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JAMES SYME, F.R.S.E., D.C.L., &c.

CANADA
MEDICAL JOURNAL.

ORIGINAL COMMUNICATIONS.

A Case of Reflex Paralysis. By Wm. McGeachy, M.D., Iona, Ontario.

Mrs. ——— had for some months been troubled with an ulcer situated on the anterior aspect of the lower part of the thigh. The original cause was a severe scald, of a much more extensive area than the present sore, but which had healed over with a tolerably healthy cicatrix. An abrasion received in the month of August, when alighting from a vehicle, was the immediate forerunner of the indolent ulcer, for which I was now called upon to prescribe.

From a history of the case and its treatment, I judged that a fair trial had been made of the usual stimulating procedures, and accordingly had recourse to the mechanical effects of adhesive straps, conjoined with an internal treatment of zinc and strychnia, given in pill, with extract of gentian.

At the end of ten days the surface of the sore seemed reduced to its minimum area, and, altogether, more healthy in appearance. Up to this time since my attendance began, nothing unusual occurred to pre indicate the somewhat novel complication that was to follow, beyond a little twitching of the diseased limb, to which, I confess, I paid no attention.

September 27th.—Was called suddenly in the morning with the intelligence that something very serious was wrong, and on arrival was not a little puzzled to find complete paralysis of the lower extremities, which she discovered in attempting to withdraw one of her limbs under the bedclothes. The evening before, the part was dressed with a pledget of lint saturated in a solution of carbolic acid, and secured by bandage. This I now removed and found the ulcer quite healthy. Examined the spine carefully, but could discover nothing amiss.

Called also in the evening, as per appointment, and drew off about 18 oz. of urine with the catheter. Gave an enema of castor oil and turpentine, which came away in an hour with some fœcal matter. Paraplegia, if possible, more complete. Attempted to make her stand by the side of

the bed, but was only upbraided for cruelty. Could discover no history of hysteria in patient or family; pulse normal, but weak; tongue moist, with white fur; both pupils strangely dilated and sensitive. Bandaged the ulcer with the dressing as before. Ordered half an ounce of brandy and 30 minims of spt. ether. nit. every third hour. To discontinue the pills; to attempt to urinate during the night.

28th., Sunday.—Felt a great desire to make water during the night but could not. Gave mixture of ol. ricin., ol. tiglu, ol. terebinth., and stated I should call on my return. No motion of the bowels. Used the catheter again. To continue the mixture when the bowels move. Rubbed the spine every two hours with stimulating embrocation. Ordered to wear flannel drawers. Removed dressings from the sore, and substituted flax-seed poultice.

29th, 6 a.m.—Bowels had moved in the night. Patient much easier; can move the toes. Evening.—Voluntary control of the limbs rapidly being restored. Catheter discovered scarcely an ounce of urine, probably in consequence of the drastic purges. Mixture continued, with also quinine, one grain.

30th.—Patient had a good night's rest for the first time. Almost entirely well. Continue brandy, ether and quinine every fourth hour. Beef tea freely. Tinct. opii. enema to restrain the bowels.

31st.—Patient walking about. All dressings removed. Medicines to be continued.

October 1st.—Still continues to improve. Pricking sensation through both limbs. Made her retire to bed before night. Had a considerable discharge of a pale serum-like liquid, which patient maintains came from vaginal passages. Ordered the carbolic acid lotion and bandage, and took my leave.

3rd.—Was again summoned to the case, and again found loss of motion in both limbs. Both legs in a complete and continuous tremor, like an ague chill. Had made up my mind before this as to the nature of the case. Again removed dressings, carefully washed the sore, and pencilled with solid caustic. Ordered a poultice at bed time, and to have four grains extract of hyosciamus every fourth hour.

4th.—Patient much better. At night had violent motion of the limbs and body, inasmuch that she could with difficulty be prevented from throwing herself out of bed. These motions she asserted to be involuntary. To have 20 grains of bromide of potassium each night in some syrup. Port wine *ad libitum*.

A gradual and complete recovery was the result, without a relapse as yet.

I shall make a few remarks, but will chiefly leave the case to the consideration of the profession. Can hysteria be safely excluded as an element entering into a consideration of this case? I decidedly think so. I confess I never saw a case of reflex paraplegia, either in private practice or in the wards of an hospital, but occasionally witnessed this and similar grave affections simulated by the victim of hysteria. None of the usual remedies for hysteria were used in this case. The irritation produced by the carbolic acid, the trembling of the limbs, and their subsequent impotence, seem to form an unbroken link in the chain of evidence connecting the first-named procedure with the last result.

That it was a decided case of peraplegia no one would think of doubting. If not caused by the ulcer, by what then? There neither was nor is any diagnostic symptom of spinal disease. I might thus proceed, by the method exclusion, and shew that the evidence inevitably points to the conclusion I have already been led to. It, therefore, remains for others who may doubt those I have arrived at, to account in a rational manner for the phenomenon in question.

The use of Amalgam of Mercury and other Metals in filling Carious Teeth. By H. M. Bowker, Surgeon Dentist, Montreal.

In the January number of the Canada Medical Journal, an article of mine appeared on the dangerous practice of filling teeth with amalgam. I am impelled to write again on the subject to rebut statements and comments which have appeared in other journals.

First:—In the February number of the American Journal of *Dental Science*, published at Baltimore, the editor copied my article in full, and, in his criticisms thereon, admits the general truth of my argument, but thinks I have taken an extreme view, and believes that amalgam can be safely used in teeth which are mere shells, but never in teeth which can be saved, even with tinfoil.

Admitting, which I do not, that nothing but amalgam could save such frail teeth, it would, in my opinion, be much better to have them extracted than incur the risk of permanently injuring the constitution by the use of any kind of mercurial paste, but that is unnecessary; as it has been incontestably proved that a tooth which can be saved by such "paste" can be saved by the use of gold or tin-foil, both innocuous materials. In corroboration, the American Society of Dental Surgeons, at their Convention, 1841, declared that there is no tooth affected by caries in which gold-foil cannot be employed to render the organ serviceable. Again, the American Journal of *Dental Science* has always,

in its articles on the subject, taken a most decided and uncompromising stand against the use of amalgam for filling teeth, more especially during the time it was conducted by such able men as C. A. Harris, A. Westcott, W. H. Dewinell, S. Brown, Piggott, and E. Parmly, all of whom repudiated the use of amalgam, and those of them now living remain unchanged in their opinions on the question.

Mr. F. G. Callender, member of the Royal College of Dental Surgeons and professor at the Toronto Dental College, admits that he has for a long time past discarded the use of amalgam, unless in exceptional cases, and he agrees in the main with me as to its unfitnesss, but he denies that the College encourages its use. Mr. Chittenden, also a member of the same College, says:—"That the application of mercurial paste should be limited to teeth so frail, or not sufficiently fixed in the socket to admit of any but the gentlest handling." Is not this theory of limitation an admitted recognition of the baneful effects of amalgam? If for mechanical considerations, amalgam may be used in one tooth, regardless of consequences, why not in another? There can be neither honesty nor consistency in the use of a compound, which the operator believes to be pernicious, for the sake of overcoming a mechanical difficulty. Better by far extraction of the tooth, than the absorption of poison into the system. A surgeon may as well, rather than sacrifice a limb, let the patient die from gangrene and mortification.

