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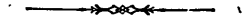
OF

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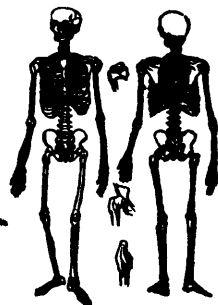
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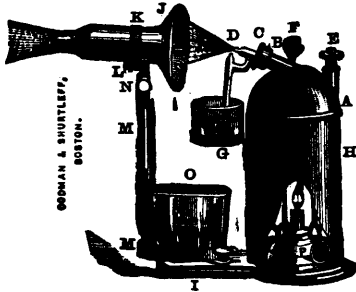


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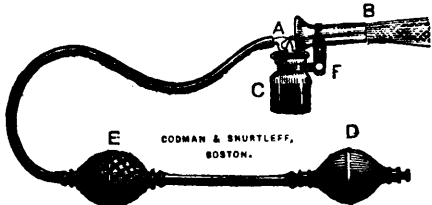


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Ninety-Third Annual Announcement, 1876-77.

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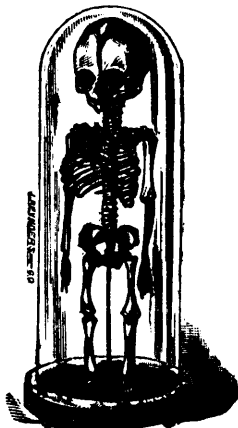
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Original Communications.

MEMBRANOUS DYSMENORRHEA.

By J. W. ROSEBRUGH, M.D., President of the Medical Faculty of the Hamilton City Hospital; late President of the Hamilton Medical Society, &c., &c.*

MR. PRESIDENT AND GENTLEMEN,—I have the pleasure this evening of presenting for the inspection and consideration of this Association, some specimens of membrane cast off from the uterus, by a patient of mine, during her menstrual periods: and in connection with the history of the case, it is my intention to make some remarks concerning the nature of these membranes and the physiology of menstruation, for the purpose of leading members into a discussion regarding these questions, and the pathology and treatment of an affection, which at the present time is eliciting unusual interest in the professional mind.

Sir William Jenner, in his admirable address, on assuming the presidency of the Clinical Society, well said, "We are wanting facts—facts which could and ought to be supplied." And again, he said, "Many of these questions admit of answers, many of them ought to be answered, and that many of them are not answered is, I think, discreditable to us as a profession." It is for this purpose that I bring forward the history of this case, that I may put on record and supply a "fact," hoping it may assist, to some extent, in elucidating a question, not yet fully determined, concerning the physiology of the uterus and its periodical changes.

History.—Nov. 21st, 1874.—Mary J., married, æt. 34, sterile, native of England, has brought for my inspection and opinion, a membrane, or rather two pieces of membrane, of the same size and shape, which she yesterday passed while menstruating.

* Read before the Canadian Medical Association, at Toronto, August 2nd, 1876.

She states that she has been in the habit of passing membranes or pieces of membranes similar to these, at each monthly period, for eight or nine years. At first, the pieces were, she thinks, smaller and thinner than they now are, but gradually became larger and thicker and more like fleshy structure. She regularly and invariably passes these membranes at each menstrual epoch, generally on the second day, and the discharge does not fairly commence until the membrane has come away. During the first day she has a little show, with an aching, bearing-down pain, which continues until the membrane is expelled, and this generally takes place in about twenty-four hours from the beginning, followed immediately by some small dark coagula, after which the flow comes on freely and continues about five days, without any more pains or aches up to the close of the period. She thinks that she never passed membranes of this kind previous to her marriage, and indeed not until she had been married eighteen months or two years; never has had an abortion, or, at all events, never has gone over her time; and to test the question themselves, she and her husband purposely "lived apart from each other from one period to the next, to ascertain whether it could be the seed she was passing from month to month, but the membrane came away that time all the same." Being the wife of a mechanic, she does her own work, but scarcely considers herself a strong person. She is rather pale and a little nervous, but does not present a delicate appearance. There is no syphilitic history.

Upon examination with the speculum and sound, the uterus, with the exception of the vaginal portion is slightly conical, and apparently normal in every respect; there is no enlargement nor displacement; no endo-cervicitis nor endometritis; no tenderness nor hyperplasia; no abrasion, ulceration nor leucorrhœa. Every four weeks, since her first visit, she has brought me these exfoliated membranes, sometimes there were two pieces, but at other times there were three or four. The period has been neither postponed nor anticipated, but returned regularly, scarcely varying one day. The membranes, when first brought to me, are always perfectly fresh looking, not having the slightest offensive odor nor presenting the least appearance of shrivelling or disintegration.

This membrane, the first she brought me, has

been hardened and preserved in alcohol; it is, you observe, in two pieces, perfect mates, which are triangular in shape, an inch long and about three-quarters of an inch wide at the broadest part, having an abrupt termination at each angle. If these two pieces were stitched together, as they mate, we would have a three-cornered bag, resembling the inside shape of the uterus, with three openings—one at each angle—the two side ones corresponding with the ostia of the Fallopian tubes, and the lower one with the internal mouth of the uterine canal. On the inner side of this membrane, the surface is smooth, irregularly subdivided by furrows, and presents, even to the unassisted eye, small openings, which my friend Dr. Malloch has kindly examined with the microscope, and informs me are undoubtedly the orifices of the utricular glands. The outer side, where the separation took place, is rough, ragged and flocculent, having much the same appearance as early aborted ova.

Etiology and Pathology.—Now the question arises, what is the anatomical or physiological structure of these membranous formations, and what is the pathological condition of the uterus which causes it to cast off or exfoliate them from month to month? You remember that when we were at the schools, the theory taught in those days, and indeed, by some teachers, even up to the present time, I understand, was, that the cause of membranous dysmenorrhœa was attributable to an inflammatory condition of the inner surface of the uterus; exudations of lymph, it was thought, took place, and casts, similar to those of croup, were formed and ultimately extruded.

To Dr. Oldham belongs the honor of first pointing out that this theory was incorrect, and he distinctly enunciated the proposition that these membranes were formed under the ovarian stimulus, and that they were formed by the uterine glands—that they were, in short, the lining membrane of the uterus itself.

The New Theory.—This theory, or more strictly speaking, the latter part of this theory,—that the membrane exfoliated in these cases is really the uterine mucous membrane, is fully accepted by all the leading authorities of the present day. To be brief on this point, and without doing injustice to any recent author, I think I may safely assume that Dr. Finkler, of Kiew, after examining seven specimens of dysmenorrhœal membrane, obtained

from four patients, summarizes about all that has been definitely ascertained concerning the structure of these formations, as follows:—"That the membrane is the mucous membrane of the uterus *inclusive* of the *blind extremities of the glands*, but that, in *some cases*, the deeper layer of the membrane and the termination of the glands remain in the uterus." The membrane, Dr. Finkler thinks, "is the product of disease, a pathological condition, and not of impregnation, nor an increased physiological action which takes place in the generative organs periodically." Dr. Barnes, admitting "the new fact," that the membrane expelled in these cases is the mucous membrane, argues that, "If it be admitted, and observations in point are now so numerous and authentic that it can scarcely be disputed, that the mucous membrane, under simple ovarian menstrual excitation, does undergo a high degree of development not distinguishable from the decidua of early pregnancy, it must also be admitted as possible, that the mucous membrane so developed may be cast off." Graily Hewitt goes further; he says, "The mucous membrane lining the body of the uterus, which is ordinarily one-eighth of an inch thick, is very vascular; during menstruation it becomes much more so, and moreover increases in thickness. The mucous membrane thus thickened appears to be shed at each catamenial period, and in cases I have found it in actual process of disintegration." Recently, some investigators have been endeavoring to prove that the mucous membrane of the uterus is exfoliated at the time of parturition and abortion, as, for instance, Kôlliker maintains that, "during parturition, the mucous membrane of the body of the uterus is entirely removed—completely cast off—in the form of decidua and placenta uterina, and that the muscular fibres become exposed in the uterine cavity."

At the time of abortion, Dr. Engelmann found it in the following condition:—"Ova expelled in the first month, and mostly those of the second, have no maternal membranes adherent to them, but show the shaggy whitish surface of the enveloping chorion; at this period the ovum is often aborted in a very marked pathological condition, together with the whole of the upper layer of the mucous membrane, which closely adheres to it."

Dr. John Williams, of London, by observations made on the uteri of twelve women who had died

in different stages of the menstrual and intermenstrual period, and by a careful study of the cycle of changes which take place during the period which elapses from the cessation of one menstrual flow to the cessation of the flow next following, has proved, pretty conclusively, it appears to me, that the mucous membrane is likewise exfoliated from the cavity of the body of the uterus during the process of menstruation. The facts elicited by the dissections of Dr. Williams have been lately confirmed by the observations of Dr. Underhill and Dr. Barnsfather; and some years ago, the late Dr. Tyler Smith came to the same conclusion.

Lastly, on this point, we have Dr. Lombe Athill's deliverance on this "new revelation," in the following language:—"But if this view is true, as I believe it to be, the menstrual flow becomes merely the termination of a process, slowly and gradually completed, and not a special function *per se*; for if the lining membrane of the uterus be disintegrated and cast off at each menstrual period, it must be as frequently reproduced. The catamenial flow, therefore, must be to the intra-menstrual period what the lochia are to pregnancy—a discharge mainly composed of effete materials."

Having thus presented a *resume* of the conclusions of leading authorities on these questions and accepting them in the main as correct, and to enable us to comprehend the possibility of the mucous membrane of the uterus being exfoliated from month to month, it will be necessary to study the publications of the more recent investigators concerning the minute anatomical structure of the mucous membrane of the uterus, and its periodical changes.

The *Physiology of Menstruation* and its relation to ovulation has recently received more attention from the profession generally than any other question in the whole domain of medicine. A number of papers have been written on this subject within a few months, but none have attracted so much attention as those of Williams, of London, and Engelmann, of St. Louis. In order, therefore, to enable us to comprehend this subject more clearly, let us briefly review the publications of these eminent authorities. * * * * With this evidence before us, Mr. President, we can come to no other conclusion, I think, than that the so-called mucous membrane, or at all events its superficial layers, of

the cavity of the body of the uterus is exfoliated at each menstrual epoch, as is the case, it appears, at parturition and abortion; and that according to Williams, the normal physiological process of removal is by "fatty degeneration and disintegration." But when the membrane is exfoliated *en masse*, as in membranous dysmenorrhœa, the normal physiological process is interrupted, and the membrane is separated and expelled, prematurely, before it has had time to undergo the normal disintegration process.

Notwithstanding the investigations of Williams have been accepted and apparently corroborated by such high authorities, it is nevertheless due to Engelmann, whose general accuracy of investigations demands for his statements the highest consideration, to state that he characterizes Williams' equally positive and careful statements as establishing a physiological improbability. He maintains strongly, that in not one of the uteri examined at such periods, was the mucous membrane, or even its superficial layer, found wanting. But it appears to me that one cannot carefully study his own publications anent this subject, without finding abundant evidence here and there, to prove that he himself frequently found "fatty degeneration—a retrograde metamorphosis—the destruction and detachment of a large part of the more exposed elements of the surface, and even of the glandular epithelium." Moreover, it appears to me, that Williams' objections to Engelmann's statements are well taken, for, as he truly remarks, the *data* from which the latter bases his conclusions are unreliable, as in no case examined by him was the date or stage of the menstrual flow known, and he has never examined a case in which death had taken place during or at the termination of the menstrual flow. Williams then trenchantly submits that, "from such data it is not possible to speak with any degree of probability, much less certainty, of the state of the uterus towards the close of the menstrual flow, and consequently of the removal and renewal of its so-called mucous membrane." Engelmann himself has recorded, that in two of the cases examined by him, which he says were undoubtedly virginal, he found, "in one, the deciduous membrane in the vagina; in the other, it was partially adherent, the greater mass, however, being lodged in the cervical canal." These cases may or may not have been cases of

membranous dysmenorrhœa. In this affection the mucous membrane certainly is exfoliated every month, and every month again renewed. And does this "fact" not prove that the theory advocated by Williams is possible; nay, more, is probable? This is, in fine, the position in which this interesting question at present rests; we have the two contending theories—the desquamative and the involutive. Further accurate investigations will soon, no doubt, settle the question as to how deep the mucous membrane of the uterus is removed at each menstrual epoch. Reasoning from analogy, I anticipate that the truth will be found to be, that in those cases where menstruation lasted only two or three days, with very little discharge, the fatty degeneration and disintegration—the retrograde metamorphosis of Engelmann—will have taken place only to a moderate extent; while on the other hand, in those who had menstruated freely—five, six, seven or eight days—and discharged a large quantity of cell and glandular debris, the desquamation has been pretty extensive and complete.

Separation and Expulsion.—The inquiry naturally arises here, at what stage of menstruation does the separation and extrusion take place? If we look into the authorities for a solution of this question, we meet with disappointment. Only Graily Hewitt discusses the question; he observes that "There appears to be no possibility of concluding otherwise than that the membrane actually expelled belonged to, or was the product of the former menstrual period. If, normally, the menstrual decidua is thrown off from the uterus after the discharge has ceased, or at all events during the latter period of the discharge, it would appear that in these abnormal cases this exfoliation is postponed, the membrane continuing to grow during the intermenstrual period." Looking back for a moment at the history of the case related by me, we will be obliged, I think, to differ from Mr. Hewitt as to the time the membranes are detached and expelled. My patient stated that when she became unwell, during the first day, she had an aching bearing-down pain until the membrane came away, followed immediately by some small dark coagula, after which there were no more pains nor clots, but the flow then came on freely and continued about five days, gradually ceasing. The membranes are always perfectly fresh looking, pre-

senting no appearance whatever, as far as I can observe, of disintegration, but looking as if they had just then been torn from off the living structure. And this history is corroborated by the researches of Williams, who found that in those cases where menstruation had been going on only one day, "part of the mucous membrane had already disappeared from the internal os upwards, where it was melting away, and nearly all of the remainder was projecting into the uterine cavity;" thus proving that in normal menstruation the mucous membrane commences to melt down and separate before the discharge makes its appearance. Dr. Williams' other subjects proved that the separation of the membrane is generally completed during an early stage of the menstrual period.

Causation.—The cause or *modus operandi* of the expulsion of these membranes from the uterus can be accounted for much more satisfactorily than their formation and separation. The conclusion arrived at by the majority of recent investigators, may be stated to be, that there is present in these cases some morbid condition, probably general congestion—hyperplasia, if not indeed actual endometritis. But in my patient there were no symptoms whatever of either of those conditions, and as far as one case can go, fully corroborates the conclusions of Professor Thomas, of New York, who thinks that when either or all those conditions exist in connection with this complaint, they are present merely as a coincidence. He remarks, "From my observation of this affection, I cannot attribute it to endo-metritis, for evidence of the existence of that disease was entirely wanting in four cases out of five. Even if endo-metritis exist, with marked displacement, it must not be concluded that these conditions have necessarily produced exfoliation, for they are commonly present as results in cases in which dysmenorrhœa of membranous type has lasted long without evidence of their existence."

Granting that an *expose* of the opinions of leading authorities precludes the idea that these membranes are likely to be shed by a healthy uterus, still, in the light of recent investigations, we may at least question the correctness of this theory. Engelmann has informed us, "that when the mucous membrane is in a state of functional physiological activity, when the state is unquestionably

that of menstruation and not of conception, the membrane is swollen—tumefied, increased in thickness—hypertrophied. The glands themselves are very much enlarged, often two and four-fold. The tumefied mucosa has grown far above the original gland openings, circumvallating them, and thus causing the funnel-shaped openings, those small pits, which make the ostia seem enlarged.”

This then is the normal physiological condition of the mucous membrane when menstruation is imminent and setting in, and immediately before, as I have shewn, the deciduous membranes are exfoliated; and surely the warmest exponents of a morbid or inflammatory condition do not represent the mucous membrane to be in a more tumefied or hypertrophied state at this time, than the normal condition so graphically described by Engelmann. How then are the membranes separated and expelled? It is believed that the vessels between the mucous membrane and the muscular structure, weakened by a partial process of fatty degeneration, become turgid and break down, blood is then extravasated between these structures and separates them; but whatever the process or cause may be, the separated membrane acts like a foreign body, the inevitable reflex action is induced, spasmodic contractions of the uterus take place, and expulsion of the separated membrane is speedily accomplished.

Frequency and Subjects.—It was formerly supposed that this affection was extremely rare, but gynæcologists are now convinced that deciduous membranes are exfoliated much more frequently than was formerly suspected, and cases of it are every now and then discovered, as it were, by accident.

It likewise appears to have been pretty firmly fixed in the minds of the profession, that this condition was confined to females leading a married life; but this also is found to have been incorrect, and several authors have quoted cases of chaste unmarried females who were in the habit of passing these membranes during their monthly periods.

Hausman advanced the idea that they are due to conception, which has just been established; and Rokitansky coincides with this theory in some cases. But for one, I cannot believe it possible that any woman could become pregnant every month, as in the case cited by me, for years in succession. My patient purposely lived apart from her husband for one month to test the ques-

tion for herself, but passed the membrane during the next menstrual epoch as usual; and Dr. Finkler, of Kiew, had a patient under observation in the hospital for three months, during that period she menstruated three times and passed a membrane on each occasion. Besides, Raciborski points out a method by which these membranes may be distinguished from those of early abortion, by examination.

Treatment.—The practical question now forces itself upon our attention: Can anything in the way of successful treatment be accomplished in these cases? Where the pathological condition has not been comprehended, it is manifest the treatment must have been empirical, and it is almost amusing to see how various and contradictory the treatment has been; of course we must carefully study the physical condition of the uterus, and if there should any complicating diseases co-exist, they must receive their appropriate treatment. If we assume that these membranes are not shed by a healthy organ, the morbid condition, excluding syphilis, must be located in the mucous membrane of the uterus itself, and our remedies should be applied to that tissue. If there be constitutional debility or a syphilitic taint, tonics or alteratives are indicated. Sterility in the married woman being an invariable consequence of this condition, pregnancy with her is the great desideratum. My patient being rather pale and somewhat nervous, was placed upon a mild tonic course of treatment; and with the view of effecting a stronger condition of the vascular structure of the mucous membrane, an application of the strong tincture of iodine was made, as nearly as convenient, on every fifth day, to the mucous membrane of the cavity of the body of the uterus. The iodine was applied by means of a whalebone applicator, of the same shape, but rather smaller, than the uterine sound. The end, and extending downwards for about three inches, was snugly wound around with cotton wool; this was then saturated with the tincture and directed through the speculum, os and cervix uteri up to the fundus, and then freely moved about from side to side in the cavity. Two or three applications were made at each visit, after which the vagina was carefully wiped out, before removing the speculum, with pledgets of cotton wool held by a pair of long dressing forceps. Under this treatment she soon

improved in color, and the nervousness was no longer apparent; the membranes, although regularly exfoliated each month, were at the end of four months becoming smaller and thinner, and were broken up into several pieces; encouraging a hope that this treatment would ultimately prove successful, when an accident occurred, which broke off the treatment for the time, and which, I regret to say, has never been resumed.

Conclusions.—In closing this paper, much too long, permit me to express my regret that the conclusions arrived at are not more precise and definite; but without making any pretensions to originality of investigation in this most interesting inquiry, I have the satisfaction of believing that I have brought before the Association a *resume* of all that is known at the present day concerning menstrual dysmenorrhœa, the mucous membrane of the uterus, and the physiology of menstruation.

To recapitulate, the following are my deductions:

1. That the membrane exfoliated in membranous dysmenorrhœa is the mucous membrane of the cavity of the body of the uterus.
2. That membranes are exfoliated much more frequently than was formerly supposed, and from chaste single as well as married females.
3. That in married females the membranes are not the result of impregnation.
4. That the membranes can be distinguished from those of early abortion by examination.
5. That at the commencement of normal physiological menstruation, the mucous membrane is very much tumefied, hypertrophied and increased in thickness; but that there is necessarily present in membranous dysmenorrhœa, a morbid or diseased condition, has not been satisfactorily demonstrated.
6. That the separation and expulsion of the membrane take place during the first stage of menstruation; the separation is effected by extravasation of blood between the mucous membrane and the muscular structure, lifting the former from its base, which, acting as a foreign body, excites reflex action of the uterus, violent contractions take place and expel the membrane *prematurely*, before it has had time to undergo the normal process of fatty degeneration and disintegration.

TUMOR IN THE RIGHT LUMBAR REGION WITH AUTOPSY AND SOME REMARKS.

BY V. A. BROWN, M.B., L.R.C.S.E., LONDON, ONT.

