the general practitioner, we give the following from the *Can. Pharm. Jour.*:—Only virgin rubber can be used for this purpose. It should be cut as small as possible with a wet knife, and put in a corked bottle, with sufficient benzole to cover it well. Solution will follow, but it may be hastened by the heat of the water-bath, care being taken to loosen the cork. Those who make this cement for the first time always overestimate the quantity of rubber required. It swells very considerably before solution, and allowance must be made for this. Benzole from coal tar, not benzin from petroleum, must be used, but carbon bisulphide will answer, though no solvent is as good for general purposes as that first specified.

DIFFERENTIAL DIAGNOSIS OF DISEASES OF THE STOMACH.—Dr. Loundby (*Med. Rec.*) gives the following useful table for diagnosis of stomach troubles:

SYMPTOM.	GASTRODYNIA	ATONIC DYSPEPSIA.	GASTRIC CATARRH.	ULCER	CANCER.
Character of pain . . . . .	Dull, heavy.	Dull, heavy.	Burning soreness.	Acute stabbing.	Cutting.
Locality . . . . .	Epigastrium	Epigastrium	Behind sternum.	In one spot.	Epigastrium.
Incidence . . . . .	Immediately	After 1 or 2 hours.	After 2 or 3 hours.	Immediately.	After 1 or 2 hours.
Tenderness . . . . .	Sometimes.	None.	None.	Usually.	Usually.
Vomiting . . . . .	Usually.	None.	Of'n some retching.	Usually.	Usually.
Hematemesis . . . . .	None.	None.	None.	Usually.	Usually.
Tongue . . . . .	Clean.	Clean.	Furred.	Clean.	Variable.
Tumor . . . . .	None.	None.	None.	None.	Usually.
Age . . . . .	Usually under 30.	Any age.	Any age.	Usually under 30.	Usually over 40.
Sex . . . . .	Usually female.	Either.	Either.	Usually female.	Usually male.

STRYCHNINE IN THE TREATMENT OF ALCOHOLISM.—It has been remarked by an ancient authority that all the evil effects of alcohol upon the

system may be obviated by strychnine. Whether this be true or not, there is no doubt it is a most useful drug in the treatment of disorders especially of the nervous system, arising from a too free use of alcohol. Dr. Pombrak, says *The Lancet*, writing in the *Meditsinskoi Obozrénie* on alcoholism, describes seven cases treated by hypodermic injections of strychnine—a method that seems especially in favor in Russia, where, however, it must be remembered that drunkenness presents as a rule forms somewhat different from those prevalent in this country. Dr. Pombrak found strychnine a very valuable remedy, both in cases of chronic alcoholism and in those of dipsomania, not merely curing the attacks, but abolishing the desire for drink. Even attacks of delirium tremens were influenced beneficially. The treatment must be carried out in a systematic manner, and must frequently be kept up for a very considerable period. As to the dose, Dr. Pombrak in cases of moderate severity commenced with one-thirtieth of a grain, in more serious ones with one-fifteenth. He found that while the treatment was being carried out there was no necessity to order the patients to abstain from the use of spirits, as they always did so of their own accord.

#### REGISTRATION OF DOCTORS AS DRUGGISTS.—

There has been considerable friction between the medical profession and the authorities of the College as to the amount of the fees to be paid by the former on registration as pharmacists. Prior to the passing of the late amendments, it was optional with physicians whether they registered or not, but, as a matter of fact, most of those carrying on drug stores really did so for the benefit of their apprentices, who would otherwise have been debarred from recognition of service by the College of Pharmacy. The late amendments made registration compulsory with those physicians who desire to carry on the business of pharmaceutical chemists.

The question arose as the amount of the fees. The registrar, acting under special direction of the president, demanded ten dollars as the legal amount. Members of the medical profession claimed that the law permitted them to register on payment of four dollars. The controversy engendered some ill feeling, and, if pursued further, would have doubtless resulted in an open breach between

classes whose relation are of the closest character, and should be the most amicable.

The matter came up for discussion in committee at the council meeting, and legal advice having been taken, it was decided to retreat from the position, and make amends as far as possible, by returning to physicians who have sent in their fees since the passing of the amendments, all moneys in excess of the fee of four dollars which the law prescribes.

Recent legislation placed doctor and druggist on an equal footing, and it is exceedingly explicit in this respect. We have nothing to say as to the justice of this state of things; it is sufficient that it is the law, and as such must be respected, while it devolves upon the College to administer it with wisdom, impartiality and honesty.—*Canadian Pharm. Jour.*

TREATMENT OF A "COLD" BY SALICYLATE OF SODA.—The *Memphis Med. Jour.* says of this remedy: Salicylate of sodium in free doses gives as satisfactory results in the treatment of "bad colds" as it does in cutting short tonsillitis. Sodii salicylatis, ℥ss; syr. auranti cort., ℥ss; aquæ menth. piper., ad, ℥iv. M. Sig. A dessertspoonful every three or four hours. A dose every three hours until a free specific influence of the salicylate—tinnitus aurium—is observed—will so far control the symptoms that the aching of the brow, eyes, nose, etc., will cease. The sneezing and running from the nose" will also abate and will disappear in a few days, not leaving, as is usual under other treatment, a cough, from the extension of the inflammation to the bronchial tubes.