In the face of these eminent American authorities, Mr. W. G. Beers, co-editor of the *Canada Dental Journal*, not only defends the use of amalgam, but has the hardihood to state that I am guilty of using a compound which I condemn as malpractice. To the latter assertion, I conscientiously affirm that never in my twenty years practice have I used mercurial paste. Mr. W. G. Beers, with the same regard for truth, denies my assertion that the American Society of Dental Surgeons unanimously, in 1845, carried a resolution condemnatory of the use of amalgam. I think the following extracts from the proceedings of the Society, dated New York, August 9, 1845, will be sufficient refutation even for Mr. W. G. Beers.

Firstly, it is stated, "that the objects of this Society are the mutual improvement of its members and the protection of themselves and the public against the quackery and empiricisms which are the disgrace of the profession."

"The Society does not presume in this communication to speak of more than a single one of those base deceptions by which individuals calling themselves dentists are imposing on the community. We allude to the practice of filling decayed teeth with amalgam, known under the name

of *royal succedaneum, lithodion, mineral paste, admantine cement, alabaster cement, diamond cement*, and other improper substances, by the use of which thousands of valuable teeth are annually destroyed, and innumerable evils result to the community at large which can never be repaired."

"*The Society has unanimously declared that the use of the above named amalgams for stopping teeth is malpractice, destructive to the safety of the teeth, injurious to the healthy condition of the mouth, and not unfrequently exciting and promoting bad effects on the constitution frequently disposed to the injurious action of mercury, which invariably constitutes an ingredient in all these compounds. Every member of this Society who shall hereafter use this substance under any of these imposing and deceptive names, or under any other name, is, by that act, expelled from the institution.*"

By order of the Society,

E. PARMLY, *President.**

AMOS WESTCOTT, *Recording Secretary.*

Mr. W. G. Beers has the additional temerity to say that the above resolution was finally rescinded. In refutation of this other gratuitous statement, Mr. W. G. Beers has only to look at page 71, New Series of the American Journal, and he will find these words:

"That it is now seven years since the Society *unanimously* resolved that it regards the use of *mineral paste* for stopping carious teeth as *malpractice.*"

"In 1841, with the like unanimity, it had declared that amalgams were hurtful to the teeth and every part of the mouth, and that gold could be used in every case where any form of filling fairly promised advantage, and at subsequent annual meetings it reiterated these sentiments, till finally, in 1845, it resolved upon the expulsion of non-conformists, and in 1847 actually inflicted the penalty upon some of its members."†

"Dentistry now, like the practice of medicine, may safely trust its general character to the common caution and prudence which legitimate responsibility ordinarily requires. While, therefore, we would intimate no change of sentiment as to the subject-matter of the protest, believing, as we do, the substitution of amalgam for gold to be *malpractice*, but would still most earnestly advise that total abstinence from the practice which we have heretofore *enforced.*"

* Vol. 6, page 82. American Journal of Dental Science.

† Vol. 1, page 71.

Can language be stronger? The use of amalgam is absolutely and unanimously condemned! So much for Mr. W. G. Beers.

The Virginian Society of Surgeon Dentists resolved:—"That the use of all pastes and cements, of which *mercury is a part*, entirely unfit for and highly objectionable as for filling carious teeth, and further, that the use of them in dental practice is *empirical* and is hereby declared to be MALPRACTICE."*

The Mississippi Valley Association of Dental Surgeons also resolved:—"That we consider the use of all mineral pastes in the plugging of the teeth as *unprofessional* and *highly injurious*, and that we will neither use it nor countenance its use by others.†

I respectfully ask Mr. W. G. Beers—Are the physical conditions of the human frame different in 1870 from what they were in 1847? If the malpractice of amalgam was determined in 1847, what circumstances can possibly make its use sound and good practice in 1870? Is the Canadian College of Dental Surgeons prepared to say that the members of their kindred colleges in the United States are ignorant empirics?

Here is another mis-statement made by Mr. W. G. Beers. He says: "I am qualified to assure you that neither college nor societies have once, directly or indirectly, discussed the subject"—meaning that of amalgam. In the *Canada Dental Journal*, Vol. I., page 110, are to be found questions put to the students on amalgam. Mr. W. G. Beers labours hard to convince the public that neither the college nor the dental societies encourage the use of amalgam, yet with a marvellous consistency, he, being secretary of one of the dental societies and co-editor of the *Canadian Dental Journal*, not only advocates but vindicates the use of amalgam, and more, advertises it. His brother editor, Mr. Chittenden of Hamilton, upon the principal that there are two sides to every question, speaking of tin-foil, says:—"*that as a cheap filling, it is infinitely preferable to amalgam, in that it leaves no sting behind.*"

To discover a truth and separate it from a falsehood is surely an occupation worthy of the best intellect and not at all unworthy of the best heart, so Mr. W. G. Beers has exercised his intellect to disprove my statements and to throw doubts upon my professional practice. He gives an array of names who are advocates of amalgam. Are they practitioners of any high repute? The standard writers on dental surgery are all but unanimous in the condemnation of the use of amalgam—"their names are legion." There is hardly any

* Vol. 6, page 157. A. J. of D. S.
† Vol. 5, page 119. A. J. of D. S.

necessity for giving them, they are so well known to every student in dental surgery.

Dr. Evans of Paris, who has a world-wide reputation, and is considered the highest authority in dental surgery at the present time in Europe, says:—

"*I cannot, however, refrain from stating it as my deliberate opinion that all operations in which amalgams are employed are merely temporary in their nature, and that any tooth that can be filled in a proper manner with gold can be effectually and permanently saved only by this means.*"*

The above opinion he published to the world after having announced the discovery of a compound of mercury with other metals, exempt—as he supposed—from all the objections of other amalgams. The learned Doctor, after having patiently and faithfully tried his system and found it malpractice, had the honesty and manliness to disavow amalgams. Dr. Townsend of Philadelphia, who ranked very high in his profession, and the inventor of a nostrum called "Townsend's amalgam," finding the use of it injurious, publicly recanted nearly every advantage he claimed for it. He said that in cases where he most relied on it, and expected to find the best results, it *entirely failed*.†

Professor Taft, of the Ohio College of Dental Surgery and the author of a work on "Operative Dentistry," which is admitted by all American dentists to be the best work extant on the subject (1868) closes an article condemnatory of amalgam paste in these words:—

"So great and so numerous are the objections to this material that it is but little used by reliable operators. Its adaptability is the main prop on which are based the arguments in its favour: it is easily applied, and consolidates with considerable hardness. It is affirmed also, teeth which cannot be saved with anything else may be filled with this and made more valuable. This, however, is not true since the employment of the adhesive property of gold; which property renders this metal equal in adaptability to amalgam."