History of the Case.—Oct. 8th, 1874.—Miss A. W., æt. 26, a very fair delicate looking young woman, consulted me to-day in consequence of a swelling which has been making its appearance for some time in the right lumbar region. It prevents her from straightening herself, and causes considerable pain in the lower extremities, if she is long on her feet. She first noticed it 8 months ago, and attributes its origin to a severe strain which she sustained 12 years ago in that region. She says she felt something give way suddenly at the time, and it caused her to faint. She was kept lying down for a few days and soon recovered. At that time, and for some time afterwards, she was in service, but latterly she has sewed, using a sewing machine a great deal, which she says she thinks has done her a deal of harm.

The tumor appears to be about the size of a small orange, and is barely perceptible above the surrounding skin. It is immoveable and imbedded within the muscles in the angle formed by the spine and ilium on the right side. It is tense, and imparts to the tips of the fingers a sense of fluctuation; it has no impulse. A most careful examination of the abdomen and right groin could not detect the slightest sign of a swelling in either. There was no loss of nervous power in either lower extremity.

Diagnosis.—A fibro-cystic tumor, which I strongly urged upon her to have removed, but which she refused, and said she never would allow.

I lost sight of her for some months, and on May 22, 1875, was requested to visit her. During the interim the tumor had made considerable progress, and her general health began manifestly to decline. She had also been examined by several medical gentlemen who had expressed different opinions as to its nature; one said it was a lumbar or psoas abscess; another, an aneurism; a third, that it was a malignant tumor. Beyond its increase of size, and a continued absence of anything to be found within the abdomen it was much the same as when she first consulted me. I now proposed its exploration with an aspirating needle, which she readily consented to. On passing a fine needle into it,

there immediately flowed out, rather slowly, a thin stream of blood, which soon coagulated; this was arrested by means of pressure, and there was no further oozing. The result of the examination, as may be imagined, determined me to do nothing more, but to wait patiently for the issue.

Notes of the Case.—July 7th, 1875.—The lower extremities have become œdematous, and the right inguinal fossa swollen, but no pulsation. The tumor also has considerably increased in size. She is now unable to stand, and has to be lifted in and out of bed. She suffers a great deal of pain, and has to take one grain of pul. opii every night; her bowels are obstinately costive. No bruit or impulse in the tumor.

July 26.—Examined the tumor again to-day; size has greatly increased; the most careful manipulation fails to detect any of the swelling within the abdomen. It appears to be adherent to the side of the spinal column and upper edge of the ilium. Fluctuation in it is very distinct, but no impulse nor the slightest sign of a bruit. She has become much thinner, and is now confined altogether to bed. Right foot is occasionally numb, but not swollen; the swelling perceptible before in the right inguinal fossa is gone. An opiate every night is now indispensable.

October 10.—Since last report the tumor has been steadily increasing. It is now prominent above the surrounding skin; is very tense, with a most distinct sense of fluctuation. Her legs are completely powerless, and she is sometimes troubled with incontinence of urine; bowels obstinately constipated. No sign of line of spine being abnormal; no sign of swelling within the abdomen, temperature of both legs same, as also swelling.

November 6th.—Examined the tumor to-day; size still increasing; apparently it is about that of a closed fist and a half; incontinence of urine worse; sensation in both legs diminished, more in left, swelling same.

January 24, 1876.—Another examination to-day. Tumor much larger; she is greatly emaciated. Bed sores, notwithstanding an air cushion, have occurred over the sacrum and right trochanter. General condition same as at last visit.

26th.—A curious change took place in the case to-day. Her mother left the house for a short time, and on her return found her in the following condition—(she was absent only 20 minutes, when

she left, her daughter was precisely as usual): Her face was swollen, features almost undiscernible, lips livid and three times their natural size; the whole of the body was at the same time swollen and covered with a rose-coloured rash similar to scarlet fever. She was perfectly conscious. This abnormal condition, due in all probability to obstructed capillary circulation, lasted for 12 or 14 hours, when it gradually subsided, leaving her as before. She does not know how to account for it, as she had taken nothing to disagree with her.

31st.—After some deliberation, I came to the determination to aspirate, which, after a great deal of hesitation on her part, she consented to. Accordingly, I passed in a medium sized trocar $2\frac{1}{2}$ inches into the tumor, the external wall of which appeared to be very thin. On its withdrawal there issued a rapid stream of blood, not, however, *per saltum*, about 6 ounces, coagulation taking place in a few minutes. Its sanious origin being unmistakable, I unhesitatingly determined not to complete the aspiration. On a withdrawal of the trocar all oozing ceased and none returned.

March 12th.—Tumor has slightly increased, extending upwards towards the ribs. No sign of it in the abdomen; her other symptoms same and very distressing, another bed sore on right knee, where it is continually pressed on by the left, a position which cannot be prevented.

July 21st.—Since last report her condition has been steadily and gradually getting worse; her body wasted almost to skin and bone, with the exception of both legs, which are very œdematous. Smart hæmorrhage has once or twice occurred from a bed sore over the great trochanter. The tumor is now almost touching the ribs; within the abdomen it is undiscernible; it has become so prominent that a bed sore is commencing on its surface, notwithstanding every precaution is taken to ward off pressure, but which her mother says it is almost impossible effectually to do, on account of her totally helpless condition. The danger of the ulceration penetrating the sac and causing fatal hæmorrhage was fully explained to her. Both legs are doubled up and cannot be straightened, and she has lost all control of her bladder. She suffers no pain unless when moved, and though perfectly sensible and conscious, appears to be apathetic and resigned.

August 11.—Yesterday the threatened rupture

in the ulcerated patch took place. It was followed by an alarming hæmorrhage. Her mother was out at the time, and says, on her return she found her in a pool of coagulated blood; it had partially ceased, and she was very pale. I was out of town, and consequently did not see her until the following day. I found her almost helpless, but perfectly conscious. Shortly prior to my visit there had been several dark and white clots passed, followed by smart oozing. Her mother says that several of these had occurred since the first. She describes the flow of blood as resembling that in uterine hæmorrhage, and not *per saltum*. On looking at the tumor, I found the opening blocked up with what resembled white fibrine; there was a very slight oozing through the interstices; the colour of the blood was dark. Nothing was done or ordered, as she was evidently sinking. Shortly after my visit another burst took place, when she died in a very few minutes.

Autopsy.—Three hours after death. Surface of body pale and very anemic; lower extremities œdematous; a large ulcerated opening the size of a dollar on the surface of the tumor; interior filled with thick, whitish gelatiniform matter of different consistence and shades of color, varying from white to pale yellow. Some of it resembled brain matter; some fatty matter, and some fibrine. There were interspersed through it, here and there, in small quantities, small dark coagula. The white clots in the centre were discolored toward the outside. These were partially laminated; one or two were roundish and turned out of compartments. One of these latter, extending from the centre of the bottom of the sac, on the abdominal side, was very sharp and defined; the walls of the sac were thin and fibrinous, exactly resembling those of an ordinary encysted tumor. The whole of the contents were turned out and the bottom of the sac carefully cleaned, with the view of ascertaining its attachments, and whether there were any openings leading from it. But on a most careful searching, both myself and three other medical gentlemen who were with me, were satisfied that no arterial communication existed; but on following the connections of the tumor into the cavity of the abdomen, the inferior vena cava was found to be intimately adherent to its surface, opposite to the compartment already described, with a small opening the size of a No. 6 duck shot into its cavity. It re-

quired some dissection to remove this adherent portion of the vessel. Between this point and the heart, for a short distance, it was impervious. (This pathological change satisfactorily accounts for the long continued œdema of the lower extremities.) The tumor was firmly adherent to the transverse processes and right side of the bodies of the lumbar vertebræ, and to the whole of the crest of the right ilium. It had caused atrophy of all the muscular tissue in the neighborhood, from the ilium to the ribs on that side; a very small portion of it was extended into the cavity of the abdomen, and that was behind the psoas and iliacus muscles, which had to be dissected off, and were not in a state of atrophy like those in the loin. The right ureter was stretched over its surface. Posteriorly, all the tissue outside the sac was one thickened mass, like disorganized glandular tissue, also that between the psoas and iliacus muscles and the ilium on which that side of the tumor lay.

It had caused no erosion nor absorption of the bodies of the vertebræ; beyond a small spot on one of the transverse processes, that portion of the spinal column was healthy. The aorta was small and perfectly natural; no appearance of anything abnormal in the right common iliac; slight effusion into both pleuræ. All the thoracic and abdominal viscera were perfectly healthy. The interior of the tumor fully occupied the space between the ilium and lower ribs, and extended laterally from the spine to the side.

When the contents were examined under the microscope, no sign of cells, corpuscles nor granules could be made out. It was soft and homogenous, some of it tougher than the rest; it presented the appearance of a closely matted or felt-like mass of pliant, reticulated fibrils, and that of lowly organizing tissue or lymph. In my opinion it was venous fibrine in different stages of organization, that towards the outside being most advanced.

It may be asked, what was the real nature of the tumor? There may possibly be different opinions regarding it now, as there were when the patient was alive; but to my mind the post-mortem satisfactorily proves that from the first it was extra-abdominal, being an ordinary encysted tumor, which gradually worked its way into the abdomen, finally becoming adherent to the vena cava, between which and its cavity a communication was set up, and was the source of the hæmorrhage at

the first attempt at aspiration, May 22, 1875. What would have been the result of excision when I first proposed it to her in October 1874, (six months previous), it is impossible to say, but from its small size at that time, conjoined with other signs, my opinion is that it would have been successful.

VESICAL CALCULUS IN A FEMALE CHILD—EXTRACTION—RECOVERY.

By N. BETHUNE, M.A., M.D., F.R.C.S., Eng., Prof. of Surgery, Trinity Medical College, Toronto.

Stone in the bladder is a common affection in children of the male sex, but in females of corresponding age, as in those of more advanced life, it occurs very rarely from the fact that the nucleus, whatever it may be, upon which the concretion forms, is apt to escape at an early period through the short dilatable canal of the urethra.

A remarkable instance of calculus in a young female is presented in the following:—Phœbe H., aged three years and a half was brought to Toronto in July last, accompanied by her parents, and by Dr. Joy, of Tilsonburg, her medical attendant.

The usual symptoms of vesical calculus were well marked, the stone itself being easily detected by the sound.

As regards the history, it appears that the child had been suffering for about two years, the most prominent symptoms being frequent desire to void urine with more or less pain accompanying. These symptoms recurred in paroxysms at variable intervals, and gradually increased in severity until the last three months when they became almost constant, and were finally attended with incontinence of urine. The pain was at times so severe that the child was threatened with convulsions.

On the 10th of July last, assisted by Dr. Joy, the child was placed under the influence of ether, and the operation proceeded with. The presence of a calculus having again been satisfactorily verified, two or three ordinary dressing forceps of different sizes were successively passed through the urethra into the bladder, until one of appropriate shape was found to grasp the stone. By gentle traction which was continued for some time, the stone reached a stage in the urethra beyond which, from resistance of the parts, it was considered inexpedi-

ent to persevere in extracting it by dilatation. A sharp pointed, narrow bladed knife was now passed into the urethra, guided by the forceps, and an incision of moderate extent made upwards in the direction of the symphysis pubis. The bleeding was trifling, and by a very slight addition to the traction already employed, the calculus was easily removed. It proved to be a phosphatic concretion of a somewhat flattened oval shape with rough exterior, and weighing ninety grains. It measured $\frac{7}{8}$ of an inch in length, $\frac{3}{4}$ th of an inch in breadth, and $\frac{1}{2}$ inch in thickness.

Dr. Joy writes to state that there have been no unpleasant symptoms since the operation, and that the child has made a good recovery.

Reports of Societies.

CANADIAN MEDICAL ASSOCIATION.

First Day's Proceedings.

The ninth annual meeting of the Canadian Medical Association was held in Toronto on the 2nd ult., Dr. Hodder, the President, in the chair.

The following members were present:—Drs. Hodder, Workman, Davids, A. M. Roseburgh, Canniff, Riddell, Sweetland, D. Clark, Zimmerman, Oldright, Freeman, Abbott, Sloan, McKay, H. H. Wright, J. Ross, Temple, Reeve, Fulton, Hingston, Trenholme, Hornibrook, Yeomans, Kincaid, J. H. Richardson, Thorburn, J. J. Hillary, Bascome, J. H. McCallum, Geikie, McDonald, Mullin.

After routine business, the following gentlemen were proposed and elected members of the Association:—Dr. Osler, Montreal; Dr. Strange, Aurora; Drs. Buchan, Playter, Grasett, Reeve, Greenlees, Robertson, Barrett, F. Wright, and Agnew, Toronto; Dr. Tye, Thamesville; Dr. A. Macdonnell, Guelph; Dr. Moore, Brampton.

Many of the members and delegates not having arrived, the meeting adjourned till two p. m.

On re-assembling, the American delegates, Drs. White and Rochester of Buffalo, were invited to take seats as ordinary members of the Association.

Dr. White returned thanks for the compliment. In the course of his remarks he alluded to the importance of mutual conference and association between medical men, deprecated local jealousies and encouraged the Association in its work. He wished that the interchange of friendship not only between city and country practitioners but between the medical men of the United States and Canada might be more frequent; indeed he could go so far as to wish that the two nations were one. This feeling, however, he thought was more prevalent on the other side than here; but whether they gave their allegiance to the President or Queen Victoria, medical men should be loyal and true to their profession.

In conclusion, he congratulated the Association and wished its deliberations to be crowned with success.

The following gentlemen were then elected members of the Association:—Drs. Graham, Reade, Hagel, King, J. Roseburgh, Robertson, Philp, and Britton.

PRESIDENT'S ADDRESS.—We meet together this morning, gentlemen, to celebrate the ninth annual meeting of the Canadian Medical Association, and from the large number of visitors and members whom I see before me, I feel assured that it will continue to meet with the support and approbation not only of the medical practitioners in the larger cities of the Dominion, but of the medical profession throughout the length and breadth of the land. In the first place, gentlemen, allow me to offer, on the part of the medical men of Toronto, a most cordial and hearty welcome to the delegates from the United States, as well as those from the eastern and more distant portion of the Dominion, and to invite them to join in all the discussions or debates, and to consider themselves for the time being in every particular as members of the Association. It is not only customary but it is also respectful for the President of a Society to make a few introductory remarks, especially when he has been placed in the responsible position in which I, through your flattering kindness, have now the honour to stand. Allow me to express to you how deeply I feel this honour and this responsibility; and I should be wanting in justice to myself if I did not endeavour to express, however imperfectly, the consciousness of my inability to fulfil in a manner satisfactory to myself the office of President of the Canadian Medical Association. For the last seven or eight weeks I have been suffering from a severe attack of my old enemy, the gout, and which for a considerable portion of that time rendered me incapable of either bodily or mental exertion; I must, therefore, look to your indulgence in pardoning the many deficiencies which I am but too conscious of; yet, as far as it is possible to counterbalance these deficiencies by hearty zeal, and my best endeavours to aid the progress and success of the Association, I think I may safely promise my co-operation. When we see the success that has attended the formation of these societies in the United Kingdom, and in almost every other country of Europe; when we see the ponderous volumes yearly issued by our hard-working, industrious, and painstaking friends and professional brethren in the United States; it ought to stimulate and induce the medical men in the Dominion to follow so excellent an example. When we consider the vast amount of practice and observation which is daily and hourly going on, not only in the larger cities but in the surrounding districts of the Dominion, we cannot but feel with regret that an enormous fund of valuable information and experience is, and has been allowed to run almost entirely to waste for a long succession of years. By

joining such an Association as that which I have the honour to preside over this day, the numerous body of our professional brethren extensively engaged as general practitioners, who spend long and active lives in the practice of their profession, would undoubtedly be able to contribute inexhaustible stores of medical experience of the highest interest and value, and which, but for such a society, would remain uncommunicated, and therefore lost to the profession. The local medical societies do some good, but the results of their meetings are rarely published, and therefore many valuable cases never meet the eyes of the profession generally, and are thereby lost to the world. There is, however, one point of very considerable moment to which I beg to draw the attention of the younger members of the profession:—Many young practitioners are deterred from publishing or bringing before an association or society cases of interest which occur in their practice, from an erroneous supposition on their part that it is necessary to work them up into the form of an elaborate essay. In nothing are they more deceived; the plain and truthful narrative of a single fact is of infinitely more value than a thousand theories. Wisely, then, did this Association when they met last year at Halifax limit the time for the reading of papers to a short time, by which I trust many members will be induced to send in communications which otherwise they might not feel disposed to do. It is only therefore in an Association such as this that the accumulated experience of a large body of the medical profession in the Dominion can be properly collected and concentrated, so as to turn such inestimable stores of knowledge to good account, and render them available and useful to the profession at large. When we glance over the medical literature of former years, not only of Great Britain and the Continent but of the United States—what, I would ask, are the works which have stood the test of time, and which among the numerous changes produced by improving and increasing knowledge are still “lasting monuments” while systematic and, for the time, learned works have long since sunk into oblivion?—it will be found that those simple records of the experience of long lives, devoted with ardent zeal to the cultivation of medical knowledge, retain their value into the present moment, and will doubtless continue to be consulted and referred to by succeeding generations, as mines of invaluable practical information. Now, if the practice of one man, as in the case of Hunter, Harvey, Smellie, and a host of others, can produce recollections of facts which have immortalized their names and conferred lasting benefits on every department of the healing art, how much more useful and important will be the combined efforts of hundreds of fact-collectors, concerning all the results of their practice and their observations, thrown into one great depository—viz.: the Canadian Medical Association. If I have

tired your patience, gentlemen, by dwelling too long upon what appears to me to be the great object and what will form the great strength and importance of this Association, I mean the collection of valuable facts on questions of medical and surgical practice and public hygiene, I beg your indulgence; and yet there is another point which I must not omit, I mean the effect these meetings have on our social position. It brings together the members of the medical profession, it enables us to know each other, it binds us together with a social bond which must ever be not only a source of sincere satisfaction but of mutual improvement and advantage. The friction of different minds earnestly engaged in similar pursuits is peculiarly valuable, for it is scarcely possible for any man who has been moved by the same impulses, agitated by the same fears, excited by the same hopes, and elated by the same successes, who has felt the responsibilities, and experienced the hours of painful anxiety in the treatment of difficult and dangerous cases, not to derive consolation and benefit by consultation and communication with his professional brethren.

Since the last meeting, numerous discoveries and changes have taken place in every branch of the profession, many of them of extreme value. Time will not allow me to refer to them all, but there are two in which I am more particularly interested and to which I wish to draw the attention of the Association. [He then alluded verbally to the treatment of intermural fibroid of the uterus, by the subcutaneous injection of ergotine, and the subject of transfusion, and concluded by alluding to the serious loss which the medical profession and the world at large had met with by the death of a very large number of distinguished men.]

Great Britain had lost Bennett, Sir James Clark, Latham, Headland, Sir George Gibbs, Letheby, Donovan, and many others. In Berlin Professor Traube has passed away, while in France we have to regret the loss of such men as Andral, Lorain, Balard, and Duchesne. In our own country we have to deplore the loss of many of our old and intimate friends and fellow workers, amongst whom I may mention Dr. Cole, of Clinton, Dr. Yates, of Kingston, and Dr. Beaumont, of Toronto. In conclusion, gentlemen, allow me to express my sincere wish that the Association may long prosper and flourish; long may it be a bond of union and friendship amongst its numerous members; long may it continue the centre of knowledge and experience in every department of the healing art, and extend its beneficial influence the length and breadth of the whole land. I think that Dr. Rochester's sentiment — "Medical Fraternity—limited to no nation, creed or clime, may its bonds increase in strength and usefulness as long as the world endure"—was most appropriate.

A vote of thanks was tendered the President for his address.

REPORTS OF COMMITTEES.

Dr. Oldwright, as a member of the Committee on Surgery, expressed his regret that the chairman of the committee was not present, and that there was not a report forthcoming.

Dr. Trenholme presented a paper, in lieu of a report, on Obstetrics and the Treatment of the Diseases of Women, which he would read at a future session.

Dr. Trenholme asked if at present any prizes were offered for essays.

Dr. David stated that a gold medal was offered by Dr. Grant for three successive years, but no one competed.

Dr. Thornburn moved that the following be the nominating committee: Drs. Canniff, Trenholme, Robillard, Zimmerman, Temple, Roseburgh, Strange, Osler, David, and the mover.

READING OF PAPERS.

Dr. Workman read a very able and interesting paper on "Criminal Insanity," which was listened to with marked attention. An epitome will be found in another place. The following discussion took place at the close of the paper, and a vote of thanks was tendered the author.