INSOMNIA.—Extract from an article in the *Medical Press and Circular*, by Edward Warren Bey, M.D., C.M., LL.D., D.M.P., Chevalier of the Legion of Honor, 15 Rue Caumartin, Paris. "To those familiar with the use of Bromidia (Battle), no argument is necessary, for it speaks for itself by fulfilling the indications for which it is administered with a certainty, efficiency and harmlessness, which elicit at once the wonder of the patient and the delight of the prescriber, and give to the profession the assurance of possessing one remedy at least which approximates so near to infallibility of action as to justify the title of specific."

PERSISTENT VIRULENCE OF THE TUBERCLE BA



**CILLUS**—The great powers of life evinced by these organisms make it necessary to observe the strictest precautions regarding the disinfection of the patient's sputa. The Paris correspondent of the *Therap. Gaz.* says: "Koch, and Tappeiner before him, have shown that the phthisis bacilli are not killed by the drying of the sputa. But Drs. Malassez and Vignal have carried the experiment further, to show the microbe's tenacity of life. In order to imitate closely the conditions of ordinary life, they have taken phthisic sputa, dried and powdered them, then moistened them again, and repeated several times the same series of operations, just as is likely to happen naturally to spittles dropped on the floor or the sidewalk, and found, by actual comparison, to be almost as numerous and virulent as the first day."

**CANADIAN MEDICAL ASSOCIATION.**—The twenty-third Annual Meeting of the Canadian Medical Association, will be held in Toronto, on the 9th, 10th and 11th of September next.

Arrangements will be made with the railroad and steamboat companies for a reduced travelling rate, and certificates entitling members to such reduction will be issued by the secretary on application.

Members intending to present papers at this meeting, are requested to notify the secretary at as early a date as possible of title of the paper intended to be read.

JAMES BELL, M.D., Sec.

**BORIC ACID AS AN ANTISEPTIC.**—Dr. Plant (*Therap. Gaz.*) holds that this drug is not by any means the harmless antiseptic it has been supposed to be. He believes that "boric acid, when brought into the peritoneal cavity or under the skin, results in many cases in rapid death if the quantities dissolved are large, or, if small, the final fatal effect is preceded by acute parenchymatous nephritis."

**TINCT. IODINE IN BRONCHOCELE.**—Dr. Davies (*Br. Med. Jour.*) says tinct. iodine in 5 minim doses, with hydrochloric acid and glycerine answers well in simple glandular cases of bronchocele. This amount may require to be increased. When there is fibrous growth present, the injection of tinct. iodine is necessary—and Dr. Davies has never seen any serious results if we exclude cases of cystic goitre.

**HAIR TONIC (Chem. and Drug.)**

R—Quin. sulphat., . . . . . gr. xx.  
Tinct. jaborandi, . . . . . ʒ j.  
Glycerini, . . . . . ʒ j.  
Aq. Colog., . . . . . ʒ ij.  
Myrciæ Spt., . . . . . ʒ ij.  
Aq. rosæ, . . . . . ʒ xj.—M.

Sig.—Apply locally.

**UTERINE BACILLI.**—The following is given by *The Dixie Doctor*:

R—Iodoform, . . . . . ʒ v.  
Acaciæ pulv.,  
Amyli pulv., . . . . . āā gr. xxx.  
Glycerini, . . . . . gtt. xxx.—M.

Ft. bacilli, No. iij.

Sig.—Insert one in uterus for abrasions in genital tract after delivery, or after operations in or around vagina. It disinfects for a day or two.

ANOTHER remedy is brought forward for the night sweats of phthisis. It is camphoric acid, the dose of which varies from thirty to seventy-five grains, the larger amount being given in divided doses. The action of the drug is not noticed until the following night, but it continues for several nights.

**AMENORRŒA.**—Dr. Poulet says the following is a very certain emmenagogue:

R—Acidi Oxal., . . . . . gr. xxx.  
Syr. Aurant, . . . . . ʒ ij.  
Aquæ, . . . . . ʒ iv.

Sig.—ʒ ss. every hour.

SIR MORELL MACKENZIE has been awarded (*New Eng. Med. Monthly*) £1500 damages in his suit against *The St James' Gazette* in connection with his treatment of the late Emperor of Germany, and £150 in a similar suit against the *London Times*.

DR. HALEY (*Med. World*) says that an ointment consisting of 80 grains of calomel to the ounce of prepared lard, is a certain cure for pruritus vulvæ and ani.

**BIRTH.**—At Edmonton, Alberta, N. W. T., on June 1st, 1890, the wife of Hon. H. C. Wilson, M.D., Speaker Legislative Assembly—a daughter.