Dr. Watt in his "Chemical Essays," (1868), says:—"Amalgam plugs are usually large, as none but quacks insert them into large cavities. We have frequently seen two, three, or four large plugs in same mouth, and in one mouth we saw *seventeen* large and small. For illustration, let us suppose a case in which eighty grains of amalgam cement are inserted—this is not an extraordinary case. Four molars, with a small plug in each, would give that amount. The forty grains of

* Vol. 10, page 132. A. J. of D. S.

† This nostrum is also advertised in the Canada Journal of Dental Science.

mercury (even though inert in the metallic state, which is not proved, however,) would make two drachms of the blue mass, or forty officinal blue pills, or about fifty-four grains of corrosive sublimate, or would yield forty-seven grains of calomel, or nearly forty-two grains of black oxyd of mercury. Now, no scientific man could be surprised at witnessing constitutional effects from the presence of such quantities of any one of these drugs. But the amalgam advocates may, and do object, that these compounds are not liable to be formed in the mouth, but with the next breath, they go on to lament the 'blackness,' 'discoloration,' 'coloration,' &c., through all the changes, ascribing it all the while to *oxydation*, thus acknowledging that the last named condition almost invariably results. And it is objected, too, that if formed at all, these drugs are formed, and therefore introduced so slowly and gradually that they can produce no perceptible effects. But such objectors manifest an ignorance of scientific truth hardly excusable in this enlightened age of the profession. The slow and gradual introduction is the important point to be considered. It is here that the danger lies. When rapidly introduced, the system is aroused and rebels, and much of the poison is ejected. This slow introduction is nothing else than "nurturing up wrath against the day of wrath,' as in the case of the man that wore the metal in a leathern bag.* The poison could only pass infinitessimally into the system; yet in six years it did its work. And those who wear amalgam plugs in their mouth for six years, and especially for 'fifteen years,' have no security that their fate will not be similar. When we read of old practitioners, whose neighbours, as well as themselves, have all along been using amalgams, and who yet assert that they have never seen a case of ptyalism or other constitutional disease arising from their use, we must be excused if we look upon them "with considerable doubt, as to the value of their judgment, or opinions as reliable diagnosticians."

"One cannot believe that amalgam fillings can produce ptyalism, because this is produced through the general system whether the mercury is used externally or internally. Now it is not probable that any one believes that amalgam plugs can produce ptyalism by mere local action."

"Another is a disbeliever because 'it is well known that mercury uncombined is inert'—which is merely an assertion—and because 'equally so must it be when combined with silver or tin,' which is a mere assumption. And he is further confirmed in his position from the fact that the proto-chloride of mercury (calomel) and deuto-chloride of mercury (cor-

* Dr. Watt refers to a fatal case, attended with salivation, brought on by wearing a leathern bag containing a few drachms of liquid mercury.

rosive sublimate) are formed from sulphate of mercury and muriate of soda, triturated and sublimated. As this process cannot be very well carried on in the mouth, it is hardly supposable that they are elaborated to any extent."

"Well, there is chemistry for you. Are we to infer that chlorine and mercury can combine only under the circumstances here detailed? When it is objected to the use of amalgams that there is danger of mercurial poisonings, the answer is that abscess, exostosis, and necrosis occur in mouths where no mercury is used, as if these were what is meant by *constitutional* effects of mercury. And where a genuine case of poisoning is presented, it is referred to some other cause than mercury, because many cases of "irritated gums looking terribly enough has yielded to proper constitutional and local treatment," as if irritated gums were all the effect of ptyalism, and as if acute ptyalism was not amenable to treatment. Any scientific dentist would infer that there is greater danger of mercurialization from this source when the fluids of the mouth are acid than when they are alkaline. If a case of ptyalism presented itself, and the amalgam plugs were allowed to remain, a part of the proper treatment would be to secure an alkaline state of the saliva. And he would infer that the disease was most likely the result of either the oxydation or chloridation of mercury; and as its compounds with sulphur are far less poisonous than its oxyds or chlorides, and are nearly insoluble, he would take such measures as would secure its sulphidation. We make these remarks merely to remind the reader that even ptyalism is amenable to proper constitutional treatment; and hence, yielding to treatment is no evidence that the disease is not ptyalism. If the corrosion of mercury is stopped for the time, the disease will usually exhaust itself, and recovery will take place without direct treatment. Many advocates of amalgam suggest that many of the cases taken for the bad effects of mercury are the result of "mechanical irritation" which would have resulted just as soon from bad gold filling. Now every one who understands the subject knows that *mechanical* irritation never did and never will produce results very much like mercurial ptyalism."

"It is well known that ptyalism may be, and is produced by other causes than mercury. This is what is called "spontaneous ptyalism," and it is cordially admitted that in a large majority of cases in which amalgams are fused, no observable constitutional effects result. But it will not do on this account to deny the fact of mercurial poisoning by amalgam plugs. The same warrant is afforded for the denial of mercurialization from any source. In a large majority of cases in which mercurials are administered, no poisoning is observable. Indeed, it

would be no more than consistent for some of our disbelieving brethren to write an article to prove that both mercury and its compounds are inert. They would be at no loss for arguments stronger than those they are in the habit of using in discussing the "amalgam question." Why, a patient has taken over fifty drachms of calomel in less than so many hours "without the least sensible effect!" Take the position, and *stick* to it, that calomel never produces ptyalism. And if it should occur while the patient is taking the drug, be firm and *consistent*, by claiming that it was about to occur any way, and has resulted simply from "mechanical irritation."

Mr. W. G. Beers and the advocates of amalgam allude to an old compound used years ago, as if mercury had not the same effect upon the constitution now as it had years ago. They do not deny that there is mercury in the improved compound of amalgam now used, nor do they tell us in what the new improvement consists. We pause to know in what way their amalgam is improved? According to Dr. Watt, amalgams used to be made of mercury and silver; their use has long since become unpopular, and is regarded as a *black spot* on our professional escutcheon. They are simply rendered respectable and perfect now by the addition of another *base metal.*

Mr. W. G. Beers says:—"We might give up filling teeth altogether if we were to abstain from every material that may be abused. With equal propriety it might be urged against gold that because when highly oxydized it becomes a powerful medicinal agent, therefore it should not be used for filling teeth."

The weakness of such an argument needs no pointing out, for the objection to amalgam and the preference for gold are equally based on special causes. As long as I have been a member of the profession, I was not aware that pure gold would become highly oxydized when used as plugs in the teeth, or would have any medicinal effect on the constitution.

Gold is the best and most innocuous material that can be used for filling teeth, and as such was never known to have any deleterious effect upon the constitution. With mineral paste or amalgam how different! There are some constitutions so susceptible to the action of mercury that even one half-grain in a tooth will cause severe neuralgic pains, so that however carefully manipulated and vastly improved the amalgam now used may be, the effect is frequently such as to enforce the immediate removal of the poisonous compound from the mouth, which being done, all the unfavourable symptoms at once disappear. The difference is obvious, in the use of gold the patient does not incur any risk of injur-

of his constitution, whereas, in the case where amalgam is used he does occur that risk. Scarcely a week passes that I do not witness the evil consequences resulting from the employment of an amalgam on the constitution of patients, many of whom are willing to give me their testimony with regard to their sufferings and to the mode and extent of their relief.