Dr. Hingston expressed the great satisfaction with which he had listened to the paper. He thought that if the meeting were now to close, members would be amply rewarded in coming to Toronto. If it was a fact that Ontario was far in advance of the Province of Quebec in literature and the arts and sciences, he was glad indeed to learn that crime was not so prevalent in the latter Province as in the former. He did not know to what to attribute the present epidemic of crime in Ontario, the pulpit and press of Quebec being similar; the same desire for sensation being in existence. There was one thing in Dr. Workman's paper which had struck him (Dr. H.) very forcibly; it was with regard to the impression on the public mind that medical evidence was not so valuable as it really was. He thought this feeling had arisen because while two or three medical men were brought into court to give evidence on one side, a like number were always ready to give evidence on the other side, and the Judge was frequently obliged to discredit all the medical evidence given. In some instances a man like Dr. Workman might be sought out to give an opinion on a subject, and opposed to him would be a number of men, who, though expressing an opinion honestly, had not probably given the subject in question so much attention as Dr. Workman. Not only was that unfortunate practice adopted in cases of insanity, but also in cases of actions for mal-practice, and if medical men would abstain from giving evidence, except where they felt they had a special knowledge of the subject, the profession would be benefited.

Dr. Clark gave testimony to his appreciation of Dr. Workman's paper. He believed there was no man in the Dominion more able to give an intelligent opinion on the subject than Dr. Workman. He did not wish to pass a panygeric on the press but he could not entirely endorse Dr. Workman's opinion with regard to it. He thought, however, that the publication of details of crimes committed, had been the cause of similar offences being committed by other persons simply from the desire to imitate, and that if the press would suppress the accounts of the cold-blooded crimes that are daily occurring in the country the result would be very satisfactory. He endorsed Dr. Workman's opinion as to the misconception which had arisen as to the existence of moral insanity. He admitted that the sense of right and wrong was present in a large majority of those who were insane, as everybody who had anything to do with asylums knew very well. People, who believe that the conscience could give an intelligent verdict independent of judgment, forget that the conscience would really give a wrong verdict just as quickly as it would give a right verdict if the evidence was incorrect. In other words, the conscience had to depend upon the intellect. He gave an illustration of his argument by giving the case of a dog entering a room and being immediately shot by some person. It would be at once believed that the person who killed the animal did wrong in putting an innocent dog to death. But in the event of it being stated that the dog was mad, the evidence would be changed, and it could be stated conscientiously that the man did right. Again, additional information might be brought forward to the effect that the dog was muzzled when he was shot. The probability was then that the verdict would again be reversed. The fact was that the conscience depended upon the intellect and the evidence presented to it.

Dr. Kincaid stated that as Gaol Surgeon he had had experience in cases of criminal insanity, and by way of illustrating the manner in which people could be misled, he referred to the case of Fox, who was hanged at Peterboro for murder. He held that Fox was sane although many people held that he was not in his right mind. Dr. Workman, Dr. Dickson and others examined him, and held that he was sane. The result was that after the man was hanged it was proven at the *post mortem* examination, that there was no evidence of disease of the brain. In the face of this a school teacher in the West, professing to know more about the case than medical men, had been writing to the papers, contending that Fox was insane. In his opinion the public should be careful what should be taken as evidence out of the communications forwarded to the public press.

Dr. Sloane did not desire to be committed to all the views enunciated by Dr. Workman. Was all crime insanity? The Hindoo when placing himself

under the car of Juggernaut, believed in his conscience that he was going to save his soul; and that was not the only case of the misleading influence of conscience. Conscience was just the result of education and the accident of nationality. He desired information as to how far moral insanity was to be allowed. If a bank manager with a salary of \$15,000 per annum should spend \$50,000 and become deficient in his accounts, was he to be deemed morally insane.

Dr. Hornbrook thought the system which prevails in France should prevail in Canada, and that on the plea of insanity being made the patient should be placed under the care of experts who were neither in favor of the prosecution nor the defence. The testimony of such men would have such weight that insane people would not be hanged and sane criminals would receive their deserts. He moved, "That in the opinion of this Association it would be desirable that in all cases of alleged murder where the plea of insanity is raised, the culprit should be placed under supervision of one or more experts until the existence or non-existence of insanity is determined."

Dr. Robertson wanted to know what, in the event of that view of the case being adopted, would prevent the plea of insanity being raised in the case of all murders.

Dr. Canniff suggested that the matter should be allowed to remain as a notice of motion.

This was agreed to by the mover and seconder.

Dr. Thorburn remarked that Mr. Blake, when in the Ontario Government, had made a proposal that scientific matters of that kind should be dealt with by scientists. The matter was, however, allowed to drop.

Dr. Strange, Aurora, read a paper on "Ovariectomy," which was discussed by Drs. White, Hodder, Trenholme and others.

Dr. Rosebrugh read a paper on "Membranous Dysmenorrhoea and its treatment." This paper was discussed by Dr. Osler and others.

Dr. Canniff moved seconded by Dr. Tienholme, that the following committee be appointed to prepare a memorial to the Dominion Government, with respect to vital statistics and public hygiene; the President, Drs. Hingston, Workman, Clarke, Playter, Canniff and Oldright.

Dr. Riddell thought the Dominion Parliament was not the right authority to apply to with regard to the statistics of disease and mortality in the various Provinces? The proper course was to apply to the various Provinces? An Act was passed at the first session of our Provincial Legislature making it only compulsory to send statistics to the Government of the Provinces and not to Ottawa. He thought by passing the present resolution they would be ignoring the rights and privileges of the different Provinces.

Dr. Hingston said that at Confederation the matter of vital statistics was not settled, and it was an open question as to whether the collection of

statistics pertained to the Dominion or Local Governments. He thought, however, that if there was anything like a feeling of unanimity in the Provinces, it would be well to press the matter on the Legislatures.

Dr. Playter thought the object of the motion was simply to strengthen Dr. Brouse in his desire to induce the Dominion Government to take the matter up. The idea of Dr. Brouse was to have a central bureau establishment for the collection of sanitary information from the Provinces.

Dr. Canniff thought the memorial if it had no other effect would educate the public mind on the question of public hygiene, and that a memorial of that kind from such an Association would carry great weight.

Dr. Workman hoped the carrying out of the idea would not give the profession a great deal of extra work, while that work could be done by some of the idle civil service clerks who have nothing else to do.

Dr. Sloan said the working of the present Ontario system was as complete as the Government could make it, and only wanted the co-operation of the medical profession.

Dr. David thought that as the motion merely memorialized the Government to take some action, without specifying the action, it would be quite competent for the Association to pass such resolution.

The motion was then passed, as the Association adjourned.

In the evening the members attended an "at home" kindly given to the association and friends by Mr. Bickford. The grounds were beautifully illuminated for the occasion by Chinese lanterns, and a band of music was present to enliven the proceedings. Dancing was enjoyed by those who so desired, a bountiful spread was prepared for the company by the host and hostess, and the evening was spent most pleasantly by all.

Second Day's Proceedings.

The Association met at ten o'clock. Dr. Hodder presiding. The minutes of the last meeting were read and confirmed.

The following new members were elected:— Drs. Pollard, W. Metcalfe, McGregor, Bell, Shepard, Brown, Ross, Fuller, Gardner, Roddick, Wilkins, Holey and Carroll.

Dr. Riddell laid on the table the various Acts with reference to vital statistics, which showed that the Province of Ontario assumed all rights with regard to the collection of statistics. He presented the copies of the Acts. He also produced copies of the schedule of registration of births, deaths, and marriages.

Dr. Hingston considered himself very much indebted to Dr. Riddell for the inquest he had held on these Acts. He called it an inquest because he believed the state of matters to be such that

the registration of births, deaths, and marriages was not properly carried out.

Dr. Geikie, Toronto, read a paper on a case of "Gastric Ulcer," and "Suppression of Urine" for thirty days without intermission.

A short discussion followed in which Drs. Hornibrook, Riddell and others took part.

Dr. Trenholme, Montreal, read a paper on the "Treatment of Fibroid Tumors of the Uterus."

A discussion followed the reading of the paper, in which several members took part.

In the afternoon session the following were elected permanent members:—Drs. E. Baldwin, Archibald, Berryman, Pyne, Cobbett, Hodder, Jr., Holmes, Fraser, R. Corbett, and Baines.

Dr. Grasset read a paper on the theory and practice of "Antiseptic Surgery."

Dr. Workman expressed his sense of the value of the paper, but complained that Dr. Grasset had read it too rapidly.

Dr. Hingston said, when he visited Dr. Lister's infirmary, he had come to the conclusion that far too much attention had been given to this system. It was claimed that it prevented putrefaction, and putrefaction and suppuration were used as convertible terms, though one was a physiological and the other a pathological fact. Carbolic acid had the power of diminishing suppuration, but it did not prevent putrefaction, which was an essentially distinct thing. He did not believe they should assume the existence of these germs in the air. He did not believe that the admission of pure air into a wound would do much harm. Absolute cleanliness was of the greatest importance.

Dr. Canniff said that while they might not dispute the existence of certain germs in the air, there would be a great difference of opinion in regard to the allegation that the air germs had anything necessarily to do with suppuration. Decomposition was in the order of nature and would take place without the presence of air germs. He mentioned several cases which did not seem to agree with Lister's theory. It was the decomposition of organic matter which caused the mischief, and not the presence of air germs.

Dr. Ross, Toronto, thought too much faith had been placed in carbolic acid. He mentioned several cases of wounds and fractures which had been successfully treated with a simple water dressing, and urged that while attention should be given to Lister's and other systems, too much attention had been given to carbolic acid treatment.

Dr. Hornibrook, said his experience showed that carbolic acid arrested neither suppuration nor putrefaction, but rather increased them, and the best treatment was that with tincture of iodine.

Dr. Agnew, Toronto, said the best antiseptic was cleanliness.

ELECTION OF OFFICERS.

Dr. Thornburn submitted the report of the Nominating Committee, which was concurred in: President, Dr. Hingston; Vice-Presidents: For Ontario, Dr. Workman; Quebec, Hon. Dr. Ross; New Brunswick, Dr. Bayard; Nova Scotia, Dr. Moran; Secretaries: for Ontario, Dr. Zimmerman; Quebec, Dr. Russell, Jr.; New Brunswick, Dr. Herrington; Nova Scotia, Dr. Almon; General Secretary, Dr. David, Montreal; General Treasurer, Dr. Robillard, Montreal.

The following Committees were appointed:

Publication.—Dr. David, *Chairman*; Drs. Robillard, F. W. Campbell, Howard and Osler.

Medicine.—Dr. Geo. Ross, *Chairman*; Drs. Mullin and Sweetland.

Surgery.—Dr. J. H. Richardson, *Chairman*; Drs. Oldright and Kincaid.

Obstetrics.—Dr. Ross, *Chairman*; Drs. Strange and Rosebrugh.

Therapeutics, New Remedies and Medical Jurisprudence.—Dr. Fulton, *Chairman*; Drs. D. Clarke and Hornibrook.

Neurology.—Dr. Osler, *Chairman*; Graham and Farrell.

Medical Education and Literature.—Dr. Howard, *Chairman*; Drs. Hodder and Parker (Halifax).

Climatology.—Dr. Marsden, *Chairman*, Drs. Playter, Baynes, Tye, Dewit Martin, Larocque, Ross (Quebec), Botsford, Canniff and Jennings.

Delegates to the American Medical Association: Drs. Grant, Sweetland, Hingston, David, Fulton, Thornburn, Marsden, Russell, Sr.; and to the International Medical Congress to be held at Philadelphia next month:—Drs. J. Ross, F. H. Wright, Macdonald, Malloch, Grant, Brouse, Workman, Dickson, Osler, Wilkins, Craik, Russell, Jr., Earl, Wickwire, Canniff, Rosebrugh, Yeomans.

Dr. Hingston thanked the Association for the marked honour which had been conferred on him. He was deeply sensible of that honour, especially as he would succeed one who occupied, and justly occupied, so high a professional and social position in the country. He only hoped he might fulfil the duties belonging to the office in such a manner as to meet with the approval of those who had done him the honour."

It was unanimously resolved to allow the Secretary \$100 for his services, and to pay the Treasurer's expenses.

Votes of thanks were given to his Worship the Mayor for the use of the Council Chamber, and to the Railway Companies for reduced fares.

On motion of Dr. Osler, it was decided that the next meeting of the Association be held in Montreal on the second Wednesday in September.

Dr. Hingston, Montreal, submitted the report of the Committee on Medical Education, recommending that the medical education in each Province be assimilated, so that a licence to practice in one Pro-

vince may be understood to extend to all the Provinces of the Dominion.

The report was received.

Dr. Hingston moved, "That this Association is of opinion that the sanitary laws at present in existence in the Dominion are insufficient to meet the requirements of public health; that a system of public hygiene must embrace an acquaintance with vital statistics; that the importance of that knowledge is recognized elsewhere; that in countries not more favorably situated than Canada, systems more or less complete of vital statistics obtain, and sanitary laws have been enforced; therefore this Association is of opinion that it would be within the scope and function of the Dominion Parliament that such a comprehensive scheme should be introduced as would supply a much-felt want, afford to the members of the profession throughout the Dominion and other scientific persons additional means of acquiring a more extended knowledge of the more prevalent diseases in the different parts of the Dominion, and establish comprehensive laws relating to public health." Carried.

The President stated that a memorial had been received from the Exemption Committee of the Toronto City Council asking the Association to support the abolition of exemption from municipal taxation. As it was shown that the subject was one which did not come within the objects of the Association the letter was laid on the table.

Dr. Reeve, Toronto, read an interesting paper on "Otology or Aural Surgery," and exhibited some instruments used in his practice.

Dr. Yeomans and Dr. Oldwright declined to read their papers because of the lateness of the hour.

Dr. Trenholme, Montreal, exhibited Molesworth's instruments, which were examined with much interest by the members.

The thanks of the Association were presented to Dr. Hodder, for his conduct in the chair; to the Toronto members of the Association for the reception they had given to their visitors; to the Mayor for the use of the Hall; to the Railway and Navigation Companies; to the General Secretary Dr. David, and the Treasurer, Dr. Robillard.

The Association then adjourned.

Third Day's Proceedings.

The members of the Association and their friends assembled at the Northern Railway depot, at 8 a.m., where a special train was in readiness to convey them on their trip to Lake Couchiching. On the arrival of the train at Belle Ewart, the steamer "Lady of the Lake," was in waiting to convey the party on a trip round the Lake and through the Narrows to Couchiching. The Company went to the Hotel, where a sumptuous dinner was prepared, which all seemed prepared to do justice to. After dinner, the usual loyal toasts were drunk and responded to, and a vote of thanks passed to the Northern Railway

Company for their courtesy to the Association. While there, some engaged themselves in fishing, others in boating, bathing, &c. The Company returned home in the evening, much pleased with their journey.

NORTH ONTARIO MEDICAL ASSOCIATION.

A meeting of the North Ontario Medical Association was held in Cannington on the 26th of June. There were present Dr Gillespie, vice-president; Dr. J. J. Hillary, secretary and treasurer; Drs. Black, Bascome, Freel, Luke, Rear, and McKay.

The minutes of last meeting were read and confirmed. The members then proceeded to elect officers for the ensuing year with the following result: Dr. Bascome, President; Dr. Gillespie, Vice-President; Dr. Hillary, Secretary and Treasurer. A vote of thanks was tendered to the retiring officers.

The secretary read several communications from the Insurance companies relative to the resolution passed at a former meeting, raising the fee for examination in Life Insurance to \$5.00, and as each of the companies had made some slight advance in the fee.

It was moved "That this Association accept the terms of the different Life Insurance companies as to medical fees for the present." Carried.

Moved by Dr. Gillespie, seconded by Dr. McKay, "That the thanks of this Association are due to our representative, Dr. Allison, for his efforts to carry out in the Council the views of the medical profession of King and Queen's division in reference to the appointment of examiners, and other matters of reform." Carried.

Moved by Dr. Bascome, seconded by Dr. Black, "That the secretary be instructed to notify all members of the North Ontario Medical Association, who have not paid their yearly fee, to forward the same to the secretary without delay, as the money is required to meet current expenses." Carried.

Dr. Hillary read a paper on "Uterine and Ovarian Fibroids," exhibiting a post-mortem specimen of a right ovary converted into a fibrous mass. Dr. McKay gave a practical exhibit of the Laryngoscope. Drs. Bascome and Hillary gave their experience of diphtheria, which was followed by a very interesting discussion on the subject. The next place of meeting of the Association was ap-

pointed to be held at Uxbridge in September, and Drs. Black, Freel and McKay, were requested to contribute each a paper to be read on that occasion. The meeting then adjourned.

THE ONTARIO COLLEGE OF PHARMACY.

The eleventh semi-annual meeting of the Council of the above College took place at Toronto on the 8th ult. In the absence of Mr. Lyman, the President, Mr. N. C. Love, Vice-President, was called to the chair.

The minutes of last meeting were read and approved, after which a discussion followed on the merits of the various mottoes to be attached to the arms of the College, finally a committee was appointed to report at next meeting.

It was decided to grant diplomas of the new design to members who wished them, on condition that the applicants returned their old diplomas and paid a fee of one dollar.

The Board of Examiners reported that the eleventh semi-annual examination had been held in conformity with the regulations of the Act. Forty candidates entered their names, but of these only thirty-nine were examined, one having retired, nineteen gentlemen obtained the requisite number of marks to entitle them to diplomas.

The first prize was awarded to Mr. E. D. Martin; the second prize to Mr. E. F. Stephenson.

The chairman stated that greater importance had been given to the department of practical dispensing, and urged the necessity of increased facilities being provided for the accommodation of candidates.

The Treasurer's report showed a balance of \$969, 29. Income from various sources \$1,099, 67, making a total of receipts of \$2,068, 96. The disbursements amounted to \$1,744, 90, leaving a balance of cash on hand to the amount of \$324, 06.

The Registrar's report was next presented and adopted. It contained nothing of any interest to readers outside the Council.

The report of the Committee on Legislation was as follows:—

"Your committee beg to report that the draft of the Amendment Act, as laid before this council at a previous meeting, was put into the hands of Mr. Striker, M.P.P., but owing to press of business, was not introduced during the session.

"From conversations with prominent members of the House we are of opinion that there will be little opposition to the Act, if introduced next session, as the hostility of the medical profession has in a great part given place to a more favourable and reasonable feeling. Many members of that profession holding high places in the medical council, have expressed themselves strongly in favour of the Act, and recognize its importance as well to themselves as the public in general.

It was suggested that the time of council meeting be changed from Wednesday until Thursday. The examinations are now held during the two days preceding the meeting, and candidates are necessitated to stay in the city over Sunday, thereby incurring needless expenditure of time and money.

After adjournment, the members of the council were entertained by the Vice-President, at Dennis and Jewell's.

INSANITY AND CRIME.

BY JOSEPH WORKMAN, M.D., TORONTO.

The following is an epitome of the paper on the above subject:—He said that within the present year, if they could believe the statements of prosecuting counsel and the press, an epidemic of crime had prevailed in this Province. He was not aware that the number of crimes in the neighbouring States had undergone any remarkable change, and the Province of Quebec and the Maritime Provinces, had not been visited with an unusually large number of criminal cases. Admitting the existence of the Ontario epidemic he thought it would not be unprofitable to enquire the cause of the moral malady. Similar outbursts of crime had from time to time been chronicled in all countries, and in their attempts to account for them men had arrived at diverse conclusions. Some had held that the criminal laws were too lax or too loosely administered, and in order to remedy it they had decided that all that could be done was to inflict the most severe punishment on offenders. After the close of the Crimean war, a period of frightful criminality set in, in England. The Recorder of the Central Criminal Court, in his address in March, 1856, took occasion to remark that during the period prior to 1854 there had been a decrease in the number of such crimes as murder and manslaughter, &c., by about thirteen per cent.; but during the twelve months preceding 1856 an unusual number of heinous crimes had been committed by persons in high station as well as by those in a more humble position in life. In an article in the *English Churchman* of the same year a statement was found headed "Murders, Forgeries, Suicides! Suicides, Forgeries, Murders!" in which it was alleged that no sooner had one case spread over the Kingdom than another came to eclipse and dispute a place with it in the public mind. The *Christian Times* of the same year said that an epidemic of murder was raging just then. Crime propagates itself by infection, like fever and small pox, the law of moral infection were among the most recondite and difficult subjects in contemplation. There was a large class of minds, over which great crimes exerted

a sort of fascination, and those who had not trained themselves to take the responsibilities of moral freedom were liable to become the victims of the strangest delusions and catch any moral infection which might be raging. Let a woman fling herself from the top of the monument, and the gallery has to be railed in, lest the contagion should spread and monument yard become the Tyburn of suicides.