Mr. W. G. Beers says:—All amalgamists say the same, and I may remark that they are only a repetition of the stale arguments of twenty or thirty years since." He also says that " those who use amalgam for front teeth, or for small cavities are quacks," therefore, the inference to be drawn is that those who use it by wholesale in large cavities are justified in so doing. Assuredly if it saves frail teeth with large cavities without any detriment to the constitution, what would it not do in the case of firm teeth with small cavities? Surely Mr. W. G. Beers trifles with the intelligence of his readers when he says " the possibility of amalgam being abused, is no more reasonable argument against its use than an argument that no preparation of arsenic, morphine, &c., should be used because they are infallible poisons. If it were considered necessary to administer arsenic, morphia, &c., it would be for the purpose of arresting a serious malady, or for the preservation of life, but in the case of the mercurial poisons the object would be to save a tooth; therefore, there is a difference in the two applications, the one saving a life, the other a tooth.

An operator who uses foil of any kind would soon manifest his lack of skill by the sudden disappearance of the fillings, therefore his imposition on the public would be as short as the duration of his operations, at the same time his incapacity would have no injurious effect upon the health of his patient. The operator who uses amalgam has only to put it in the cavity of the tooth in a plastic state, where it soon becomes hard and remains in the cavity until decay takes place around the plug, but all the time it is there the patient has in his mouth a poison of slow, steady, but certain malignity; a poison, even in its insoluble combination, capable of producing grave and lasting disturbances of health.

What says Dr. Slack, Professor of Chemistry in the Medical College of Ohio, about amalgam? His answer is conclusive, he says:—" The cellular tissue of the tooth is filled with minute arteries, veins, absorbents, and nerves; leaving out of view galvanic action, what must be the effect from the oxydation of the inserted amalgam? Will not the deleterious vile compound be absorbed? Can a substance certainly be of any advantage to nerve, artery, veins, blood, &c.? The poison will be thrown into circulation, and though it may move slowly at first, it will, unless

arrested, certainly perform its work of destruction. Health must be prostrated and an early grave will be the portion of the victim."*

Dr. Westcott, an authority,—he having filled the Professorial Chairs of Operative and Mechanical Dentistry, in the Dental Colleges of Baltimore and New York—is one of the original and most indefatigable writers against all preparations of mercury for filling teeth. What does he say? His utterances are not uncertain. What language can be more decisive? He, in the most emphatic manner, says:—"No man who has so little self respect as to use this amalgam to any considerable extent, will refuse to stoop to any species of quackery which will contribute to his pocket. . . . As we weaken public confidence in this deception and enlighten the public mind respecting it, we not only blot out this particular species of quackery, but to a corresponding extent weaken the power of those charlatans to practice this or any other deceit by pointing to them as the men who have, at least in one way, imposed upon the community and filled their teeth with no other motive than filling their own pockets, and without any regard to the consequences."†

Feeling so strongly as I do on the subject, and having been wantonly assailed for my first communication against the dangerous practice of filling teeth with amalgam, I cannot refrain from making another quotation, and it shall be the last. It is from the valedictory address of Dr. Parmly, of New York, delivered to the graduates of the Baltimore College of Dental Surgery. The Doctor says:—"A distinguished Parisian, a gentleman and scholar, Count de D ——, now in New York, remarked to me a few days ago that he had discovered during his residence in this country that there are two classes of dentists, one very high, the other very low, and that the latter live upon the reputation of the former—the latter chiefly consist of 'amalgamists.' There may be honest and truthful men among them, but if there be, they differ very much from those champions of amalgam whom I have encountered and already proved to be without either professional or moral honesty. I can bring the same proof with regard to others if necessity shall require it. I am willing, however, that this necessity shall never call me to the unpleasant task, but I will not shrink from the task when the conduct of knaves and charlatans shall render that task a duty.

"To the American public I owe many obligations for the confidence my fellow-citizens have reposed in my professional practice, and I intend to discharge at least a part of my obligations by exposing the tricks of

* Page 63, Vol. 6. A. J. of D. S.

† Page 178, Vol. 8. A. J. of D. S.

mountebanks and the impudence of knaves. Of all the quackeries of our profession, or of those who live only to disgrace it, I regard mercurial paste most notorious, execrable, and base, as used in this country, and should a part of my life be spent in exposing the evils of such nostrums, I shall not regard it as utterly lost to my race, nor to my country."*

Severe Metrorrhagia from ulceration of the os and cervix uteri. Reported by Dr. T. G. RODDICK, Assistant House Surgeon to the Montreal General Hospital.

C. H., æt. 27, was admitted into the Montreal General Hospital, June 21st, under care of Dr. MacCallum, suffering from severe metrorrhagia consequent on extensive ulceration of the os and cervix uteri.

She gave a history of having been troubled, more or less, for the past, two years with leucorrhœa, which, however, never affected her health materially. In February last she contracted a severe cold while menstruating, and, in consequence, the flow continued incessantly for over two weeks. After this time she was seldom or never regular, but menstruated every ten days or a fortnight with considerable pain and alarming prostration. In the month of April she consulted Dr. MacCallum, who put her under the usual treatment in such cases, and her condition improved for some time though the hæmorrhage continued to recur. When admitted she was almost in a state of chlorosis, her countenance being pasty-looking and of an almost greenish-yellow hue; her feet swollen from time to time; fatigue on the slightest exertion; loss of appetite; sleeplessness; constant malaise. A uterine examination was made by Dr. MacCallum with the hope of finding some state of the organ to account for the metrorrhagia and other symptoms, when the following conditions were noticed:—The entire face of the os uteri was involved in an ulcer of the size of a quarter dollar piece or even larger, and about the sixteenth of an inch across; granulations very vascular, large at the entrance, and extending some distance into the cervix; thick tenaceous mucus extended from the canal of the cervix and could with difficulty be removed; the whole surface of the ulcer was covered with a thick layer of pus; little or no pain in the sore when touched. The solid stick of argent. nit. was effectually applied, and the patient was ordered in addition an injection containing, zinc. sulph. gr. v. to aquæ ℥ j., with the following mixture to be taken internally:—℞ Pot: Brom. ʒ ii; Ferri Ammon. Cit: ʒ i; Aquæ ℥ vi a table spoonful three times a day.

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* Vol. 1, New Series, page 465.

June 25th.—Uterus again examined. Ulcer much cleaner and less vascular; cervical mucus not so abundant; bleeding markedly checked. Application of caustic as before. General condition of patient improving.

June 30th.—Ulcer tending to heal; much cleaner than when last examined; vascularity of granulations decreasing. Applied a saturated solution of chromic acid. Health of patient improving. Has not lost any blood since last examined; is more cheerful and not so easily fatigued.

July 15th.—The ulcer has been examined on two occasions since last noted, and treated with chromic acid. It is now healed to the size of a sixpenny piece, healthy-looking and clean. It was dressed to-day with a solution of one to ten of carbolic acid. The granulations within the cervix bleed on the slightest provocation, but there has been no spontaneous flow of blood for the past three weeks. The general health of the patient is on the mend, and her appetite is good.

July 24.—The ulcer has healed to within a couple of lines round the os uteri. She has had a slight attack of hæmorrhage since last examination, which cannot be accounted for, as everything seems to be progressing most favourably. With a view to ascertain if there was any growth or polypus within the womb, Dr. MacCallum dilated the cervix with sponge tents. The patient's health has not visibly suffered by the late attack, though she is in depressed spirits from her long detention in hospital. The same preparation of carbolic acid has been applied.

July 28th.—The sponge tent has dilated the os and cervix uteri so that the parts are distinctly visible, but nothing abnormal can be discovered, excepting the vascular condition of the mucus membrane, and its tendency to bleed on the merest touch. The external ulcer is nearly healed with an occasional application of the acid lotion, which is likewise applied to the neck of the womb as far as can be reached.

August 17th.—She has had two slight hæmorrhages within the last fortnight, but they have not appeared to affect her general health in any way. The ulcer has entirely healed and the patient's health is capital.

October 28th.—She left the hospital shortly after last note, and reports herself as perfectly recovered, and as strong almost as she ever was. Her appearance is that of complete health.

HOSPITAL REPORTS.

MONTREAL GENERAL HOSPITAL.

CASES IN MEDICINE AND SURGERY UNDER THE CARE OF DR. D. C. MACCALLUM.

Case 21.—*Diffuse Cellulitis of the entire Left Arm, with Sloughing of the Skin, and severe Hæmorrhage from the Opening up of a Vein.* Reported by MR. T. G. JOHNSTON.

James P., aged 40, Scotch, paper maker, was admitted into the Montreal General Hospital, August 1st, 1870; is a man of good general conformation, and temperate. For the last five years has been perfectly healthy; but previous to that time suffered from an attack of small-pox, and several attacks of intermittent fever.

About a month ago, while out fishing, he fell and struck his left elbow on the corner of a stone, abrading a small surface the size of a pea, immediately over the olecranon process. For the time he experienced no more pain or discomfort from it than would be expected from an injury of the sort, going to his work as usual the next day. In three days, however, the sore began to suppurate, and the arm became painful, hot and swollen. He, in the meantime, dressed it with a piece of rag taken from a miscellaneous pile in the paper mill. Was ordered by his medical attendant to apply lead lotion, which he did for a week, but with no good result, as the inflammation extended to the subcutaneous cellular tissue, which it destroyed completely—suppurating extensively and discharging through two openings; one about two inches above the external condyle, and the other on the ulxar aspect of the fore arm, about its middle.

Was then ordered to discontinue the lotion and apply poultices; he did so, and felt much better until about a week ago, when one of the veins of the arm being involved in the ulceration, gave way, and caused considerable hæmorrhage, which has continued almost ever since.

Appearance on admission: Is very anæmic-looking from loss of blood; is very weak; has been confined to bed at home for some time, and there is a slight appearance of a bed sore over the sacrum. *Arm* about twice its normal size; considerable impairment of capillary circulation of the surface; very cold; pulse 84, and much less distinct than on the sound side; great numbness; large open ulcer, from sloughing of the skin, about 4½ in. long and 1½ in breadth over anterior surface of the biceps; cannot use either extensors or flexors; about a pint of clotted blood was squeezed out of two small openings in the skin immediately over the joint.

August 2nd—Seen by Dr. MacCallum, who enlarged openings on uluar side of the arm by a free incision, allowing free exit of a large quantity of pus and clotted blood; and injected, lotio acid carbol 1 to 30; ordered quin sulph gr j. three times a day; half diet; also, two pints beef tea and one pint porter.

August 3rd—Injection continued; free discharge of sanious pus; temperature of arm increased; bandaged loosely from fingers to middle of fore arm; ordered tinct ferri mur m. x. in conjunction with each dose of the quinine.

August 7th—Is generally improved; sleeps well; and is gaining strength; dependent opening made in upper arm to allow exit of matter which has collected; injection of fore arm stopped as discharge from it has ceased and it seems disposed to heal; complains of bed sore which has formed; dressed with ordinary red wash.

August 12th—Still improving; lower arm almost healed; flexion and extension almost perfect; pronation and supination not quite so good; there is also a tendency of biceps to contraction; cannot extend the arm perfectly.

August 19th—Caught cold on the 15th; had a chill followed by fever; stopped iron and quinine; and gave liq. amon. acet ʒ ij. every three hours instead; passed a poor night; arm very painful; re-appearance of the discharge; to inject again with carbolic acid lotion; erysipelas of head and neck set in; to stop liq. amon. acet and give tr. ferri mur : m xxx. every four hours. Also brandy ʒ vi.

August 30th—Has had several attacks of erysipelas of head and neck; very slight and easily stopped by the iron; general condition improving; appetite good; arm looking well and no discharge of any account; allowed all the nourishment he can take.

September 10th—Arm improved greatly; slight attack of conjunctivitis from exposure to cold air; to continue iron mixture and have his clothes.

September 16th—Doing well; pulse natural and good colour in his face; complains of slight stiffness in legs from long confinement to bed; bed sore has completely healed.

October 11th—Discharged cured, with the exception of a small portion of the original ulcer over the biceps in the middle arm, which, however, tends to heal; his general health is excellent; the use of the entire limb nearly restored; and he hopes to resume his work in a week. The severe effects following the infliction of such a slight injury as the foregoing, were, no doubt, due to the innoculation of virus of some sort, contained in the rag with which he dressed his arm, particularly as he was at the time in the best of health; and had previously suffered injuries

far more severe, which, when properly treated, healed without any bad results. It might be stated that the attack of small pox from which he suffered, was due to infection from old rags necessarily handled in his occupation.

Case 22.—Ulcers and Fissure of the Anus, treated by incision. Reported by Mr. Thos. G. Johnston.

Mary K., aged 30, Irish, the mother of three children, was admitted into the Montreal General Hospital, under Dr. MacCallum, on the 18th of August, 1870. She has been previously healthy, but since her last pregnancy (about six months ago), has been in a very bad state of health. At present she has an anxious, careworn look, and complains of intolerable pain in the anus on going to stool. On examination a fissure was found on the right side of the rectum having its external termination concealed by a small red papilla-like elevation. On further examination three ulcers were discovered occupying the whole of the right side, and which were excessively painful. The two side ones were circular in shape, while the central and largest one was more or less elliptical. The whole were touched with nitrate of silver, and an astringent and anodyne suppository ordered.