The *Psychological Journal of Medicine*, of April, 1856, expressed the opinion that the causes of the spread of crime were more amenable to investigation than those of various bodily diseases such as plague, cholera, or influenza. In Denmark, in the middle of the last century a great number of people were affected with the idea that a murderer on being condemned to death frequently became better prepared for heaven. It was found impossible to stay the epidemic by capital punishment, and other measures had to be adopted. There was too much reason to believe that the details now frequently given of religious manifestations given by great criminals had acted unfavorably in respect to the public weal. A wretched man, W—, committed a most atrocious crime, for which he was executed. A minister visited him, and on his return he preached a sermon upon the penitence and pardon of 'this poor, erring, yet suffering fellow-creature;' depicted his tears, and his sighs, and his reminiscences of his Sunday School days; the manner in which their joint petitions ascended from that cold cell to the Throne of Grace; and all this in a manner so acceptable to his audience that very many were taken out in hysterics. It was not long until one of that district, if not of that very congregation, was tried for a crime similar in nature, and for which he could give no reason, but that W— had done so before. The English Churchman had stated that very much of the preaching of the present day was defective in those qualities which the character, temptation, and sins of the time required. There has been in many quarters, plenty of vague generality, but very little of definite, practical teaching. 'The preaching of vital godliness,' has dealt very little with the real life of men, women and children. Conventional language, conventional thought, and conventional feeling, have been excited and cultivated; but these are, in many instances, wholly ineffective, or inadequate for the real battle of life. To what purpose is it to preach Sunday after Sunday, on imputed righteousness, to the man who is contemplating forgery, to supply his extravagance; or upon 'justification by faith,' to those who are about to ruin their friends or neighbours, in order to sustain their own credit; or upon 'the errors of Popery,' to those who are knowingly selling adulterated articles, or using short weights and measures; or upon the doctrine of predestination, to those who are ill-treating their wives, and bringing

*Read before the Canadian Medical Association, August 3, 1876.

their children up like heathens? But what are the shortcomings of the pulpit compared with the poison-spreading recklessness of the press. Long ago they were instructed by the ablest newspaper conductor in Canada that journalism was simply "a commercial enterprise," and with that view the news must be made as attractive to the heterogeneous mass of readers as mercantile experience may prescribe or editorial virtue permit. The publicity given to the details of terrible crimes in the public press was undoubtedly a fruitful source of crime in this and other countries. The evil was a great and admitted one; the remedy had yet to be discovered. There was always in every city a numerous class of persons of questionable moral sense eager to seize hold of any excuse for the commission of great offences against persons and property. That class was more or less affected by the publication of the details of murders or other crimes; to them such particulars were dangerously suggestive. Esquiro and many others complain bitterly of the effect of the public press in increasing the amount of maniacal crime. The idea of poisoning his wife with strychnine was suggested to Dove by hearing in a public bar-room the evidence in the case of Palmer who poisoned Cook with strychnine.

Some years previous to these poisoning cases, the *Medical Times* contained the following passage:—"It is known that Mallard, the pawnbroker from whom Wix purchased the pistol with which he shot Bostock, his master, was the shop-keeper from whom Graham subsequently bought the pistol with which he shot the stranger Blewitt. 'Immediately,' says the pawnbroker 'after the assassination by Wix I received a great many applications for pistols, and now, within the last few days (after the second tragedy) several persons have applied to me for the same thing. I am now determined never to sell another.'

How much more tender was this man's conscience than that of the newspaper publishers who instructed the would-be murderers where to purchase cheap pistols? It would be nothing short of a miracle that a journalist should decline to spice his columns with the sensational details of a murder or a suicide, though the consequence might be the prompting of a dozen similar acts, or the laceration of the feelings of a dozen distracted families."

Dr. Winslow in his "Anatomy of Suicide," gives the following illustration:—"A criminal was executed not many years ago in Paris for murder. A few weeks after, another murder was perpetrated, and when the young man was asked to assign a reason for taking the life of a fellow-creature, he replied that he was not instigated by any feeling of malice, but that after having witnessed the execution he felt a desire, over which he had no control, to commit a similar crime, and had no rest until he had gratified his feelings."

Some years ago a man hung himself on the threshold of one of the doors of the corridor, at the *Hotel des Invalides*. In the succeeding fortnight *five invalids hung themselves on the same cross bar* and the Governor was obliged to shut up the passage. How truthful the words of Shakspeare, in his King John—

"How oft the sight of means to *do* ill-deeds,
Makes ill-deeds *done*!"

The imitative instinct is perhaps the strongest in our nature. In the insane it certainly is, as regards the perpetration of suicide, and very probably of homicide also, even more potent than in the sane. Some thirty years ago a suicide occurred in a large American Asylum. It was speedily followed by several others, and by a frightful number of defeated attempts. About fifteen years ago two women, resident in the same ward of the Toronto Asylum, committed suicide within a short time of each other by exactly similar means. In 1860 a suicidal epidemic seemed to prevail all over the Province, and in the Asylum one man succeeded in hanging himself. Dr. Workman became alarmed, and took the precaution of allowing no newspapers to be sent to the wards until all reports of suicides or other violent acts had been cut out of them. In consequence either of this precaution or the care of the attendants no other cases occurred. About this time the editor of the *American Journal of Insanity*, in an article said, "That suicides are alarmingly frequent in this country, is evident to all—and as a means of prevention, we respectfully suggest the propriety of not publishing the details of such occurrences. A single paragraph may suggest suicide to twenty persons."

Entirely concurring in the above opinion he had written to the editor of a city paper expressing the view that the reports by the city press were largely contributing to the spread of acts of violence. The notice awarded to his communication was a negation of his assertion and an allegation that giving publicity to these crimes was the best means of preventing their recurrence. He courted no further correspondence with a journal which was capable of giving public-expression to such a crude idea. It was asserted by the press that there was an epidemic of crime. Reporters were always on the look out for sensational news, and there services were appreciated by their employers according to the quantity and sensational quality of their matter. If a case of sore throat or ambiguous measles occurred in the family of an editor or reporter, they read of an epidemic of diphtheria or small-pox in the city.

Within the last half-year it had been his misfortune to be summoned as an expert witness in two atrocious murder cases, in which the defence advanced the plea of insanity. The crimes of McConnell and Ward were so atrocious as to curdle the blood of every man and woman in the community, and he believed if acquittal had been ob-

tained in either case the enraged populace would have made short work of the discharged men before they were many yards from the court-house door. The press had done its strongest to inflame the public mind, and had succeeded in that preparatory process. If it had adhered strictly to truth it would have been less censurable, but facts were exaggerated and some unfounded statements were made. For example, it was stated that after stabbing Mills, McConnell coolly wiped his knife on his coat-sleeve, but nothing of the kind was proved in the evidence. It was also stated that he had used his wife brutally, but nothing of the kind was proved. It was shown that from the time he sustained fracture of the skull he was subject to fits of gloom and irritability. He thought the Association would concur with him in the opinion that it was unwise, if not wrong and unjust, to precipitate the trial within four weeks of the man's commitment, while the public mind was in a state little short of vindictive frenzy. If fair time should be given in ordinary cases for efficient prosecution and adequate defence, how much more advisable was this precaution in cases in which the very difficult question of the mental condition of the accused was likely to come up for solution. In France, when a plea of insanity was advanced, the accused was placed for a certain time under skilled observance, but in this country not only was this process unthought of, but the very opposite course was applauded. One of the city papers congratulated them on the speed with which McConnell was brought to trial and the gallows. He could hardly imagine that anyone in a state of present mental competency could give expression to a view so repugnant to Christian charity and sound sense. He summarised the evidence given in regard to the alleged insanity of McConnell, and criticised the "trash" of which the prosecuting counsel's questions were composed. He referred to the ignorance of the jury on the subject brought before them; and alleged that it was easier with the vulgar and conceited ignorant to palm off a case of grossly simulated madness, which could not escape detection by an experienced observer for ten minutes, than to detect the unobtrusive and often coy symptoms of the true disease. He referred to the case of Fox, who was executed at Peterboro' in 1873, and whom he and Dr. Kincaid examined. To neither of them could he or would he pertinently answer one question. His utterances were a strain of extemporized nonsense. No one of experience could fail to detect the sham, but after his conviction a great outcry was raised; and Dr. Dickson and Dr. Howard were deputed to examine him but they sustained his testimony. Almost all simulators overdid their work. They dread to utter one rational word. The truly insane sought rather to conceal than to exhibit their madness, and answered pertinently, though not always

sensibly, to questions put to them. In illustration of this he cited the gibberish talked by the simulating Mad Tom in "King Lear," which would pass muster before half the jurors that sat in the murder trials. Neither McConnell nor Ward evinced the slightest desire to be considered insane, and it was a monstrous falsehood to charge the latter with any such desire. If the writers who invented and published such statements could still sleep, they must have obtained a divorce from conscience.

That Ward had been insane four years before he murdered his wife, was satisfactorily proved. That his conduct and words in the interval, savoured far more of insanity than of sanity, was the writers belief, and the belief also of Dr. Dickson. He persistently exhibited that mental condition—*delusion*—which even the law holds to be reliable proof of insanity. But the law, or its expositors, hold that in order to establish irresponsibility for crime, the delusion must have direct connection with it. His delusion was that poison was from time to time being administered to him.

Lord Brougham has laid down the doctrine that in civil cases, (though he held a contrary view in criminal ones), partial insanity should have the same legal consequences as the general form of the disease. He regarded the mind as indivisible, and averred that we are unable to *limit* exactly the operation of unsoundness by which it is affected. Delusion as long as it exists, is a manifestation of insanity, and hence no confidence can be placed in any act, of a diseased mind, because we have no security that the lurking delusion, the real unsoundness, does not mingle itself with, or occasion the act. A mind insane on any one point, is *tainted* with insanity throughout, and all who watch the insane closely will be disposed to concur with his Lordship. The idea of unsoundness affecting a part of the mind and leaving the rest free, was a psychological incompatibility.

Lord Brougham's discrimination between civil incompetency and criminal liability, according to his own showing, rested solely on the consideration of expediency. Crime is to be punished, as his lordship held, not because it is a violation of human or divine justice, but because it is necessary to punish in order to deter others from offending.

We have in Canada, arrived at times in which the competency of medical experts to testify to mental condition, is declared to be no greater, or more reliable, than that of ordinary men. Insanity is, by those holding this belief, regarded as one of those palpable and unmistakable facts, which are continually coming under the observance and adjudication of the multitude, and there is no more danger of a wrong judgment being formed on its actuality or its nullity, than upon any other every day matter of observance, as the present state of the weather, the bad condition of the streets, the muddiness of the Bay water, or the bad quality of

baker's bread, and a hundred other things, which that remarkably wise and erudite biped—*every man*—so well understands. It is not beyond the reach of probability that a person who has once seen a fully developed case of small-pox, may have so closely and sharply observed it, that he will, at a glance, recognize the next case he may chance to see in the same stage; though if he has never been vaccinated, or if having been vaccinated, he is doubtful of the completeness of the process, he will neither have spent much time in observing his first case, nor will he advertently come into propinquity with a second. Does any of you, gentlemen, believe that such a man would be a competent and reliable diagnosticator of the disease in every stage and form? What would he make of it in the incubative period? What in the initiatory fever? What, in those anomalous forms in which it simulates other exanthemata? What in those cases in which it appears neither true to itself, nor similar to its cutaneous relatives? Is insanity a less protean malady than small-pox? Have our lawyers, judges, and jurors, noted it more closely or protractedly? I venture not to ask these questions in allusion to another class of men, whose knowledge, not only of insanity and small-pox, but of everything else in the heavens above, the earth beneath, and the waters under or over the earth is, in their own belief, so vast, profound, and omnipotent, as to qualify them for rendering infallible judgment on every obscure or perplexing question which may be involved in human or inhuman affairs.

In an interview with one of those encyclopaedic savants, they differed in opinion in regard to insanity and idiocy, the newspaper writer assuming himself to be quite as competent to distinguish between the two forms of mental conditions as he (Dr. Workman) was. By-and-bye the gentlemen expressed a wish to visit the wards of the asylum, and did so, at the close of which he remarked that he believed he had taken the nurses for the patients, and *vice versa*. And such proved the fact. In regard to McConnell and Ward, every person who had largely studied the records of insane crime well knew that its almost distinguishing characteristic was its atrocity, its extravagant ferocity. At the same time there had been cases of ferocious crimes committed by men of sound mind; but those cases were few and did not affect the general rule. Yet, woe be to the practitioner who might, in a court of justice or elsewhere, give expression to any such idea, for the indignation and ponderosity of the Bar, the Bench, the Press, the Pulpit, and the people would fall upon him as a moral avalanche, on the ground that he was an apologist of crime, and had studied the subject until his wits had gone wool-gathering, and he could not distinguish between an editor and a fool.

"Not long ago," says the *London Record*, "a lady, by a series of the most extraordinary misrepresentations and cleverly carried out impostures, raised large sums of money on no security whatever, and spent them as recklessly; imposed on jewellers, so that they trusted her with goods worth hundreds of pounds; furnished grand houses at the expense of trusting upholsterers; introduced herself, by sheer impudence, to one great nobleman after another, and then introduced her dupes, who, on the faith of their distinguished social connexions, at once disgorged more money. To one person she was a great literary character; to another of royal descent; to another she had immense expectations; to another she was a stern religionist.

She was finally brought to book. She very well knew right from wrong, and transacted her business with great ability and skill. Not one of all those she duped and cheated—intelligent, prudent and clear-headed Scotchmen as they were—ever questioned her mental soundness.

'At last this lying, cheating, and scheming imposture developed into marked insanity and brain disease, of which she soon died, and it was seen that all these people had been the dupes of a lunatic, whose boldness, cunning and mendacity had been the direct result of her insanity.

Had a physician ventured to express the opinion that she was insane when she committed the offences charged against her, the judge would have frowned, the prosecuting counsel sneered, the jury would have been astounded, and the press would have applauded their verdict of guilty.

The case of John Howison, a Scotchman, "was one of a sanguinary group," given by Dr. Pritchard. "He had," says the reporter of the case, "false perceptions; he used to sit brushing away flies for hours together, with his hand, where there were no flies, and his landlady told him so; he had struggles in the night with witches; and was, in general, miserably superstitious. *The case was however atrocious*, and the intractable savageness of the man was rendered more disgusting by being associated with brutal voracity in regard to food." He was found guilty of murder, and of the atrocious crime of bulimia, and as it would have cost too much to feed him, he was hanged.

His was a case of unequivocal and incurable insanity, and one which must soon come to a fatal issue, without the services of the hangman.

Not long ago a man in a south-western county murdered his wife. He was regarded by various persons as trying the "insanity dodge." Dr. Dickson was summoned to examine the prisoner and give expert evidence. He very soon decided that the prisoner was

insane, and the form of his malady Paresis, formerly called General Paralysis of the Insane.

Dr. Dickson was the first and only witness examined, and although the prosecuting counsel ridiculed the doctor's assertion, the Judge instructed the jury to render a verdict, finding the prisoner insane. If Howison had been tried by such a Judge, he would not have been hanged.

But a great change has of late begun to take place in the mode of instructing juries, in cases of alleged insanity, and notably in Scotland. Lord Justice Clerk, of Glasgow, made the following remarks in charging the jury in a murder case. The prisoner had murdered his mother. The crime was atrocious.

"At one time lawyers were apt to avoid all difficulty by inquiring whether a prisoner knew right from wrong; and as, in point of fact, except in cases of acute mania or idiocy, there were few lunatics who did not know right from wrong, in the sense of being capable of forming and even acting on, the distinction; much unreasoning humanity (inhumanity?) had been the result of their *unscientific* maxims." Here, at a bound, Lord Justice Clerk has overleaped the barrier which has hemmed in the legal jurisprudence of insanity for centuries, and has excluded sound science from the blood-stained arena of Justice.

No medical witnesses, in a case of alleged insanity, or indeed in any other case, need expect to escape the fangs of a self-inspired cross-examiner, without undergoing the infliction of numerous questions constructed for the purpose of confusing or annoying him. It is well, on such occasions, to be very careful to remain undisturbed by impertinence, which springs from ignorance. It is related of Dr. Bankhead, physician to the celebrated Lord Castlereagh, that being once under examination by Mr., afterwards Lord Brougham, the latter, in putting some important question to the doctor, shook his finger at him, whereupon the doctor shook his fist at Mr. Brougham. The latter demanded an instant explanation of such outrageous conduct in court. The Dr. coolly replied that it was his habit to show his fist to every man who shook his finger at him.

When we are asked for our definition of insanity, as I am aware is frequently the case, shall we promptly comply with the demand, or decline the invitation? Shall we, to oblige the builder up of a hypothetical case, offer a *definition* of the *indefinable*? Let us not forget that we are talking to a man whose knowledge of insanity may all have been hunted up by him within the last few days, or even the last few hours, in books of law, the writers of which were just as competent to treat of insanity as of neuralgia or unavoidable uterine hemorrhage.

In the McConnell case the writer was asked by prosecuting counsel what a "Lucid Interval" was. The idea of a lucid interval in any case is to admit the existence of insanity before and after it, which must have been entirely foreign to the mind of the prosecuting attorney. He replied that he did not know what it was as defined in law, and that he regarded the legal definitions as pure fiction created by those who had never seen one. The writer then quoted the opinions of Lords Thurlow and Brougham, and also M. D'Aguesseau's delineation of a lucid interval, and concluded by saying that the best proof of a lucid interval in insanity, in his opinion, would be the subsequent full recovery of the patient. Not only the non-recovery of a patient, but his death within a short time, is surely a very damaging witness in establishment of the lucid interval theory of the *law*, and it is only of *that* fiction I would here be understood as treating. Talk indeed, about the uncertainty of medical science, and the absurdity of some of its present theories! If medicine is mutable, it is at all events progressive, and is ever, not merely ready to bow to experience, but beyond all other departments of life, it is the most severely critical upon itself. It acknowledges no authority but scrutinized and clearly established facts. It repudiates all creeds and Shibboleths of concreted ignorance or superstition, and is never ashamed to confess its own fallibility.

It had frequently occurred to him that serious misconception prevailed in the public mind and in courts of justice regarding moral insanity. A host of eminent writers on insanity had not merely admitted that form of disease, but had contended for distinct existence. He had never seen a case which come up to the description of its advocates. Nearly all the cases cited passed ultimately into unmistakable intellectual overthrow, and many of them into profound dementia. He thought it was clearly established that all insanity, except in the few cases which resulted from a sudden mental shock, commenced as a moral perversion. Finally, he said, the reports of new murders which were presented to them almost daily in the newspapers showed that their epidemic of crime was no myth. He prayed that it might be only an epidemic, but he had strong fears that it might be a rooted endemic. He did not discard the evil influences he had dwelt upon in the provocative or fostering relations to high crimes, but it would be rash or unjust to ascribe the present moral morbidity exclusively, or even chiefly to these. The question was a great puzzle. The Province of Ontario was one of the wealthiest and best educated in the Dominion; they enjoyed as full constitutional liberty as any country in the world; from the supreme Legislature down to their township and village

Parliaments, their system of Government was little short of human perfection; the Bench was pure, the pulpit filled by 3,000 earnest preachers of religion with a number of active laymen and an infinite number of earnest and pious women to assist them; every town had its Y. M. C. A., every village an excellent library, their common schools were the admiration of strangers and a pride to themselves; the city of Toronto now had more educational advantages than the whole Province forty years ago, they excelled all the rest of the Dominion in the extent and the ability—would he could add in the veracity and patriotism—of their press (laughter); and yet with all these superior and augmenting advantages they would seem to be retrograding most alarmingly in their moral condition. Whither were they drifting? He asked gentlemen from a distance to tell them what ailed them and how to shake off the present killing epidemic.

Selected Articles.

IMPERFORATE ANUS—OPERATION.

Mr. Harrison, of the Liverpool Royal Infirmary, operated on a child for imperforate anus, under the following unusual circumstances:

The patient was a well-nourished female child, aged thirty-three days, and was born with an imperforate anus. For this, shortly after birth a puncture had been made by the patient's medical attendant in the position of the anus, but without any effect. The child had been fed upon the breast, and, with the exception of vomiting occasionally, appeared to suffer no inconvenience. Within the last few days the vomiting has been incessant, and of a fecal character.

The child, when placed upon the operating table, presented a remarkable appearance, the abdomen being enormously distended, and covered with veins. In miniature, it presented the appearance of a woman suffering from a large ovarian tumor. The genital organs were naturally developed. There was a complete absence of anything like an anus; nor was there any indication to guide to the position of the bowel.

Mr. Harrison operated in the following manner: An incision was made through the skin at a point corresponding to the anus, and the knife was cautiously pushed upwards in the direction of the rectum for an inch and a half. The incision was made free enough to admit the little finger, which was then introduced to the bottom of the wound, when the pressure of the bowel was indistinctly felt. The largest trocar of the aspirator was then introduced, when a gush of fecal matter took place. Into the puncture made by the trocar an ordinary pair of dressing forceps was passed, by means of

which the opening in the bowel was considerably enlarged. A large escape of feces now took place; no pressure was exercised on the abdomen, as it was thought better to let the distended intestines empty themselves gradually. A piece of oiled lint was introduced through the wound into the bowel. During the remainder of the day the child passed a quantity of fecal matter.