Aug. 22nd.—Does not feel at all relieved, passes very bad nights, and pain during each motion is excruciating. An operation was accordingly proposed, and after the administration of chloroform, the bottom of each ulcer was divided by a slight incision about an eighth of an inch in depth, a pledget of oiled lint was then introduced, and the patient left quiet. Previous to the operation the bowels were well opened, and for a day or two after were kept quiet. A suppository containing opium was ordered each night, with an occasional dose of castor oil to keep the bowels gently open. Under this treatment she rapidly recovered, and to day, September 12th, a solution of nitrate of silver (20 grs to 1 ounce) was applied, ulcers granulating well.

Sept. 18th.—Solution of nitrate of silver again applied.

October 5th.—Discharged. Cured.

Case 23.—Extensive Acute Abscess of the Abdominal Walls. Reported by Mr. Kenneth L. Gunsolus.

C. J., aged 46, widow, mother of six children, was admitted into the Montreal General Hospital on the 5th August, 1870. She is a stout woman of dark complexion, and with the exception of a severe attack

of dysentery, from which she had just recovered, she has always been very healthy; she never received a blow over the side, or got an injury of any kind, nor has she had any chill or rigors. She attributed her ailment to the kidneys, and did not seem to be aware of the large swelling or tumor on her left side when she entered the Hospital.

August 6th.—She has a very high fever; pulse 128, and there is great heat and dryness of the skin; tongue coated, a circumscribed flush over the malar eminences; urine diminished and high coloured, but discovered nothing abnormal by the usual tests; bowels are constipated; the temperature in the axilla is 104½. She has a large tumor situated on the left side between the floating ribs and crest of the ileum, and extending a little on the crest. In front it extends to a line drawn perpendicularly upwards from the anterior superior spinous process of the ileum, and behind it extends to the margin of the rector spinæ muscle; it is quite prominent, tense and resisting, exceedingly sensitive to the touch; could discern no fluctuation. Dr. MacCallum ordered a large linseed meal poultice to be put on, and pulv. doveri. gr. 5 every three hours; she was also given one pint of chicken broth, beside milk diet.

Aug. 7th.—Much the same as yesterday; pulse 118; did not sleep any last night, but slept a little during the day; tumor very painful and tender; could distinguish no fluctuation; no rigors nor chills; she has headache, but no head symptoms; has sickness of the stomach; the temperature has fallen, being now 104.

August 8th.—Pulse 120; slept very little last night on account of the pain; has not slept any during the day. Dr. MacCallum discovered distinct deep seated fluctuation in the tumor to-day for the first time; tumor is softer than yesterday, but very sensitive, no chills; temperature of surface 104.

August 9th.—Pulse 112; she was put under the influence of chloroform, and Dr. MacCallum made a free opening into the tumor, when there came away ten ounces of creamy laudable pus, slightly streaked with blood, and which relieved her almost instantly. A tent of carbolic oil (1 to 40) was then inserted into the wound, and the linseed poultice again applied. The abscess was situated in the muscular walls; temperature in axilla 102½.

August 10th.—Pulse 100; very little discharge from the abscess; she is generally improved since the abscess was opened and she says that she feels relieved; the tenderness is much lessened.

August 11th.—Pulse 90; perspiring constantly; skin cool and moist; tongue cleaning; bowels regular; vomited once after taking her powder this morning; the flush over the malar eminences has disappeared; the

temperature of the surface is nearly normal, and she rests well at night.

Dr. MacCallum ordered carbolic acid dressing to the wound (1 part carbolic acid to 20 parts of water) to be put on with lint and covered with oiled silk.

August 12th.—Condition about the same as yesterday, very little discharge, and no sign of further formation of pus; was injected with carbolic acid (1 part acid to 20 of water) and afterwards dressed with the lotion same strength; was ordered the following: ℞ quinin sulph. grs. xij. acidi sulph. arom ℥ j. aquæ ad. ℥ vj. a table spoonful three times a day.

August 15th.—Discharge less, the wound is looking healthier and the abscess is becoming more circumscribed; injection of carbolic acid continued; temperature of surface 97½.

August 19th.—Sleeps well; no pain; very little discharge, was ordered a compress over the abscess; beef steak and 4 oz. wine.

August 24th.—Well. Discharge ceased and opening closed.

Case 24.—Extensive Anthrax, involving the whole of the posterior surface of the neck. Reported by Mr. JOHN A. REID.

Patrick W., æt. 68, labourer, was admitted into the Montreal General Hospital, on September 5th, 1870, suffering from a very large carbuncle.

He states that about three weeks previous to his entering the hospital he suffered great pain in the neck, caused, as he says by a small boil, which made all the muscles of the back of the neck very stiff.

On admission the patient had a very large anthrax on the back of the neck, extending from the posterior occipital protruberance to the vertebra prominens in a vertical position, and latterly from the mastoid process of the temporal bone on one side to the same part on the other. The surface of the anthrax was studded with numerous holes, from which a quantity of unhealthy pus exuded. On seeing the patient Dr. MacCallum immediately placed him under the influence of chloroform, and made a deep crucial incision from the extreme limits of the diseased part down to the fascia; a poultice of linseed meal was ordered to be put on the part; he was ordered full diet, and 6 oz whisky, and as constitutional treatment the following:—℞. quin. sulph. gr j. tinct. ferri. mur. m. xv. aquæ. ad. ℥ ii. to be taken three times daily.

Sept. 7th.—Suffered great pain, and complained of not having slept during the night, the linseed meal poultice was ordered to be changed and to put one of yeast in its place, and a sleeping draught of chloral hydrat grs. xx at bed time.

Sept. 8th.—Patient passed a much more comfortable night; the application of poultices was ordered to be continued, and the chloral hydrat to be given at night. This treatment was continued without much interruption for three consecutive days, the patient also taking the quinine and iron as before.

Sept. 12th.—The slough seemed to be coming away so slowly, that Dr. MacCallum thought it advisable to apply caustic potash to the part; and the patient being placed partly under the influence of chloroform, the caustic was thoroughly applied and large poultices of linseed meal were ordered to be frequently applied, and the part to be well cleansed with warm water.

On the 14th, a great deal of the slough had come away, but patient was suffering severe pain, and the pulse at the wrist was small and quick; a draught of chloral hydrat xx grs. was given to him at bed time, and as extra he had a pint and a half of ale with full diet and his allowance of whiskey; a local application of carbolic ointment spread on the poultice was applied: the patient gradually got better; the sloughs came away, and the wound was soon studded with healthy granulations.

On the 20th September, he was discharged nearly well, and was ordered to come as an out door patient, to have his neck dressed. I saw the patient sometime after in the out-door room, the wound on back of the neck was quite healed, and the patient only complained of stiffness in the muscles of his neck.

Case 25.—Typhoid Fever with Bronchitic complication, Delirium, &c.
Reported by Mr. Wm. G. Ross.

James G., aged 14, emigrant, admitted 20th August, 1870.

Previous History—Has been ill two weeks; during the first he had severe and continuous diarrhœa; during the second his bowels were constipated; he was hot and feverish, and felt very giddy when he attempted to walk.

Symptoms on admission. Skin very hot and dry; cheeks flushed; pupils dilated; seven or eight bright rose spots on the chest and abdomen; tongue thickly furred; complains of great thirst. Dr. MacCallum ordered mist. potas. chlor. (M. G. H.) ʒ ij. every four hours; milk diet and one pint of milk extra. Morning. Temperature 103½; pulse 114. Evening: temperature 104; pulse 112.

August 21st.—The abdominal walls have become tense; the bowels are confined and give out a tympanitic note on percussion, and there are well marked gurgling and tenderness on pressure in the right iliac fossa;

the tongue is covered with a thick, yellowish fur; in addition to the chlorate of potash mixture he was given the following: ℞ spts. terebinth ʒj. ov. vitell. j. spts. æther chlor. ʒjss. aquæ. ad- ℥viij. a tablespoonful three times a day. Morning: temperature 103, pulse 106.

August 22nd.—Complains of a slight dry cough; the inspiration is wheezing, the chest everywhere resonant. On applying the ear, inspiration whistling, expiration has a prolonged sonorous ronchus; vesicular murmur nowhere heard; no expectoration. A turpentine stupe was ordered to be applied to the chest once a day. Morning temperature 103; pulse 106; respirations 45; evening temperature 104; pulse 106.

August 23rd, 24th, 25th.—General condition the same as on the 22nd; the bowels are constipated, there having been two small and hard motions; large eruption of spots on the back; the temperature has gradually risen half a degree morning and evening, so that on the night of the 25th it was 104½, the pulse 104, and the respirations 50. Examination of the urine: cloudy appearance cleared by a drop of nitric acid; acid-reaction; chlorides deficient; no albumen or uro-hematine.

August 26th.—A few moist râles heard in different situations; tongue thickly furred in the centre; tip and edges red; bowels very tympanitic; gurgling plainly heard. Morning temperature 104; pulse 108; respirations 44; evening temperature 105; pulse 114; respiration 44.

August 27th.—Cough very troublesome with expectoration of frothy mucus; moist râles heard all over the chest; a few fresh spots on the abdomen; lips dry; sordes on the teeth and centre of the tongue, the tip and edges of which are red, the papillæ appearing larger; sleeps a great deal; tossing about and muttering; when awake is quite delirious; a pint of chicken broth was added to his diet. Morning: temperature 103; pulse 112; respiration 54. Evening temperature 104½; pulse 120.

28th, 29th, 30th.—During these three days the râles became moister; the expectoration greater; the *delirium* was constantly present, also the muttering and restlessness during sleep; the tongue was dry, with a thick brown fur in the centre; the lips brown and fissured; the bowels constipated, one hard stool having been passed after the lapse of a week; tympanitis, gurgling and tenderness on pressure always marked; the pupils continue dilated; a few fresh spots appeared. To mist. potas. chlor. was added spts. æth. chlor. and ipecac; he was ordered 4 ozs. of claret daily. The morning temperature ranged between 103½ and 103; the evening between 104 and 103½; the pulse from 116 to 102, and the respirations from 42 to 60.

31 Aug., 1st and 2nd Sept.—The râles are very moist; the tongue is dry but gradually clearing off; the bowels confined; the face appears a little

brighter; he is still delirious; the morning temperature was between 102 and 102½; the evening between 102½ and 103; the pulse from 92 to 106 and the respirations from 44 to 50. Examination of urine: clear, normal colour, acid reaction; chlorides deficient; uro-hematine in small quantity; no albumen, sp. gr. 1011.

From 3rd to 9th Sept.—During this week the râles rapidly decreased, so that on the 9th none could anywhere be detected; the vesicular murmur re-appeared, the inspiration being harsh: the stupes discontinued; the tongue became cleaner every day, but was sometimes dry, sometimes moist, and fissures began to appear in it extending obliquely outwards from the centre; it finally became of a deep red colour; he had two stools of a clay colour, natural in consistence and quantity; no fresh spots; skin desquamating in very small scales; the delirium is quieter and he sleeps well, without muttering and moving about; tympanitis, gurgling and tenderness on pressure being no longer perceptible, the mist. terebinth. is stopped. The morning temperature was from 99½ to 102½; the evening from 103 to 104½, 104½ being the degree for the last two nights; the pulse varied greatly being between 80 and 106; the respirations between 28 and 50.

From 10th to 28th, the day of his discharge, the boy kept improving, without the slightest tendency to relapse. On the night of the 10th he had a rigor followed by profuse sweating, being the first time the skin had acted sensibly since his admission; it afterwards became dry and continued so; the tongue was usually moist and clean, but sometimes slightly furred; less frequently dry; his bowels were moved every three days, the motion being of natural form and consistence, and at last of a normal colour; on the 12th the chlorate of potash mixture was stopped and he was put on quinine sulph gr. j. three times a day. His diet was changed as he improved, rice pudding, eggs and mutton chop being added; the variation in the temperature was slight, although the heat kept up to 100; the pulse remained very quick, being usually 112; the respirations dwindled from 50 to 20; the pupils were dilated throughout. He became coherent by degrees and walked about the hospital five days before his discharge, although his understanding was by no means clear.

Case 26.—*Typhoid Fever, with Bronchitic complication, Epistaxis, restless delirium, &c.* Reported by Mr. HENRY WRIGHT.

Mrs. C., *æt.* 22, admitted into the Montreal General Hospital, on Sunday, August 28th, 1870. Ill three weeks previous to admittance, and during that time, has been under proper medical treatment. At the

commencement of the attack suffered from headache, and has been up to this time unable long to retain anything on her stomach.

Sunday, 11 a.m.—Countenance flushed; pupils dilated; skin hot and dry; tongue parched and cracked in the centre, moist at the edges typhoid spots distinct on the back, chest and abdomen: tenderness in the iliac region of the abdomen: has had diarrhœa for some time; stools watery and rather dark. Is also suffering from slight attack of bronchitis; rales heard over the upper part of the chest; the lower and back part of the right lung is congested; temperature 103; pulse 128; respiration 38. Dr. MacCallum ordered turpentine stupes to the chest, and prescribed ℞, potas. chlor. grs. v.; acid hydrochl. dil. m x.: æther chlor. m x. vin. ipecac. m v., to be taken every four hours; milk diet with arrowroot and barley water. 6 p.m. Temperature 102½; pulse 128; respiration 38; bowels moved twice through the day.

August 29th, 10.30 a.m.—Temprature 104; pulse 128; respiration 38; tongue cleaner and moister; had three motions through the night; can distinguish no râles this morning; breathing simply exaggerated. 7·30 p.m. Temperature 102½; pulse 136; respiration 38; two motions to day.

August 30th, 10·30 a.m.—Temperature 103½; pulse 136; respiration 38; 7·30 p. m., temperature 103: pulse 126; respiration 34; found her quite delirious this evening, restless and attempting to get out of bed; skin slightly moist: respiration same as yesterday.