On the following day (February 9th) the child appeared in no way to suffer from the operation. It had slept and taken the breast naturally. There had been no vomiting. Several motions had been passed. February 10th, the improvement continues. Bowels acting naturally. 11th, there does not appear to be anything wrong with the child: motions are passed at short intervals, the abdomen is almost the natural size, and the child is thriving. Mother and child returned home.

In alluding to this case, Mr. Harrison said that he regarded it as one where the lower portion of the rectum was completely absent. By keeping the incision in the direction of the bowel, he believed that he had effected an entrance into the intestinal canal at its lowest portion—viz., the upper part of the rectum. Considering the distended condition of the bowels, he did not think there would be any difficulty in maintaining the patency of the opening that had been made. That the child should have suffered so little inconvenience from this prolonged imperforation was a very remarkable feature in the case, and rendered, so far as he was aware, the case unique. The child's condition on leaving the Infirmary was such as to make the prognosis favourable.—*London Lancet.*—*Nashville Med. Journal.*

TREATMENT OF SUNSTROKE WITH HYPODERMIC INJECTIONS OF QUININE.—All cases of insolation treated with subcutaneous administration will doubtless receive the best chances of recovery. Old army surgeons in British India, where the best opportunity for observing this malady is offered, say the effect of quinine thus applied "may be described as magical." Heat is, at first, a vaso-motor stimulant—too long continued in, this stimulation becomes exhaustion, and then the peculiar condition of the system following is denominated *sunstroke*. The vaso-motor control over the vessels is lost, the cutaneous vessels are turgid with blood, and the sweat glands have apparently lost their power. Theoretically, quinine stimulates the vaso-motors and thus produces capillary contraction; and the peculiar train of morbid circulatory symptoms is broken up, and convalescence sets in. However, whatever the theory may be, the practice of putting three to five grains of quinine under the skin is productive of speedy recovery in nearly all cases.—*Practitioner.*—*Chicago Med. Journal.*

EXTRACTS FROM THE ANNUAL
ADDRESS, BY DR. SIMS, BEFORE
THE AMERICAN MEDICAL
ASSOCIATION.

CODE OF ETHICS.—We boast of a Code of Ethics, the best ever given for the government of medical men; and we urge it as a model to be adopted by the profession in other countries. I would not shock the moral sense of this august body by speaking of it in irreverent terms; for I know that there are many, indeed a large majority of this association who believe it to be as perfect as the Decalogue, and as incapable of improvement.

It is looked upon by some of its High Priests as the Holy of Holies, and not to be desecrated by the touch of vulgar hands. It is only by observing the practical operation of laws that we can judge of their fitness and usefulness. Let us measure our Code by the universal standard.

Twenty years ago it was considered disreputable for a physician to put on his door, or in his window a plate giving his office hours. Now, every one does it, greatly to the convenience of both physician and public. A few years ago a physician in a neighboring city was expelled from a society for inserting his name in the general directory, with the announcement of his specialty and his office hours. In France they do things differently. There a doctor cannot put his name on the door of his apartment, but can advertise himself in the Directory as broadly as he pleases. Usage makes what is wright in one country, wrong in the other. A gentleman high in the ranks of the profession, holding a distinguished position among us, wishing to change his place of residence, writes me to know how he can notify the world of his intention without violating the Code of Ethics; and he and a friend of his, a well known stickler for the inviolability of the Code, hold grave consultations over the easiest way of getting round its provisions without a flagrant violation of them. These are honest and honorable men, and would not wilfully do anything wrong. But they feel that they are hampered by rules that are unjust and oppressive.

Pardon me if I ask you. "Is the Code of Ethics up to the requirements of the times, when it compels honorable men to do dishonorable things to promote an honest action?"

Under our Code, all consultations are secret and confidential, and the friends of the patient are never to know that there was a difference of opinion between the consultants. But was there ever a difference of opinion on such occasions that it did not leak out, sooner or later?

Is it derogatory to professional character for a physician to take out a patent for a surgical instrument or any other invention? A distinguished physician invents a galvanic cautery. He has

spent much time and a large amount of money in perfecting his apparatus. According to our Code, he cannot, he dare not, take out a patent for it as any other honest man could do, simply because he is a practising physician. But why should not the physician reap the reward due to talent and inventive genius as well as any other man? Does the profession at large, or does the public derive any benefit by this robbery of the inventor? None whatever. We simply compel him to give his invention, his time and labor, to enrich the instrument-maker. A few brave men, daring to assert their inalienable rights, would establish a precedent that would soon become a law, rendering this clause of the Code, as in other instances, a dead letter.

Who among us is ignorant of the value of Dieulafoy's Aspirator? A young man not over thirty, he had the courage to patent his invention. The profession in France at first turned the cold shoulder to him, and said it was a pity that such a talented young man should have made such a mistake as to patent his invention! But now he is called in consultation with leading men in the profession, and the younger members of this association will live to see him a member of the Academy of Medicine in spite of his patent.

A gentleman in a neighboring State invents a pessary of great value. He has spent fifteen years in working it out. He has spent a large amount of money in perfecting it. He is poor and in bad health from a dissecting wound received five years ago. He writes me to ask what he is to do, to reap some reward for his time and labor. We say by our Code, that he must make a gift of his invention to the profession. But he can only give it to the instrument maker, and not to the profession. His only course is to quit the ranks of a liberal profession, and enter those of honest manufacturers, and then supply us with his instruments from his own factory. Out of the profession, he is out of its jurisdiction.

The Code of Ethics is violated every day either wilfully or ignorantly, not only by the rank and file, but by men high in the profession, men who are considered leaders, advanced thinkers, and workers.

How many of you prescribe Chlorodyne, which is almost a specific in choleroïd affections? and yet it is a secret remedy. Who among you never prescribed McMunn's Elixir of Opium? It too, is a secret remedy. Even Henry's Calcined Magnesia is made by a secret process. The Tolu Anodyne is daily prescribed in New York and New England by hundreds of leading physicians, and it is but another name for a preparation of Cannabis Indica.

The prescription of all such remedies is a flagrant violation of our Code of Ethics. But we seem to condone the act, because usage and interest justify it.

There is not a man within the sound of my voice who cannot call to mind some violation of the letter or spirit of the Code of Ethics, that has occurred under his own immediate observation. Indeed, when we speak of violating the spirit of the Code, we may all as one man cry out, "He that is without sin among you, let him first cast a stone."

Several medical gentlemen, notably in New York, Philadelphia, Baltimore, and elsewhere, have lately rendered the greatest service to the profession and to humanity by furnishing us with animal vaccine virus. As they are engaged in a commercial speculation in the virus, and as they resort to conspicuous advertisements of it, they are plainly acting in opposition to both the letter and the spirit of our Code of Ethics. But where is the man among us who is such an idiot, so dead to all sense of honor and right, as to charge these noble philanthropists with base purposes? Thus we see that the Code is of necessity a dead letter the moment it comes in collision with the duty and interests of the profession at large. The introduction of bovine virus brings about a revolution in vaccination that affects not only the usefulness of the medical profession, but the safety of every man, woman and child living, and the welfare of future generations. How absurd then would it be, if its universal beneficence could be cramped by the silly legislation of a generation and a time, when human virus, with all its defects, and all its dangers, was the only known means of vaccination! Here common sense and common interests have, silently, almost imperceptibly, established a higher law that overrides the Code, and leaves it inert.

But there is another stand-point from which to view our Code. Did it ever occur to any of you that this is capable of being used as an engine of torture and oppression?—that men jealously, maliciously intent upon persecuting a fellow member, may distort the meaning of the Code to suit their malign purposes, thus entering into a regular conspiracy to blacken character, and that under the sanctity of the Code's provisions?

Illustrations of this are not wanting, and I could give you some astounding details. But in mercy to you, and in pity for the poor poltroons, who, in the name of virtue, could so prostitute themselves to vicious acts, I spare you the recital. I have said, perhaps, too much on this theme; certainly enough to put you to thinking. This is the first time that the validity, the constitutionality of the Code has been openly called in question, but every thinking man here, with a particle of self-respect and self-reliance, has at times felt an inward protest against its unequal operation. I do not ask you to appoint a committee on the Code. Let it stand as it is. Honorable men do not need its protection. Dishonest men are not influenced by its edicts. We must educate the profession up to the recognition of a higher law, the unwritten Code reg-

ulating intercourse among gentle men. This is the Code that governs in England and France. The man that violates it is by common consent dropped out, ignored and allowed to vegetate in isolation.

The time will come, (but not yet,) when your organic laws like the constitution of our country will require modifications and amendments to suit a higher intelligence, a broader education and a greater destiny. Remember that when our Code was adopted, we had no telegraph, no ocean steam navigation, but few railroads; the profession was not educated up to its present level, and the press was not the organized power in the land that it is today. Modern thought and modern progress keeping pace with the physical development of the age, will never be content with the slow movement of olden times.

STATE MEDICINE—The address in State Medicine and Public Hygiene by the distinguished Henry I. Bowditch at our last annual meeting, has awakened a new interest in the subject, and we recognize in it the beginning of a great movement for the establishment of a Sanitary Bureau, or Council of Health at the seat of government.

Already nine States have organized State Boards of Health:

Massachusetts.....	1869
Louisiana.....	" 1870
California.....	" 1870
Virginia.....	" 1872
Minnesota.....	" 1873
Michigan.....	" 1873
Maryland.....	" 1874
Georgia.....	" 1875
Alabama.....	" 1875

Of all these only four belong to the original thirteen States.

How strange to see the young sister California taking the lead of the great States of New York and Pennsylvania! Massachusetts has often led New York and Pennsylvania in political matters, and she leads them now in the more important matter of the formation of a State Board of Health.

Let us hope that the wise counsels of the American Medical Association may soon universally prevail in the several States, and that we shall, at no distant day, see them all falling into line with State Boards of Health, ready for mutual co-operation in the great work before them. When this is done, I shall expect to see one of the most terrible scourges of the human race, now wholly ignored by Boards of Health, brought at once under control, and eventually stamped out from among us.

Boards of Health should take cognizance of, and have control of any and every focus of infectious disease, call it by what name you may. Has it a habitat? Can it be broken up? Has it the power of transmission from one to another? Can its transmissibility be arrested? Then it is the bounden duty

of State Medicine, with its organized Health Boards, to search out its abode, to take charge of and heal those already diseased, to prevent the spread of the infection to the well, and thus eradicate the poison of contamination. The Board of Health that fails in this, fails in the great object of its organization. And this brings me to a subject that I wish to press upon your consideration.

SYPHILIS.—Prof. Gross delivered the Address in Surgery at the Detroit meeting in 1874, and took Syphilis as his subject. This address, like everything that emanates from his prolific brain, was complete and exhaustive. Viewing the subject from every possible standpoint, he had the courage to recommend legislation to restrain the spread of syphilis.

A committee was appointed, with Dr. Gross as chairman, to report on the subject at the next meeting. This committee reported at Louisville (1875), and recommended partial legislation on the subject. The whole subject was referred back to the committee for a further report, to be made at this meeting.

I would not infringe upon the duties of this committee, but I hold views on this subject that I wish to state broadly before the association. No grander theme could possibly engage the attention of the profession at large. Whatever good is to be accomplished in this matter must emanate from us, and be carried forward by us. It is wholly unnecessary for me to use any argument to prove to you the importance of the subject. This has been already done by Prof. Gross.

The subject of syphilis is rarely mentioned in polite circles, even by medical men, and then only in whispers. It is our duty to enlighten the public upon all questions of public health, and particularly upon this one. Indulge me then for a short time, while I say a few words on this subject—words addressed nominally to you, but really intended for those behind and around you, who live in darkness and utter ignorance of the dangers that threaten them.

So far as the well being of the human race is concerned, I look upon the subject of syphilis as the great question of the day. It was formerly a question of treatment, of mercury or no mercury. But that time has passed, and now it is a question of prevention, of eradication, of the protection of the well against the contamination of the sick. In other words, it is no longer a question for the Therapist, but one for the Sanitarian, the Philanthropist, the Legislator, the Statesman. It is one of public hygiene and public health, and, as such, we are bound to meet it. The time has come when we can no longer shut our eyes to its evil influences, and we must deal with it precisely as we deal with other great evils that affect the general health of the people.

If yellow fever threatens to invade our precincts,

we take steps to arrest its progress at once. If small-pox infests our borders, we circumvent and extinguish it. But a greater scourge than yellow fever and cholera and small-pox combined, is quietly installed in our midst, sapping the foundations of society, poisoning the sources of life, rendering existence miserable, and deteriorating the whole human family.

Does any one for a moment think I exaggerate the evil consequences of this dread disease? To the medical profession the truth, as I state it, is well known; but, as I said before, the public at large are ignorant on this subject, and it is our duty to enlighten them, to point out the danger, to show the means of protection, and to lead the way of escape. Let us hear what a few of the most eminent medical men now living say on the subject.

Sir Thomas Watson says: "It counts its victims not only in the ranks of the vicious and self-indulgent, but among virtuous women and innocent children, by hundreds and thousands."

Sir William Jenner says: "I cannot too strongly express my conviction of the gravity of syphilis at the present time. It is one of the most fatal diseases we have in this country. I think it a disease *entirely preventable*. Children and others suffer largely from it without any act of their own, and I think it ought to be prevented."

Mr. Prescott Hewett also testifies to its ravages among innocent children, and says he knows of no disease more terrible, and that it should be prevented by legislative action.

Mr. Simon (Medical Officer of the Privy Council) said that the infections of the brothel were oftentimes carried into simultaneous or subsequent wedlock, in some cases fixing their obscene brand even on the offspring of such marriages.

Sir James Paget says: "It would be difficult to overstate the amount of damage that syphilis does to the population," and that "a number of children are born, subject to diseases which render them quite unfit for the work of life." He further said: "We now know that certain diseases of the lungs, the liver, and the spleen, are all of syphilitic origin, and that the mortality from syphilis, in its later forms, is every year found to be larger and larger." Sir James Paget further said that he had seen five surgeons die, and fifty others suffer more or less from the infection received from patients.

The facility with which syphilis is communicated is marvelous. It is often given in a kiss. French medical literature teems with examples of this sort. Prof. Gross has seen many cases. He saw a young lady who had a hard chancre on the lip contracted by kissing. In a few weeks her blood was completely poisoned; subsequently she married, and in due time she gave birth to a child that died in eight weeks, covered with syphilitic sores on the vulva and nates.

Prof. Gross tells us that an "epidemic of syph-

ilis occurred in Brives, a little town in France, in 1873, fifteen women, nine children and ten men having been affected in rapid succession. Great excitement for a time prevailed, wife accusing husband, and husband wife, of conjugal infidelity, when it was at length ascertained that the cause of all the trouble was a midwife, who had a chancre upon one of her fingers, contracted in the exercise of her profession, and who had thus carried the poison from house to house."

A short time ago a healthy looking young man obtained a situation in a glass factory in the north of France. A few weeks afterwards a dozen or more of the glass blowers had syphilis in some form or other, and were unable to tell how they got it. But the attending physician soon traced the disease to the new-comer, who was found to have syphilitic ulcer in his mouth, and the others were inoculated by using the same blower that he did.

I have known two medical men infected with this disease by patients, while in the discharge of their professional duties. Each had a slight scratch or abrasion of the skin on the fingers, and by this channel the poison was carried into the blood. One of them died most horribly in a mad-house from disease of the meninges of the brain induced by this accidental syphilization; while the other is still eking out a miserable existence, his whole system being pervaded by the deadly poison. Nurses are frequently infected by children born of parents, one of whom (always the father) has had the syphilis; and diseased nurses often infect innocent sucking babes, born of perfectly healthy parents. I have known a drunken vagabond husband to contract syphilis in a low brothel, and communicate it to his wife, who unwittingly gave it to her four children, simply by using the same towels and wash-bowl. The nature of the disease, and the manner of its propagation, were not recognized till eruptions, and putrid sores, and ulcerated throats, agonizing pains, and blindness in two of the children indicated too plainly the unmistakable character of the disease.

Some years ago, a handsome, dashing young fellow captivated the heart of a beautiful and accomplished girl, the daughter of one of our wealthy merchants. The sensible father opposed the marriage, but the foolish young girl would have her own way, and they were married. While on their wedding tour, this innocent girl and confiding wife, not seventeen years old, was syphilized by her husband, and her blood was soon poisoned. In due time she became a mother. One of her children had syphilitic eruptions, one lost the bones of the nose, and two others were variously affected with symptoms of a loathsome disease that circulates in their blood, and which will lay the foundation of disease in their offspring, if they should live to have any.

The blood of the loving wife is often poisoned by the seminal fluid of the husband, infected before marriage. I have seen an innocent young wife with the vagina full of venereal warts, only a few weeks after marriage with a man who supposed he had been cured six months before. Many years ago, I knew a rich widow who married a man socially beneath her station in life. It was a great grief to her family, but a greater was in store for them. The husband who seemed vigorous and healthy, had had syphilis a few months before marriage, but thought that he was cured. Six months after marriage his wife had syphilitic iritis and other symptoms of constitutional infection, and she soon became perfectly blind, and in the course of a year she died in the greatest agony from disease of the membranes of the brain, accompanied by nodes and other symptoms of constitutional syphilis; and yet the husband, who by his kisses and his seminal fluid poisoned his wife's blood and thus murdered her, had only a slight scaly eruption on the scalp and in the palms of the hands.

I have seen a cook and a chamber-maid with syphilitic ulcers on the fingers. Think for a moment of the danger to innocent people from such a disgusting thing!

Primary syphilitic ulcers are not generally painful. Hence the subjects of them think they are little accidental sores, or abrasions that will soon get well. These sores often remain stationary for a while and then heal up. Again, they degenerate into a sloughing state, attended with great suffering. But it is when the disease becomes constitutional, invading every part of the system, producing ulcers in the throat, warty vegetations on the vulva and about the verge of the anus, or eruptions on the skin, or thickening of the periosteum, nodes on the long bones or on the os frontis, or disease of the liver, spleen and other digestive organs, or ulceration or loss of bones in the nose, or blindness and disease of the meninges of the brain, or often softening of the brain; in short, when its ravages are traced in every part of the human frame, then can we realize the nature of this terrible scourge, which begins with lamblike mildness, and ends with ironlike rage that ruthlessly destroys everything in its way. Skin, mucous membrane, the blood, viscera, bones, brain—all are saturated with a poison which is ineradicable; and death comes at last, a merciful messenger of relief from such a disgusting and wretched existence. I need not add another word to show the loathsomeness of the disease, nor to prove that we are at every turn met with the danger of infection.

Give me a moment to inquire into the relative frequency of this disease in localities where registration brings out reliable statistics.

In the out-patient department of Guy's Hospital 25,800 cases of venereal disease are annually registered in that one institution, being 43 per cent. of the

total number of out-patients registered ; in the Hospital for Diseases of the Skin, 10 per cent. ; in the Throat Hospital, 15 ½ per cent. ; in Mooresfield Hospital for Diseases of the Eye, 20 per cent. ; in the Workhouse Infirmary, 10 per cent. Among the poor in London applying for relief at the hospitals, there are upwards of 100,000 annually affected with syphilis in some of its forms. If such a large percentage of British blood is thus poisoned with this loathsome disease, how is it with English-speaking Americans ? Our sanitarians will tell you that New York and Philadelphia, Boston and Buffalo, Chicago and St. Louis, Cincinnati and Louisville, New Orleans and Mobile, Savannah and Charleston Norfolk and Richmond, Baltimore and Washington, are all relatively as rotten as London, Glasgow, Dublin, Liverpool, or any city on the Continent.

And from recent developments it appears that San Francisco is worse off than we are. In an able speech delivered by Senator Sargent, in the United States Senate, on the first of May, on the existing treaty between China and this country, he brings forward testimony to show, that of the hundred and fifty thousand Chinese on the Pacific Slope, there are not a hundred families, and that ninety nine hundredths of the Chinese women imported into California are sold and held as slaves, slaves to be used wholly and solely for the purpose of prostitution, and that their presence necessarily breeds moral and physical pestilence.

According to the evidence of Dr. Toland, even boys eight and ten years old have been syphilized by these degraded wretches, who are allowed to openly solicit in the streets, tempting old and young alike.

Shall it be said that we, the representatives of the medical profession of a great nation, the custodians of the health of 40,000,000 of people, cognizant of all these facts, will longer let the people remain in ignorance of the dangers that surround them ? No, my friends ! We must be up and doing. We must follow in the footsteps of our illustrious leader, Prof. Gross. We must sound the alarm. We must no longer whisper, but we must boldly proclaim the truth, and scatter it broadcast over the length and breadth of the land. We must call to our aid the press, the pulpit, yea, the women of the country. To do all this, we must show the world that we are in earnest. We must here issue our orders, and call upon our State and County Medical Societies to co-operate with us. We must keep the subject not only before the profession, but we must keep it before the people, and we must appeal to legislation to give us the power to blot out this blight from among us.

I have not time to speak of what has been done in France and England, for the prevention of the spread of syphilis. Suffice it to say that the plan adopted there is not the one for us. We want no legislation that looks to licensing prostitution as in

France, and we want no partial legislation as we find in the "Contagious Diseases Acts" of England. We would not outrage religious sentiment by adopting a system of fostering vice ; nor would we subject the hardy soldier, even for his own good, to invidious restrictions not imposed upon others in the community. Besides, how absurd would the English system work with us, when we have but a nominal army, and that scattered over the frontier, away from the pale of civilization and its worst vices ! Class legislation in any shape, and for any purpose, is distasteful to the people of any country and especially of ours.

We know that cholera has a home where it is perpetually generated ; that transplanted, it flourishes for a while, then dies out, and seldom reappears, except by fresh importations from its original source of supply. But syphilis, unlike cholera, originating when and where it may, always fixes itself in great populous centres, taking up its abode in the haunts of ignorance, poverty, squalor, filth and vice. From these low conditions of life, it mounts gradually higher and higher, and sometimes to the highest, so that in the end whole communities, so to speak, may become contaminated.

To protect the public against its ravages, we must strike at the root of the evil. We must seek it out in its hot-beds, and circumvent it with such regulations as to prevent its transmission. We must ask for such laws as will confer upon us the power of dealing with this disease as we already possess with regard to cholera and small-pox.

The carriers of trade between nations, and between great commercial centres in the same nation, are the carriers of syphilis. Syphilis is carried from city to city by men, and women scatter it far and wide in communities. One man may inoculate a half dozen women during the few days his ship lies in port, and these half dozen degraded women may transmit the disease not only to scores of men, but hundreds and thousands may trace their ruined health, directly or indirectly, back to the half dozen women who were infected by one man. We must, then, manage to get the control of the men who are likely to import the poison, and we must get equal control over the women who will assuredly disseminate it through the community. How is this to be done ? is a question that has been asked over and over again, but never answered to the satisfaction of both religionists and philanthropists.

There can be no difference of opinion among us regarding the two following propositions :

1st. We want a system of sanitary inspection and control that will enable us to prevent the importation of syphilis from abroad.

2nd. We want a system of sanitary inspection and control that will enable us to take charge of the subjects of syphilis at home, and prevent them from spreading it through the community.

Every well-organized city government has its

Board of Health. This Board has or ought to have the power to protect the public health against all contagious or infectious diseases. It already has the power of quarantining vessels having on board cases of cholera, small pox, or yellow fever. Whenever small-pox is found in a city, the Health Board has the power of dealing with it in the most summary manner, of isolating it, and preventing its spread; in other words, of extinguishing it.

Now what I propose in regard to syphilis, is simply to give to the already existing Boards of Health, in the various cities, the same power over syphilis that they now possess over cholera, small-pox and yellow fever. They now have the power of ferreting out small-pox and of sending it to hospitals for treatment; and they should have the same power of searching out the abodes of syphilis, and of sending its victims to hospitals for treatment.

On all steamers or sailing vessels, whether foreign or coastwise entering port, the surgeon of the vessel should be required to make affidavit that he had examined personally every seaman, and every male steerage passenger, on the day preceding their arrival in port, and that there was no case of cholera, small-pox, yellow fever, syphilis, scarlatina, or other infectious disease aboard. If there should be syphilis, then the subjects of it should be taken in charge by the Board of Health, and sent to Hospital for treatment, to be retained there till cured, or to be returned to the vessel from which they were taken, whenever said vessel should be ready to sail from port again. If said vessel had no surgeon aboard, then it should devolve upon the quarantine officer to examine every sailor and every steerage passenger before landing, and to send any and every case of syphilis to hospital for treatment. On all vessels, foreign and coastwise, the quarantine officer should possess the same power of personal inspection and detention.

For stamping out the disease in towns and cities, their Boards of Health must have plenary powers of an absolute character over syphilis, not more so, however, than they now possess over small-pox.

Thus you see that I would simply include syphilis in the great family of contagious or communicable diseases, and make it subject to the same laws and regulations that we already possess for their management. Do this, and we cannot be accused of licensing vice, or of fostering adulterous intercourse. In cholera, and yellow fever, and in small-pox and syphilis, we recognize cruel and fatal diseases, easily communicable, each attacking the human family in its own peculiar deadly way; and we propose to deal with them all in the same manner, taking the surest, safest, and quickest method of protecting the community against their pestiferous presence, and of preventing their spread among the well.

Now let me show you how easy it will be to do all this in the great city of New York; and if prac-

ticable there, it will certainly be more so in other places.

The passage of the Metropolitan Health Law accomplished after years of agitation, not unlike that which occurred in England preceding the enactment of the sanitary laws which now give to that country pre-eminence in the care of the public health. The Metropolitan law, though modeled after the English, is much more perfect in its details. It invests authorities with arbitrary powers to meet every emergency when the public health is in peril, and yet it fully protects the public from any abuse of those powers.

For example, the Health Board may declare any matter or thing a nuisance, detrimental to health and dangerous to life, but the person proceeded against may demand a hearing before a referee, and bring evidence to prove that the matter complained of is not a nuisance. Then the case receives careful consideration by experts, and the final action of the Board is governed by the decision of the referee. The Metropolitan law was passed in 1866, and immediately after the organization of the Board, cholera made its appearance in New York.

In all former epidemics, this pestilence ravaged the city without "let or hindrance." Now it was met at the very outset with organized resistance, and never attained the proportion of even the mildest epidemic.

The plan adopted to control it was perfect in all its details. Acting upon the belief that cholera is a communicable disease from the sick to the well, by a contagium, the rule in every case was to isolate the patient, and destroy the excreta immediately. A well organized corps of men, trained to handle the sick and use disinfectants, was in waiting night and day to attend at once upon every case reported.

The cases were reported by telegraph, and frequently patients seized with cholera were in charge of these sanitary officials within an hour after the attack, and every precaution taken to prevent the spread of the disease. So effectually was this work done, that scarcely a second case occurred in the same family.

In the same manner, the Board, acting upon the same principle, stamped out relapsing fever and small-pox; the sound sanitary principle underlying its action being, that *contagious diseases can be controlled by isolation of the sick, and the destruction of contagia.*

So much for the efficiency of a Board of Health that knows its duty, and having the legal power, dares to do it.

But how are we to bring syphilis under such easy subjection as we have cholera and small-pox? It is the simplest thing in the world. I have told you that the Metropolitan Board of Health possesses arbitrary powers over all these, and all we have to do is to get the Legislature to amend the "Act creat-

ing a Metropolitan Board of Health," so as to give it the same arbitrary power over the subjects of syphilis that it has over other contagious diseases.

The thing is so simple, so self-evident, that I only wonder it was not done long ago. It requires no complex legislation, no cumbrous machinery, no irksome detail. In the Metropolitan Health Board, we find everything already prepared for engrafting this amendment upon its organic laws. Let us here pledge ourselves never to relax our efforts until we accomplish this great and good work.

ACUTE BRIGHT'S DISEASE—SIALAGOGUE EFFECT OF JABORANDI.—(Bellevue Hospital practice.) The case presented certain peculiarities which made it worthy of note. When admitted only $7\frac{1}{2}$ to $11\frac{1}{2}$ ounces of urine were passed in twenty-four hours, and it contained albumen, epithelial and granular casts. The patient was dry-cupped over the kidneys; received a cathartic, composed of croton oil, podophyllin, and elaterium, and dram doses of the fluid extract of jaborandi. The latter was administered for the purpose of producing diaphoresis, and soon after the second dose was given the patient broke out in exceeding profuse perspiration, and in addition, the remedy acted as a sialagogue to such a degree that ℥xxii . of saliva were collected in four hours. At the time of our visit the patient was passing ℥lx . of urine in twenty-four hours, acid, had a sp. gr. of 1023, and contained no albumen. After the operation of the cathartic, the infusion of digitalis with acetate of potash was administered.—*N. Y. Med. Record*.

A READY METHOD OF PREPARING SECTIONS OF DISEASED TISSUES FOR THE MICROSCOPE.—Dr. Stevenson (*Edinburgh Med. Jour.*, January 1876,) obtains excellent results from the following method: Two drachms of glycerine mixed on a slab or plate with one and a half drachms of gum tragacanth. The tissue to be sliced is placed in a pill box, and the mixture poured on until the box is full. It is now allowed to stand in a cool place for from eight to twelve hours, when it will be ready for slicing. In cutting it will be found best to moisten the surface by dipping in spirits, and also by moistening the upper surface of the knife, so that the section may float as it is cut. If sections are not made at once the cake should be placed in alcohol. If the tissue has been previously in spirit it must be steeped a few hours in cold water before embedding.

REMOVAL OF FOREIGN BODIES FROM THE EAR.—Dr. John Cleland suggests that, in removing foreign bodies from the ear, the point of the probe or needle used for extraction should be placed below the object to be dislodged. By so doing it is placed between two inclined planes, and is readily and easily expelled.—*Phil. Med. Times*.

SUBCUTANEOUS DIVISION OF THE FEMUR.—On May 16, 1876, Mr. Richard Davy divided the femur subcutaneously (after Langenbeck's method on the tibia) for bony ankylosis of the ileo-femoral joint in a boy aged fourteen. The right femur was flexed on the abdomen at an angle of ninety degrees, the angle being measured at the anterior superior spine of the ilium; the femur was also adducted, so that the legs crossed; the genitals were partially eclipsed, and the right inguinal fold deepened. A small cut was made down to the anterior plane of the femur, immediately below the trochanters. The commencing shaft was drilled through, and through this opening a key-hole saw almost effected division of the femur by right and left movements. Complete division was caused by periosteal fracture. The limb was at once abducted, straightened, and placed symmetrically; correct position was maintained by splint and sand-bags. The young fellow progressed without an unfavorable symptom, and bony union in the reformed attitude is being accomplished by nature.—*British Medical Journal*.

ESMARCH'S BANDAGE FOR CHRONIC ULCERS.—Dr. Turney, of Ohio, has employed this bandage in seven cases of ulcers of the leg, one a typical indolent ulcer, with indurated edges, over the internal malleolus of a woman over eighty-five years of age. In six cases the cure was rapid and permanent; in one a portion of the cicatrix gave way, but it was again progressing favorably when the patient disappeared. The bandage was applied firmly from the foot to the knee, once a day, and allowed to remain as long as it could be borne, about ten or fifteen minutes. No other treatment was employed. With each application oxygenated blood takes the place of a fluid unfit for nutrition; the strong pressure effectually overcomes the passive congestion and œdematous infiltration, and the distended vessels, completely relieved of their load of vitiated blood, have an opportunity to recover their lost tonicity.—*Med. Record*.

SULPHUROUS ACID IN ENTERIC FEVER.—Thirty cases were treated with sulphurous acid, in doses ranging from three to fifteen drops, in lemonade, every four hours. Only one patient of this number died; this one patient "was a fragile girl, whose life was gradually wasting away with consumption, but she recovered, then relapsed and died." The writer thinks the acid acts as a specific upon the fever poison, arresting at once its further development and thus exterminates the fever. Amelioration ensues at once, and in a very few days the patients, under the influence of this agent, are convalescent. Within twenty-four hours the tongue becomes moist and commences to clean; the diarrhoea is speedily arrested, the tympanites subsides, the pulse slows and grows stronger, the digestive faculty speedily asserts itself and the patient is soon out of danger.—*Chicago Med. Jour.*

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TORONTO, SEPT. 1, 1876.

"THE BALHAM MYSTERY."

By the English mail of August 9th, we received further particulars of the inquest investigating for ten consecutive days the means by which the late Mr. Bravo came to his death. The case will add another chapter to the already large volume of *causes celebres*. Suspicion points to tartrate of antimony and potassa as the mineral poison employed. On account of its rapid emetic effect, Morgagni and other early writers on medical jurisprudence questioned whether this salt could be considered as a poison capable of producing death. Hoffman, Orfila, Fodere, Cloquet, and other more modern physicians have however by a number of cases unmistakably established the deleterious effects arising from the continued administration of antimony, and that in large doses, it must undoubtedly be deemed a poison. The general symptoms, however, on such occasions, and the post mortem appearances, do not exactly accord with those described at the inquest in the late Mr. Bravo's case. The ordinary signs may be reduced to the following: a rough metallic taste, copious vomiting, frequent hiccough, burning heat in the epigastric region, abdominal colic, inflation, copious stools, syncope, small contracted and accelerated pulse, skin cold, sometimes intensely hot, breathing difficult, vertigo, loss of sense, convulsive movements, painful cramps in the legs, prostration, death. The ordinary post mortem appearances we will illustrate by a case reported in the *London Lancet* several years ago, contrasting it with Dr. Payne's evidence before the coroner, respecting the condition of parts in this mysterious case, and leave our readers to judge whether antimony alone had to do with

the cause of death. "Two children, a boy and a girl, the former aged four and the latter three, each swallowed a powder containing ten grains of tartar emetic mixed with a little sugar. It was stated that in twenty minutes after taking the powder, they were seized with violent vomiting and purging and great prostration, followed by convulsions and tetanic spasms; there was also great thirst. The boy died in eight hours, and the girl in twelve or thirteen hours after swallowing the dose. The bodies were inspected between four and five days after death. In the body of the boy there was effusion of serum in the right pleura; the lower lobe of the right lung, posteriorly, was redder than natural, and the peritoneum was injected from recent inflammation. The mucous membrane of the duodenum was inflamed, and covered with a whitish yellow viscid secretion; this was observed throughout the intestines although the color was of a deeper yellow in the large; there was no ulceration. The peritoneal coat of the stomach was inflamed. The mucous membrane of this organ was also *much inflamed*, especially about the larger curvature and at the cardiac orifice; there was no ulceration. The contents (about two ounces and a half of dark bloody fluid with a slight acid reaction) were adherent to it; and in one case there was a patch of lymph. The tests used did not indicate the presence of antimony. With regard to other appearances, the tongue was covered with a white fur and appeared soddened, the throat was not inflamed, the windpipe and gullet had a natural appearance. On opening the head the dura mater was found congested; the longitudinal sinus contained a coagulum of lymph and but little blood. The vessels of the surface of the brain were much injected with dark blood, the whole surface having a deep purple color. Every portion of the brain, when cut, presented many bloody points. The cerebellum and medulla oblongata were also congested; there was no effusion in the ventricles, or at the base of the brain. In the body of the girl the morbid appearances were similar." The following is the report of the autopsy of the late Mr. Bravo, by Dr. Payne, F.R.C.P., London:—"The body was well made, muscular and perfectly well nourished. No external wound, bruise, nor other injury. The lungs were healthy, except that they contained a large quantity of liquid blood, and the air passages contained blood-stained fluid, owing to

transmutation after death. The heart was of moderate size, the substance soft, the valves natural, both sides contained dark coloured blood, chiefly liquid. The stomach contained liquid matter and gas. Its walls were natural, except that the mucous membrane was softened, pale, and of a yellowish colour. There was no appearance of inflammation, congestion or ulceration. It contained about 8 oz. of thick gruel-like matter of a yellowish colour; this containing small solid lumps, and had the odour of alcoholic fermentation. The œsophagus was natural, and contained some of the like matter which the stomach contained. The first portion of the bowels was very soft, being torn in tying it; but on subsequent examination it showed no perforation, nor ulceration. The surface was *pale* and yellowish, like that of the stomach. The whole of the small intestines was like this, except the lower part, where there were some red spots. This part of the bowels contained yellowish "pasty matter"—without any admixture of blood. The large intestine at the commencement, was of a deep red color, and contained clots of blood. Subsequent examination shewed in the cæcum several small ulcers from which the bleeding had evidently arisen, but there was no perforation. The remainder of the large intestine was very deeply blood-stained, but without ulceration. The contents of the large intestine were of a red material, composed of fecal matter mixed with blood. The liver and spleen were natural, as were also the pancreas, kidneys and other abdominal organs. No appearance of hernia. On opening the head, the skull and membranes of the brain were found quite natural, containing only the usual quantity of blood. The brain substance was also natural and contained no excessive amount of blood or of watery fluid. The mouth and lips were natural, except that the papillæ at the back of the tongue were something more prominent than usual. There was no appearance of any natural disease that could have caused death." Dr. Payne assumed that as much as thirty grains of antimony had been taken in this case. He further stated that in a post mortem of death from antimony he would expect to find traces of antimony; first going from the mouth down:—2nd. Inflammation of the stomach—speaking of stomach as distinguished from the lower bowel—but that he found no inflammation in the stomach of Mr Bravo—the inflammation being

confined to the lower bowel. He considered that the absence of evidence of inflammation of the stomach was the consequence of its having been taken in a highly dilute form. In answer to the question whether the antimony might not possibly have been injected, Dr. Payne said, that there was certainly inflammation of the lower bowels, but there was no inflammation of the parts which would have been inflamed if the chloride of antimony had been injected. Moreover that before the injection of the brandy and water made by Dr. Moore, Mr. Bell, and Dr. Johnson, the vomit was made by the deceased, that there was a vomit on the leads of the priory, half of which contained five grains of antimony." We may here ask by what tests were the five grains determined upon? In the General Ketchum case, Mr. Wharton was charged with having administered antimony as a poison, twenty grains having been reported as the result of one analysis of the contents of the stomach. On scrutiny of the chemical evidence it was reduced to four-tenths of a grain. If the evidence in the Bravo case revealed a probable insensibility of the nervous system as in that state of coma which follows the ingestion of narcotic vegetable substances, or from drunkenness, we could understand that vomiting would not be excited until a considerable time after the poison had been taken, but on that supposition the evidences of mischief would certainly be much more apparent in the stomach and small intestines than in the large. In the case of the children above noticed, the ascertained quantity was ten grains. Contrast the different appearances of mucous membrane of the stomach, duodenum and large intestines, as also the different condition of the brain with those recorded by Dr. Payne, in the Bravo case. The morbid symptoms are not to be relied upon perhaps more than the general symptoms during life. In no judicial trials is it so requisite to concentrate the weight of the proof on the medical evidence as in those which refer to supposed cases of poisoning. In these, general evidence is of little avail; it is by the medical evidence that the decision as to the innocence or criminality of the suspected can be determined. The evidence to be derived from chemical analysis is undoubtedly the most decisive of all the branches of proof. It is the perfection however to which the processes necessary for this purpose have been brought, that must

constitute the validity of the testimony. With regard to the death-bed evidence in this case deposed to by Sir William Gull, who had fully informed his patient of his dying condition, we have the declaration that he had used nothing but a little laudanum to the gums for the relief of neuralgia. With the view of immediate death before him it is not likely that he would have concealed any suicidal attempt, had such been made. Until further links are added to the present chain of evidence it would be premature to express an opinion. One thing however is certain, that whatever may be the result, the suspicion following the Scotch verdict of "Not Proven" will ever attach to the prominent actors in this tragedy.

THE "PHARMACEUTICAL JOURNAL'S" ATTACK ON THE MEDICAL PROFESSION.

We deprecate entirely the rousing of any antagonism between the two professions so closely allied but yet so decidedly distinct, as those of medicine and pharmacy. We are therefore compelled to notice a covert attack on the medical profession, which has appeared in the editorial columns of *The Canadian Pharmaceutical Journal*. The bad taste and evil spirit of this attack are all the worse, for the reason that the *Journal* has gone out of its way to have a fling at the medical body.

In an article in the August number, the *Pharmaceutical Journal* comments upon an incident reported in the city papers—that of a man named Owen McKay going into Dr. Richardson & Co.'s drug store and asking for a dose of salts. The young man in attendance told him they were out of that drug, but stated that he could give him *distilled salts*, which would answer the same purpose. McKay bought an ounce of the latter, and carried it around in his pocket until the following Thursday. About ten o'clock that morning, while at work, he felt slightly ill, and took a dose of the salts. A short time afterwards he was seized with an attack of vomiting, which continued for about three hours.

Now it is upon an incident like this—of an ignorant assistant in a drug store making a gross error by giving oxalic acid for epsom salts—that the *Pharmaceutical Journal* sneers at the "ignorance of doctors who attempt to dispense medicine,"

and asserts "that it is fully time that doctors should be prevented from attempting that which they do not understand." It would have been a legitimate commentary, we think, and one fairly within the province of the *Pharmaceutical Journal*, both in the interests of the druggist profession and for the protection of the public, to have dwelt on the danger of employing unqualified assistants in dispensing medicine. It might have insisted that the Pharmacy Act should be respected, by requiring assistants and dispensers to be certified under the Act. Instead of which, it remarks, with an animus against the medical profession which stands out offensively, "We have a Pharmacy Act which has been of incalculable advantage, but which is still defective in several particulars, notably in that of exempting doctors from the operation of the Act."

The *Pharmaceutical Journal* is a trade organ; its circulation in Ontario is confined exclusively to members of the Ontario College of Pharmacy; and it is evidently striving after a special object, the alteration of the law by doing away with the exemption of the medical men from the operation of the Pharmacy Act. That this is the case is evident from the expression of its final hope that "the next time the amendments to the Pharmacy Act come before the Legislature, public feeling will be found stronger than the efforts of the little clique of medical M.P.'s, who strive to oppose all attempts at improvement or progress in pharmaceutical legislation."

Already the College of Pharmacy is a close corporation, and naturally enough the retail druggists of Ontario, being banded together, are demanding higher rates of profit, and are setting themselves more against the interests of the public and of the medical profession. It is not likely, we presume, that as this object comes to be understood, the druggists will carry public feeling along with them.

Furthermore, we are satisfied that druggists as a body are far more dependent upon the good-will of medical men than are medical men upon the good-will of druggists. In a certain town of Ontario the druggists a few years since enjoyed a fair amount of what is admittedly the most lucrative part of the business, the putting up of prescriptions; but this profitable business was speedily in great part lost to them by the medical practitioners being driven to dispense their own medicines, and to buy

their drugs in the wholesale market; the whole growing out of a disposition to tamper with prescriptions and patients which is so dishonorable in the pharmaceutical dispenser.

We do not encourage young medical men to enter into the drug trade, we would rather have them cling to the traditions of the profession, to eschew trade, and devote themselves entirely to the cultivation of medicine, exercising patience while waiting for practice; but we do not see that those medical men who conceive they have more special aptitude for the drug business than for medical practice should be debarred the right of entering on such a course when they prefer it. It is not necessary to assert the qualifications conferred by a medical education. It is to be wished that the education and training of young druggists were only as complete.

HYPOSULPHITE OF SODA IN DIPHThERIA.—Dr. Cheney, in the *Boston Medical and Surgical Journal*, June 8, speaks highly of the hyposulphite of soda in diphtheria. He also uses the compound tincture of myrrh, made by digesting an ounce each of capsicum, powdered myrrh and guaicum in a pint of alcohol. He writes:—"The dose of the hyposulphite is from five to fifteen grains or more in syrup, every two to four hours, according to age and circumstances. It can do no harm, but if too much is given it will physic. As much as the patient can bear without physicing is a good rule in the severer cases. The tinctures can be used in doses of five drops to half a drachm in milk. The amount for thorough stimulation is greater than can be taken in water. I usually give it in such doses as can be easily taken in milk, using the milk as food for small children. One fact, however, needs to be borne in mind, namely, the hyposulphite prevents the digestion of milk, and should not be given in less than an hour after it. They may be used alternately, however, without interference, in sufficiently frequent doses. Judging in this disease as I judge in others, I am fully persuaded that the treatment I have so long used, and which has not failed me yet, will save nearly every case of diphtheria if seasonably and vigorously applied; and there is no reason why it should not do as well in the hands of others as in my own. In none of my cases have I used any alcohol."

CHLORAL AS AN ANTISEPTIC.—The joint progress of Chemistry and Therapeutics has enriched the list of antiseptics, and we have now at command agents of remarkable power—notably carbolic acid, boracic acid, glycerine and hydrate of chloral. The latter agent is a powerful preservative of animal and vegetable tissues. Microscopists have begun to employ it as a preservative fluid. For this use it has an advantage over camphor, in that aqueous solutions of it can be made of any required strength. As an antiseptic, it is likely to have its uses in pharmacy and medicine. A solution of hydrate of chloral is self-preservative; and it is not therefore necessary to make it up in the form of syrup in order to preserve it. A solution of eighty grains in an ounce of water is a convenient strength for administration. A teaspoonful contains ten grains; two teaspoonfuls represent the ordinary hypnotic dose, and a third teaspoonful (aggregating thirty grains) may be given in the course of an hour, in order to ensure sleep. Twenty grains will preserve a bottled pint of infusion of ergot for a long time, a suggestion which is worthy the attention of those practitioners who prefer to use the infusion of this parturient but who may be deterred therefrom by the trouble and loss of time in having to make it at the moment that it is wanted. As chloral is itself a strengthener of parturient pains, there would obviously be no incompatibility in adding it to infusion of ergot in larger quantity than that which is simply necessary to preserve it; it may be combined in active and appreciable quantities.

USE OF SALT IN SEA-WATER.—Professor Chapman of University College, Toronto, says that the object of the saltiness of sea-water is to regulate evaporation. If any temporary cause raises the amount of saline matter in the sea to more than its normal value, evaporation goes on more and more slowly. If the value be depreciated by the addition of fresh water in undue excess, the evaporating power is the more and more increased. He gives the results of various experiments in reference to evaporation on weighed quantities of ordinary rain-water and water holding in solution 2-6 per cent. of salt. The excess of loss of the rain-water compared with the salt solution was, for the first twenty-four hours, 0.54 per cent., at the close of forty-eight hours, 1.46 per cent., and so on in increasing ratio.

PHARMACEUTICAL CHEMICALS AT THE CENTENNIAL.—There are said to be upwards of 500 exhibitors of chemical products at Philadelphia. Among the most prominent of these we noticed the names of Billings, Clapp & Co., Boston, and W. R. Warner & Co., Philadelphia. The firm of Billings, Clapp & Co., has an elegant stand over 20 feet in height. The name of the house is formed in large letters, each made of crystals of bromide of potassium, on a groundwork of black velvet. One large glass case, octagonal in shape, contains large crystals of nitrate of ammonia, weighing over 150 pounds. Three large bottles of propylamine are exhibited, the value of which is over \$2,000; also a jar of carbolic acid of perfect whiteness of the capacity of 25 pounds, the largest specimen to be seen in the exhibition. We also noticed some fine specimens of citrate of iron, bismuth &c., sulphite of sodium, salts of lead, mercury &c.,

Messrs. Warner & Co., make a very fine exhibit of sugar coated pills; in fact the best of any house in the trade. The Pharmaceutical Chemists of the United States have really made a very fine display of their products, and compare favourably with those of any other country.

THE SURGICAL USES OF COTTON WADDING.—For many years past cotton wadding has been employed as a dressing for burns and irritable excoriations. Lately it has come into employment as a sort of antiseptic filter, being used in a dressing of considerable thickness as an application to wounds and in amputations. Later still, at the Paris hospitals, it is used instead of sponges for the purpose of cleaning wounds. In order to get over the tediousness that would arise from the slow imbibition of water by this substance, it is previously partially soaked and kept moist. M. Guyon, who employs cotton wadding, gives the following specific directions:—"Cut up the wadding into pieces as large as the hand, and plunge them in a basin of carbolic water—one in fifty—taking care to turn and press them so as to facilitate imbibition. When thoroughly impregnated (which they will be in five or six minutes) press the water out of them, roll them into balls, and place them in a well-stoppered wide-necked bottle. When required for use they have only to be re-soaked at the moment of dressing."

CRAYONS OF TANNIN FOR INTRA-UTERINE MEDICATION.—In the *Annales de Gynecologie* for May, we find the following formula for the preparation of crayons of tannin:—To fifteen grains and a half of tannin add a drop and a half of glycerine, and make a crayon nearly four inches in length. Crayons thus made will keep their form for months; they may be lengthened or shortened as required, after simply warming them in the fingers, and yet are sufficiently firm to be passed into the uterine cavity without breaking them. In consequence of their ductility, they may be lengthened so as to make them into astringent bougies, and then introduced into the urethra, will be an efficient substitute for tannin injections.

DAMIANA.—Dr. Murray of New York (*Med. Record*) has been experimenting with this new remedy. He records five cases in which he used it with advantage in impotency. It also relieved constipation of the bowels in the cases in which it was used, the action being somewhat similar to that of extract of belladonna when administered in chronic constipation. He prescribes the fluid extract of damiana, in two to four drachm doses three times a day, in equal parts of glycerine and syrup of tolu. Occasionally he uses from ten to fifteen drops of diluted phosphoric acid with each dose.

AMEURISM CURED BY ESMARCH'S BANDAGE.—The *London Lancet* of August 5th contains a report by Dr. Reid, Plymouth, of a case of popliteal aneurism cured in fifty minutes by the application of Esmarch's bandage. The patient died of intercurrent disease about a month afterwards. A post mortem examination showed that the sac was filled with laminæ of fibrine and the remains of coagulated blood. The cure was believed to have been effected by rapid coagulation of the blood consequent upon its complete stagnation in the sac, produced by the bandage.

SOLVENT FOR QUININE.—To get a solution of sulphate of quinine free from turbidity, the spiritus ætheris dulcis is all that can be desired. One ounce will dissolve two drachms of quinine, giving a transparent solution.

Dr. Gilbert, Sherbrooke, Que., passed the necessary examination and was admitted a member of the College of Surgeons, England, on the 28th of July.

TOUGHENED GLASS.—The manufacture of the Bastie toughened glass has been recently commenced in the United States. A factory has been established in Ohio, and another in Pennsylvania. The principal articles now being manufactured are lamp chimneys. The "toughing" is effected by placing the glass in a hot bath, consisting of three parts of linseed oil to one of tallow; the bath being at an average temperature of 360° F. After removal from this bath, it is immersed in a second bath of a temperature of 200° F. It is then plunged into a cold water bath, and lastly into one of benzine for the purpose of removing the oil; the glass is then dried in bran and is ready for shipment. A chimney can be blown and completed in about thirty minutes.

PERSONAL.—Drs. Freeman, Fulton and Sive-wright, graduates of Trinity College Medical School, Toronto, have been improving their medical knowledge, during the past spring and summer, by attending the hospitals and other medical institutions of New York,—such as Bellevue Hospital, the Eye and Ear Infirmary, Orthopædic, etc., etc., previous to entering upon the labors of their profession. Dr. Walmsley, of Elmira, has also been making an extended professional tour of the hospitals and dispensaries of New York and Philadelphia.

ENLARGEMENT.—The *Lancet* has been considerably enlarged this month, in order to make room for the increased amount of original matter with which we have been favored. This we purpose doing from time to time whenever the pressure on our columns is such as to require it, and hope very soon to make it permanent. There will not, however, be any advance in the subscription.

LIQUOR BISMUTHI IN INTERNAL HEMORRHOIDS.—The injection of half an ounce of Liq. Bismuthi night and morning has been found very efficacious in the treatment of this troublesome affection. Those who have tried it speak very highly of the benefit derived from its use.

Alexander Dougall Blackader, M.D., McGill College, Montreal, passed the necessary examinations for the Diploma, and was admitted a member of the Royal College of Surgeons, England, on the 28th of July.

APPOINTMENTS.—A. H. Walker, M.D., of Dundas, Associate Coroner for the County of Wentworth. P. W. McLay, M.D., of Aylmer, Associate Coroner for the County of Elgin. John B. Mills, M.D., of Springfield, Associate Coroner for the County of Elgin. J. B. Campbell, M.D., of Belmont, Associate Coroner for the County of Middlesex. J. J. Robinson, M.D., of Fort Francis, to be Commissioner *per dedimus potestatem* for the District of Thunder Bay.

HUXLEY.—Prof. Huxley has arrived in New York. He was received by Prof. Youmans and Mr. Appleton. He will deliver three lectures on the direct evidence of evolution.

FORMULA FOR DIPHTHERIA.—

R—Potas. chlor.,	3j.
Tinct. capsicum,	f. ʒij.
Liq. ferri perchlor.,	f. ʒj.
Dilute alcohol,	} aa f. ʒvj.
Pure water,	

SIG.—A teaspoonful in a wine-glassful of water, to be used as a gargle each time. After gargling, a teaspoonful in a tablespoonful of water, more or less, to be slowly swallowed, and repeated every three to six hours.

INCONTINENCE OF URINE.—Mr. Brenchley writes to the *Practitioner* that he has seldom seen much good done in the above disease by belladonna, iron, or bromide of potassium, but has met with much success with the following combination of ergot and iron:

R—Tinct. ergotæ,	mx.
Tinct. ferri perchloridi,	mv.
Spts. chloroformi.	mv.
Infus. quassia,	ad. ʒj. ter die sum

ANTI-RHEUMATIC MIXTURE.—In use at the Philadelphia Hospital:

R—Potassii nitratis,	ʒj.
Vini colchici radidis,	f. ʒj.
Spiritus ætheris nitrosi,	f. ʒj.
Syrup guaiaci,	f. ʒij.
Olei gaultheriæ,	gtt. vj.
Aquæ, q. s. ad.	f. ʒvj.—M.

SIG.—A tablespoonful every two hours.—*Drugg Circular.*

MIXTURE FOR WHOOPING COUGH.—

R. Chloral hydrat	ʒ iij.
Potass bromid	ʒ ss.
Tinct. opii. camp	ʒ i.
Pulv. acaciæ	ʒ ij.
Syr. Pruni Virg	ʒ iv.
Aquæ puræ ad	ʒ viii.

Toronto Hospital Reports.

CASE I.—RUPTURE OF THE BLADDER.—Under the care of Dr. Temple—J. K. Stewart on a steamship was admitted into the Toronto General Hospital on 27th April, 1875, complaining of inability to pass water. The patient stated that about two hours previous to his admission, while straining to pass his water, he felt something give way, immediately followed by intense agony in the lower part of his abdomen. Finding he could pass no water and that the pain was intense, he managed to get to a Doctors residence close at hand, who after examining him advised him to go to the Hospital, which he did, walking the whole distance, over a mile. On admission one of the resident pupils endeavoured to pass a catheter, but failed on account of a very slight stricture which was of some ten years standing. He was ordered a hot bath, which was repeated in a short time. On the 28th at 1 P. M., Dr. Temple saw him; his condition then was as follows:—Much exhausted; pulse quick and feeble; skin cold and clammy; abdomen not very tender on pressure except at the lower part; no water had been passed for 13 hours. After some difficulty a No. 1 Catheter was fairly introduced into the bladder, but only a few drops of urine flowed, and the conclusion then arrived at was that the case was one of rupture of the bladder. Brandy and opium were ordered, but he gradually sank and died the same evening at 11 o'clock. A *post mortem* examination was made 13 hours after death. The penis and bladder were removed together. On laying open the urethra an old standing stricture of almost cartilaginous hardness was divided situated just in front of the bulb and of considerable length; the prostate gland contained a large abscess in its left half, which gave rise in life to considerable pain in passing the finger into the rectum and which was the probable cause to a great extent of the recent retention of urine. On the prosterior wall of the bladder close to the fundus was a rounded opening penetrating all the coats of the bladder, except the peritoneal coat, having clean punctured edges like a perforating gastric ulcer. The peritoneum in the vicinity of the bladder was gangrenous, caused by the urine having been effused beneath it; the mucous membrane was corrugated and thickened, presenting

the usual appearances seen in cases of old standing stricture. The foregoing case presents several interesting features apart from the fact that instances of rupture of the bladder are not very common, but still rarer are those due, not to some act of violence, but to idiopathic causes. First the fact that after rupture he was able to walk the distance he did is unusual though not unique, as this has been noticed in one or two cases of a similar kind. Secondly it is remarkable that he did not suffer more pain on pressure being made on the abdomen, considering the amount of peritonitis pressure and lastly the rapidity of his death, only 30 hours from the time of the rupture, which seems very short compared with the reports of similar cases, 3 to 15 days being the limits.

CASE II.—HYPODERMIC INJECTION OF ERGOTINE IN THE TREATMENT OF FIBROID TUMOR OF THE UTERUS.—M. McA., æt. 28; unmarried; a native of Scotland; admitted into the Toronto General Hospital May 13th, 1876, under the care of Dr. Temple, suffering from an intermural fibroid tumor of the uterus. She menstruated when fourteen years of age, and since then at intervals of every three or four weeks, lasting each time about three days. The quantity passed being usually in excess of the average normal amount. About nine months ago she became considerably weaker, owing to the flooding which took place at each menstruation, and consequently was soon confined to bed. This state of matters continued until she entered the hospital, and even for some time after, until she was completely blanched by the amount of blood lost. Her appetite was poor, and either a constipated condition of her bowels or diarrhoea prevailed. The venous hum frequently heard in the neck in cases of anæmia was quite distinct, together with the anæmic murmur over the heart. The long axis of the uterus was increased, from 5½ to 6 inches. About the beginning of July, fourteen minims of the preparation of ergotine given below was injected hypodermically into the arm each day. This was continued for a week, a marked improvement in her appearance ensuing; then discontinued for a few days, a retrograde change taking place. Again renewed, and continued to the present date, with an exceedingly beneficial effect. The long axis of the uterus is now only one inch and a half greater than the normal, her appetite is much increased, and there is very little of that

anæmic condition remaining, as the hemorrhage no longer appears. She has now quite a ruddy complexion, and her general strength has been largely invigorated.

The following is the mode of preparing the ergotine:—Dissolve 200 grs. of Squib's solid extract of ergot (the liquid ergotine in same quantity was used) in 250 minims of water by stirring; filter the solution through paper and make up to 300 minims by washing the residue in the paper with a little water. Of this solution, ten to twenty minims are injected every day or every second day.

CASE III.—FRACTURE OF THIGH—OLD-STANDING HYDROCELE—Care of Dr. De La Haye. R. H., æt. 65; fell from a building on 13th July, '76, fracturing the thigh bone in the neighbourhood of the great trochanter.

The patient was admitted to the hospital on the 14th of August. On examination there was found considerable deformity, the leg and thigh being adducted and rotated inwards to such an extent, that the internal surface of the inner condyle of the femur rested upon the bed. There was also about three inches of shortening. Bed sores were found, one on the back, and the other on the inner side of the knee. The treatment here adopted was the straightening of the limb and its retention in this position, by means of the weight and pulley and a long splint. It was impossible to alter the position of the fragments, on account of the large quantity of callus thrown out. The bed sores were dressed with carbolic acid lotion, and the patient is now progressing favourably. On examination an old-standing hydrocele was found to exist. The patient had fallen on the edge of a plank about 15 years ago and injured one of his testicles, since which time there had been more or less swelling of the scrotum. It gave him little or no trouble and he had never consulted any person about it. The scrotum was about the size of a child's head, considerably thickened, pyriform in shape, smooth and semi-elastic. Fluctuation was not very distinct and there was no translucency. A trocar was introduced and a pint and a-half of thick dark colored fluid drawn off, after which the scrotum was strapped with adhesive plaster. The canula was left in a short time to allow the fluid to drain off.

CASE IV.—NECROSIS OF THE BONES OF THE FOOT.—CARE OF DR. FULTON.—R. M., æt. 55,

labourer, received a severe injury to his foot six months ago by a stick of square timber falling on it. Some of the bones were crushed and the ankle joint very badly sprained. Inflammation took place, followed by suppuration. It was lanced and some fragments of bone came away from time to time. On his admission to the Hospital in the beginning of August, the foot was very much swollen and indurated about the heel and ankle; the joint was almost completely ankylosed, and two sinuses, one on each side of the os calcis, existed. On examining them with a probe, dead bone could be distinctly felt. The patient was put under the influence of chloroform, and Dr. Fulton cut down and removed several portions of necrosed bone from the os calcis and astragalus, making an opening through and through between these two bones. After the removal of all dead portions and washing out the opening, the incision on one side was closed up, and that on the opposite side stuffed with lint soaked in carbolic acid in order to secure proper drainage. Granulations are forming in the bottom of the wound and the case is doing well.

Book Notices.

MUMMIES AND MOSLEMS, by Chas. D. Warner, author of "My Summer in a Garden," "Black-Log Studies," &c. Toronto: Belford Bros.

This work contains a description of Egypt, its Pyramids, mummies, morgues, tombs, rivers, the Khedive, the harem, &c., &c. It is a very interesting and readable book, and will be found a most agreeable recreation after the labors of the day. The firm of Belford Bros. have published a number of books within the past year, the most interesting of which is the one now before us.

REPORT OF THE MEDICAL OFFICERS OF HEALTH of the city of Montreal, for the year ending 31st December, 1875, by Drs. Dugdale and Larocque.

BRAITHWAITE'S RETROSPECT OF MEDICINE AND SURGERY for July, '76, New York: N. A. Townsend; Toronto: Willing & Williamson.

REMARKS ON URETHRAL STRUCTURE, before the British Medical Association, by Fessenden N. Otis, M.D., New York.

Births, Marriages, and Deaths.

At Hamilton, on the 9th ult., George Ryall, M.D., aged 79 years.

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THE COLLEGIATE YEAR in this Institution embraces a Preliminary Autumnal Term, the Regular Winter Session and a Summer Session.

THE PRELIMINARY AUTUMNAL TERM for 1876-77 will commence on Wednesday, September 13, 1876, and continue until the opening of the Regular Session. During this term, instruction, consisting of didactic lectures on special subjects, and daily clinical lectures, will be given, as heretofore, by the entire Faculty. Students desiring to attend the Regular Session are strongly recommended to attend the Preliminary Term, but attendance during the latter is not required. *During the Preliminary Term, clinical and didactic lectures will be given in precisely the same number and order as in the Regular Session.*

THE REGULAR SESSION will commence on Wednesday, September 27, 1876, and end about the 1st of March, 1877.

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ISAAC E. TAYLOR, M.D., Emeritus Prof. of Obstetrics and Diseases of Women and Children, and President of the College.
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 LEWIS A. SAYRE, M.D., Prof. of Orthopedic Surgery, Fractures and Dislocations, and Clinical Surgery.
 ALEXANDER B. MOTT, M.D., Prof. of Clinical and Operative Surgery.
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A distinctive feature of the method of instruction in this College is the union of clinical and didactic teaching. All the lectures are given within the Hospital grounds. During the Regular Winter Session, in addition to four didactic lectures on every week-day, except Saturday, two or three hours are daily allotted to clinical instruction.

The Spring Session will consist chiefly of Recitations from Text-books. This term continues from the first of March to the first of June. During this Session there will be daily recitations in all the Departments, held by a corps of examiners appointed by the regular Faculty. Regular clinics are also given in the Hospital and College Building.

Fees for the Regular Session.

Fees for Tickets to all the Lectures during the Preliminary and Regular Term, including Clinical Lectures.....	\$140 00
Matriculation Fee.....	5 00
Demonstrator's Ticket (including material for dissection).....	10 00
Graduation Fee.....	30 00

Fees for the Spring Session.

Matriculation (Ticket good for the following Winter).....	\$ 5 00
Recitations, Clinics, and Lectures.....	35 00
Dissecting (Ticket good for the following Winter).....	10 00

Students who have attended two full Winter courses of lectures may be examined at the end of their second course upon Materia Medica, Physiology, Anatomy, and Chemistry, and, if successful, they will be examined at the end of their third course upon Practice of Medicine, Surgery, and Obstetrics only.

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SEVENTIETH SESSION, 1876-'77.

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MATTHEW D. MANN, M.D.,
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H. KNAPP, M.D.,
Lecturer on Diseases of the Eye and Ear.

THE COLLEGIATE YEAR.

The Collegiate Year embraces a special **Spring** and a regular **Winter Session**, attendance at the latter only being required for the graduating course. The **Spring Session for 1876** begins March 11, and continues till June 1. The **Regular Winter Session for 1876-'77** begins Monday, October 2, and continues till March. The College Commencement for the conferring of degrees is held annually at the close of the Winter Session.

TUITION.

Tuition is by the following methods:—**I. DIDACTIC LECTURES WITH DEMONSTRATIONS.** During the **Winter Session**, from five to six such lectures are given daily by the Faculty of the College, on the seven general branches of medical Science. Attendance obligatory. **Fees \$20.** for the course on each branch, or **\$140.** for the entire curriculum. During the **Spring Session**, two lectures on special topics are given daily by the faculty of the Spring Session. **Fees \$5.** for the course on branch, or **\$30.** for the entire curriculum. **II. CLINICAL TEACHING.** This important element of tuition receives the fullest attention. Ten Clinics, covering all the general and special departments of Medicine and Surgery, are held weekly throughout the entire year in the College Building itself. The attendance is about 600 patients yearly. In addition, the Faculty, being strongly represented on the Staffs of all the larger Hospitals and Dispensaries of New York, give daily systematic clinical lectures in one or more of these institutions as a regular feature of the College Curriculum. The great clinical resources of Bellevue, Charity and Roosevelt Hospitals, the Demiet Dispensary, the New York Eye and Ear Infirmary and the Manhattan Eye and Ear Hospital, are thus made of avail for the instruction of the Student. Attendance at Clinics is optional and without extra charge. **III. RECITATIONS** upon the topics of the regular lectures are held daily throughout both Sessions by a Corps of Examiners. Attendance optional. **Fees: Winter Session \$40 Spring Session, \$30. Collegiate Year, \$60. IV. PERSONAL INSTRUCTION. Practical Anatomy** is taught in the dissecting-room from October to May, and every Student is expected to dissect. **Fee \$10** good for a Collegiate Year. **Practical Chemistry** is taught in the Laboratory in the Spring. **Fee \$15.** Cases of obstetrics are furnished to advanced Students without charge. Personal instruction in **Operative Surgery, Minor Surgery, Physical Diagnosis, Ophthalmology, Otology,** and **Laryngoscopy** is also given by Instructors, eminent in these several departments, for very moderate fees. Attendance optional.

EXPENSES.

The necessary collegiate expenses are the yearly matriculation fee (**\$5.** good for a Collegiate Year), and the fees for the didactic lectures of the Winter Session (**\$20** for the Course on each branch, or **\$140.** for the entire curriculum). In addition, a **Graduating Fee of \$30.** is charged. The graduating course requires three years study, and attendance upon two courses of lectures, on each of the seven branches of the Winter Curriculum. Lecture fees are remitted graduates of the College, to graduates of other Colleges of three years standing to Theological Students, and to Students who have already attended to full courses of lectures, the latter of which, at least, has been at this College. To matriculants, who have attended two full courses elsewhere, a full course ticket is granted for **\$70.** All fees are payable in advance. **BOARD** can be had for from **\$6.** to **\$9.** a week, and the Clerk of the College will aid students in obtaining the same. For further information, and for the Annual Catalogue and Announcement, address,

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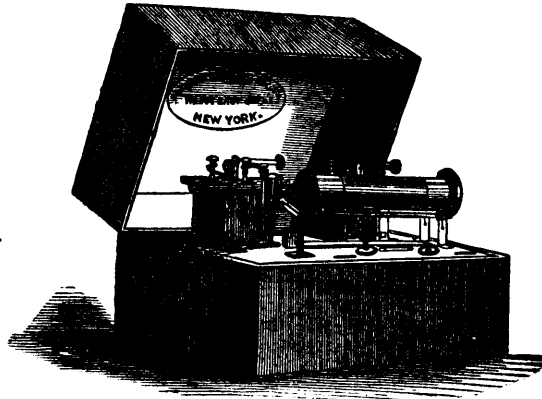
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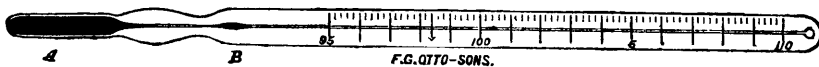
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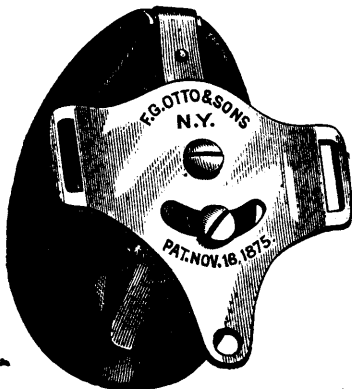
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HENRY G. PIFFARD, M.D.,
Clinical Professor of Dermatology.

THE COLLEGIATE YEAR is divided into two Sessions—a regular Winter Session, and a Spring Session. The latter is auxiliary to the former, and the design of the Faculty is to furnish instruction to medical students throughout the year. Attendance on the regular Winter Session is all that is demanded of the candidates for graduation. Those who attend the other session receive a CERTIFICATE OF HONOR, if having pursued voluntarily a fuller course than usual.

THE SPRING SESSION is principally of a practical and clinical character, and affords particular facilities to students who have already taken one course in schools where such practical advantages exist to a less extent. The course consists also partly of lectures and examinations on the subjects necessary for graduating in medicine, conducted by the Professors of the regular Faculty and their assistants. These examinations will be addressed to both first and second course students. For the purpose of making the visits to the wards of the Hospitals as available as possible, the class is divided into sections. One division at a time is instructed in Practice, Diagnosis, Prognosis, and Treatment of Patients. The course begins early in March, and continues till the middle of May, when the SUMMER COMMENCEMENT is held. During the Summer the College Clinics are kept open.

THE PRELIMINARY WINTER SESSION commences September 13th, 1876, and continues till the opening of the regular session. It is conducted on the same plan as the Regular Winter Session.

THE REGULAR WINTER SESSION occupies four and a half months—commencing on September 27th, and continuing till the middle of February. The system of instruction embraces a thorough Didactic and Clinical Course, the lectures being illustrated by two clinical days each day. One of these daily clinics will be held either in Bellevue or the Charity Hospital. The location of the College building affords the greatest facilities for Hospital Clinics. It is opposite the gate of Bellevue Hospital, on Twenty-sixth street, and in close proximity to the Charity Hospital on Blackwell's Island, while the Department of out-door Medical Charity, and the Hospital Post-mortem Rooms are across the street. The students of the University Medical College will be furnished with admission tickets to these establishments free of charge. The Professors of the practical chairs are connected with one or both of these Hospitals. Besides the Hospital Clinics, there are eight clinics each week in the College building.

THE POST GRADUATE COURSE is to consist of lectures delivered by the Professors of the several departments in the College building during the regular Winter Session, illustrated by clinics held in Hospitals and at the College. After an attendance of one Session on these lectures, any candidate who is already a graduate of a recognised Medical College can obtain a Diploma Certificate, countersigned by the Chancellor of the University and the Dean of the Faculty of the Medical Department, and by four or more Professors of the Post Graduate Course, to the effect that the candidate has passed an examination by them in their respective branches of special medical instruction. The fee for the Diploma Certificate is \$30. This course will begin September 27th.

The Faculty desires to call attention particularly to the opportunities for dissection. Subjects are abundant, and are furnished free of charge, and the Professor of Anatomy spends several hours each day in demonstration in the dissecting-room.

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For further particulars and circulars, address the Dean.

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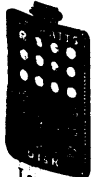
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JEFFERSON MEDICAL COLLEGE.

PHILADELPHIA.

THE Fifty-Second Session of the Jefferson Medical College will begin on Monday, 2d October, 1876, and will continue until 1st of March, 1877. PRELIMINARY LECTURES will be held from Monday, 4th September.

PROFESSORS.

- JOSEPH PANCOAST, M.D., General, Descriptive and Surgical Anatomy (*Emeritus*.)
- SAMUEL D. GROSS, M.D., LL.D., D.C.L. Oxon., Institutes and Practice of Surgery.
- ELLERSLIE WALLACE, M.D., Obstetrics and Diseases of Women and Children.
- B. HOWARD RAND, M.D., Chemistry.
- JOHN B. BIDDLE, M.D., Materia Medica and General Therapeutics.
- J. AITKEN MEIGS, M.D., Institutes of Medicine and Medical Jurisprudence.
- J.M. DACOSTA, M.D., Practice of Medicine.
- WILLIAM H. PANCOAST, M.D., General, Descriptive and Surgical Anatomy.

Special courses are also given on the following subjects :

- TOXICOLOGY, by Professor RAND.
- DISEASES OF THE CRANIAL NERVES, by Professor MEIGS.
- DERMATOLOGY and SYPHILITIC DISEASES, by Dr. F. F. MAURY, one of the Surgeons to the Philadelphia Hospital.
- PATHOLOGICAL ANATOMY, by Dr. MORRIS LONGSTRETH, Pathologist to the Pennsylvania Hospital.
- OPERATIVE SURGERY, with Operations on the Cadaver, by Dr. JOHN H. BRINTON, one of the Surgeons to the Philadelphia Hospital.
- OPHTHALMOLOGY and OTOTOLOGY are treated both clinically and didactically during the entire course, by Dr. WILLIAM THOMSON, one of the Surgeons to the Wills Ophthalmic Hospital.
- LARYNGOSCOPY, with DISEASES OF THE THROAT, by Dr. J. SOLIS-COHEN.
- The DEMONSTRATOR of Surgery, Dr. J. EWING MEARS, delivers a distinct course of Demonstrations of Surgery, with illustrations on the Cadaver, during the entire session.
- PRACTICAL CHEMISTRY with *Qualitative and Quantitative Analysis, the Examination of Normal and Abnormal Products and Manipulation* by the Student himself, is taught by the DEMONSTRATOR of Chemistry, Dr. W. H. GREENE.
- PRACTICAL ANATOMY and MORBID ANATOMY. For the study of Practical Anatomy, a full supply of material is furnished *free of charge*. The Anatomical Rooms are spacious and provided with every convenience, and not only are subjects for dissection to be had without expense, but there are no incidental or extra charges of any kind.
- Demonstrator of Anatomy, T. H. ANDREWS, M.D.

CLINICAL INSTRUCTION is given daily at the College. The SURGICAL CLINIC is held on Wednesdays and Saturdays, by Professors GROSS, JOSEPH PANCOAST and W. H. PANCOAST. The MEDICAL CLINIC, on Mondays and Thursdays, by Professors DACOSTA, BIDDLE and MEIGS. The CLINIC of Diseases of Women and Children, on Tuesdays, by Professor WALLACE. The CLINIC of Diseases of the Eye and Ear, on Fridays, by Dr. THOMSON. The PENNSYLVANIA HOSPITAL is near the College, and the corps of lecturers includes Professors DACOSTA and MEIGS. Professor PANCOAST and Drs. MAURY and BRINTON are connected with the staff of the PHILADELPHIA HOSPITAL.

THE NEW HOSPITAL OF THE JEFFERSON MEDICAL COLLEGE was begun in November, 1875, and will be completed by the close of the present summer; and it is confidently anticipated that it will be in full operation early in the ensuing session. It is situated in a spacious lot immediately west of the College, bounded on three sides by streets and a wide space on the fourth side, and will afford accommodation for at least one hundred beds. It is constructed according to the most approved principles of hospital architecture, and will be furnished with every necessary appliance for heating, ventilation, etc. A spacious amphitheatre, seating more than 500 students, is provided for Clinical Lectures, which, with daily visits to the wards, will form part of the regular services of the College.

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STUDENTS WHO HAVE ATTENDED TWO FULL COURSES OF LECTURES ON ANATOMY, CHEMISTRY, MATERIA MEDICA AND THE INSTITUTES OF MEDICINE, MAY BE EXAMINED ON THOSE SUBJECTS AT THE END OF THE SECOND COURSE, AND, IF APPROVED, WILL, AT THE END OF THEIR THIRD COURSE, BE EXAMINED ONLY ON THEORY AND PRACTICE OF MEDICINE, SURGERY AND OBSTETRICS.

A SUMMER COURSE of Supplementary Lectures is given, beginning 26th March, 1877, and extending through the months of April, May and June. There is no additional charge for this Course to Matriculants of the College, except a registration fee of five dollars.

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		\$ c.			\$ c.			\$ c.
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" Sulph. Ar.....	8 oz. bot.	0 20	Jalapin.....		1 75	Santonine.....	oz.	0 90
" Hydrocyan.....	1 "	0 23	Liu. Saponis.....	8 oz. bot.	0 24	Soda Bicarb.....	lb.	0 14
Ammon. Carb.....	lb.	0 25	Liq. Ammon.....	"	0 17	" Potass. Tart.....	"	0 32
Ether, Nit.....	8 oz. bot.	0 22	" Arsenic.....	"	0 20	Spir. Camphor.....	8 oz. bot.	0 28
" Sulph.....	"	0 33	" Bismuth.....	"	0 40	" Ammon. Co.....	"	0 25
" Co.....	"	0 28	" Donovan.....	"	0 28	Syr. Aurant.....	"	0 20
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Argent Nit. fus.....	"	1 30	" Potassæ.....	"	0 17	" Ferri Iod.....	"	0 40
Balsam Copaib.....	8 oz. bot.	0 63	Mist. Ferri Co.....	8 oz. bot.	0 20	" Strych. Phos. Co.....	"	0 45
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Ergot, pulv.....	oz.	0 50	Opium.....	oz.	0 60	" Arnica.....	"	0 24
Emp. Lytta.....	"	0 15	" Powd.....	"	0 70	" Calumb.....	"	0 20
Ext. Bellad.....	lb.	1 25	Pil. Aloes.....	gross.	0 30	" Camph. Co.....	"	0 20
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" Taraxacum.....	"	0 75	" Subchlor. Co.....	gross.	0 30	" Ergot.....	"	0 30
Fol. Buchu.....	"	0 07	" Rhei. Co.....	"	0 35	" Ferri Perchlor.....	"	0 18
" Senna.....	"	0 50	" Podophyllin, Co.....	lb.	0 40	" Gentian Co.....	"	0 20
Gum. Aloes Soc.....	"	0 30	Plumbi Acet.....	lb.	0 25	" Hyosciam.....	"	0 20
" pulv.....	"	0 90	" Potass. Acet.....	"	0 60	" Iodine.....	"	0 45
" Acacia, pulv.....	"	1 10	" Bicarb.....	"	0 35	" Nucis Vom.....	"	0 24
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		0 07	Quinæ Sul.....	oz.	2 35	" Antim.....	"	0 20

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 - BORATIO YATES, M.D. Principles and Practice of Medicine, and Clinical Medicine.
 - NICHAE L LAVELL, M.D. Obstetrics and Diseases of Women and Children.
 - NICHAE L SULLIVAN, M.D. Surgery and Surgical Anatomy.
 - N. F. DUPUIS, M.A., Botany.
 - THOMAS R. DUPUIS, M.D. Descriptive and Regional Anatomy.
 - JAMES NEISH, M.D. Medical Jurisprudence.
 - NATHAN F. DUPUIS, M.A. Chemistry and Practical Chemistry.
 - ALFRED S. OLIVER, M.D. Institutes of Medicine and Sanitary Science.
 - KENNETH N. FENWICK, M.A., M.D. M.R.C.S. England. Practical Anatomy.

The next winter Session begins on the 1st Wednesday of October, 1876. Students attending this College may obtain either the degree of M.D., or the Licence of the College. Certificates of attendance are recognized by the London and Edinburgh Colleges. The College building, which is being newly fitted up, is commodious and convenient. Unequalled facilities are presented for the study of Practical Anatomy, and great advantages are afforded for Clinical instruction at the General Hospital, and Hotel Dieu. Further information can be had on application to the Registrar.

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* Students attending the Botanical class can also without additional attend Lectures on Zoology.

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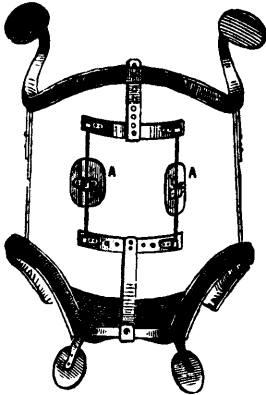
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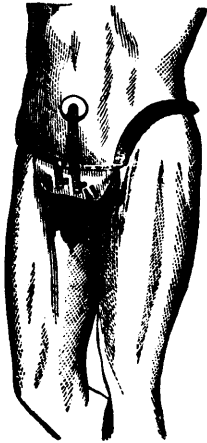
Fig. No. 18.

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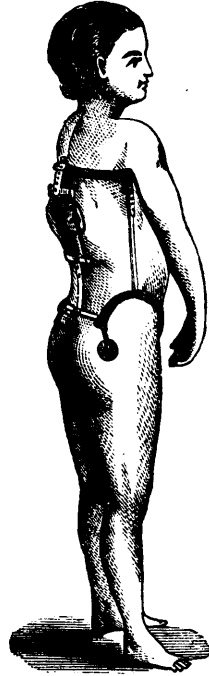
Fig. No. 12.



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Fig. No. 19.

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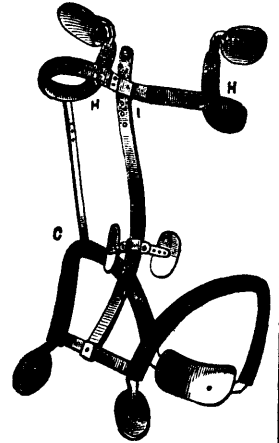


How to measure for any of these appliances.
 1st Around the body, two inches below the tips of hip bones.
 2d Around the chest, close under the arms.

3d From each armpit to corresponding tip of hip bone.
 4th Height of person. All measures to be in inches.
 Measure over the linen, drawing tape measure moderately tight.

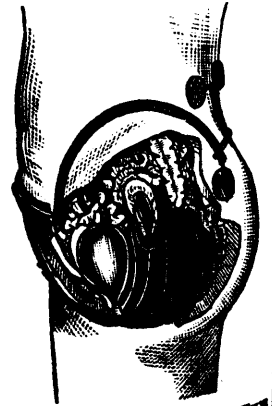
Fig. No. 14.

Improved Centripetal SPINAL LEVER.



For lateral curvature of the spine. The general action is to reverse the body's weight, and so deprive gravity of its depressing force.

Fig. No. 7.



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