August 31st, 10·30.—Temperature 103½; pulse 132; respiration 42; had severe epistaxis yesterday and this morning; delirium through the night: tongue and skin moist: one motion from the bowels this morning.

August 31st, 6 p.m.—Temperature 102½; pulse 130; respiration 42: delirious through the day; slight epistaxis; no motion from the bowels; face pale; pulse weak and fluttering; heart sounds rapid, almost the 1st as short as the 2nd: grs. iij. of plmub. acet. in solution were ordered to be taken every four hours; other medicine stopped; beef tea and claret as extras.

Sept. 1st, 10 a.m.—Temperature 99; pulse 140 and very feeble; respiration 38; still delirious; walked about the room during the night; pupils dilated, and her appearance is wild and restless; had another attack of epistaxis through the night; skin cooler and moister; ordered ℥iv. of sherry instead of claret. Examined her urine to day and found it scanty and high colored, sp. gr. 1030, contained a considerable amount of albumen; chlorides normal. 7·30 p.m. Temperature 103; pulse 144; had a short sleep this afternoon and seems a little better this evening: tongue moist and cleaner: skin also moist.

Sept. 2nd, 10 a.m.—Temperature 102; pulse 148 and flickering; respiration 44; delirious through the night, walked about the ward; face pale; tongue glazed; skin moist. This morning, is very restless and picks the bed clothes; stopped the plumb. acet. and prescribed ℞. acid. sulph. arom. m. x. tinct valer. ammon. ʒ ss. to be taken every fourth hour. 7 p.m. Being asleep was not disturbed.

Sept. 3rd, 11 a.m.—Temperature 103½; pulse 140 and fuller; respiration 44; looks a little better this morning, slept well through the night; pupils not so much dilated; tongue glazed and fissured; abdomen tympanitic; ordered turpentine stupes: 7·30 p.m. Temperature 103½ pulse 140; respiration 42; skin very hot and dry: is taking sherry ℥ vi. and claret ℥ iv. daily.

Sept. 4th, 10 a.m.—Temperature 103½; pulse 130; respiration 38; tongue dry, not so much glazed as yesterday; slept pretty well through the night; still delirious: 7 p.m. Temperature 103½; pulse 130; respiration 42; bowels moved six times during the day.

Sept. 5th, 10 a.m.—Temperature 102; pulse 136; respiration 42; tongue dry and fissured at the tip, glazed at the back; surface cool and moist; was very restless through the night, making frequent attempts to get up. 7 p.m. Temperature 102½; pulse 134; respiration 48.

Sept 6th, 10 a.m.—Temperature 103½; pulse 140 and full; respiration 44; rested a little last night; tongue has lost its glazed appearance and is moist at the tip and edges; still delirious: bowels moved once this morning; face pale, and skin moist, brandy ordered instead of wine. 7·30 p.m. Temperature 100½; pulse 144; respiration 50; surface warm and moist.

Sept. 7th, 10 a.m.—Temperature 103; pulse 144; respiration 35; slept about two hours last night, poultices applied to the abdomen. 8 p.m. Temperature 101½; pulse 130 and weak; respiration 40; slept a good deal through the day; tongue and skin dry.

Sept. 8th, 10 a.m.—Temperature 101½; pulse 138, stronger and fuller; respiration 32; better this morning; passed a pretty good night; tongue moist at the edge, general appearance improved. 7·30 p.m. Temperature 100½; pulse 134; respiration 34; looks better, tongue moister.

Sept. 9th, 10 a.m.—Temperature 100; pulse 125; respiration 34; slept about four hours last night; tongue cleaner and moister. 6 p.m. Temperature 100; pulse 125; respiration 34.

Sept. 10th, 11 a.m.—Temperature 100; pulse 126; respiration 38; one motion from her bowels this morning; coughs a little this morning; bronchial râles can again be heard over the chest. 6 p.m. Temperature 102¼, pulse 136, respiration 40; slept through the day.

Sept. 11th, 10 a.m.—Temperature 100; pulse 126; respiration 36; tongue moister; very restless.

Sept. 12th, 10 a.m.—Temperature 98½; pulse 120; respiration 28; slept well; tongue much moister; general appearance greatly improved: 7 p.m. Temperature 101; pulse 124; respiration 36.

Sept. 13th—Temperature 99½; pulse 116; respiration 32; tongue moist; slept well. 6 p.m. Temperature 101½; pulse 126; respiration 34.

Sept. 14th, 10 a.m.—Temperature 98; pulse 128; respiration 36; tongue almost natural: no bronchitic râles heard over the chest; breathing exaggerated: 6 p.m. Temperature 99; pulse 126; respiration 32, and very tranquil.

Sept. 15th, 10 a.m.—Temperature 97¾; pulse 104; respiration 24; greatly improved.

Sept. 16th, 10 a.m. Temperature 98½; pulse 110; respiration 23; tongue moist and clean: 7 p.m. Temperature 98; pulse 112; respiration 24.

Sept. 17th, 10 a.m.—Temperature 98¼; pulse 106; respiration 20; bowels regular; tongue continues clean: 6 p.m. Temperature 97½; pulse 100; respiration 24.

Sept. 18th—Temperature 98; pulse 100; respiration 24; tongue clean.

Sept. 19th, 10 a.m.—Temperature 97¼; pulse 90; respiration 20; looks well; tongue clean; is gaining strength rapidly; appetite improving; is able to sit up for a couple of hours every day; pulse is full and steady; the respiration is tranquil and the temperature natural.

Sept. 24—Is up and dressed, looks well, is taking ½ gr. doses of quinine every four hours; on half diet.

During the diarrhœa examined the stools twice; did not succeed in finding any mucus shreads.

Case 27.—*Typhoid Fever.* Reported by Mr. ZOTIQUE HEBERT.

Ann C., æt. 17, was admitted into the Montreal General Hospital, under Dr. MacCallum, on the 29th August, 1870. She had been ill for about a fortnight previous to admission, suffering from severe headache, chilliness, drowsiness, lassitude, &c. These were followed in a week by profuse perspirations, pains in the back and limbs, restlessness at night, hot skin, dry tongue, great thirst and slight cough.

On admission the above symptoms were noticeable, together with a number of rose-colored, slightly-raised spots over the abdomen and back of chest, slight uneasiness and pain on pressure over the right iliac fossa, increased thirst, tongue coated, red at tip and edge, lips and teeth covered

with sordes, pulse 120, respiration 33, temperature 105½. No diarrhœa or epistaxis.

August 30th, 8 o'clock, a. m.—Pulse 118, respiration 32, temperature 105, bowels unopened. Ordered the following:—Potas. chlor. ʒ i., acid hydrochl. ʒ ij., ether chlor. ʒ ij., vin ipecac. ʒ i., aquæ ad ℥ vj., a tablespoonful every fourth hour. Diet of milk and beef tea.

6 p. m.—Pulse 120, temperature 106, condition otherwise unaltered.

August 31st, 7.30 a. m.—Pulse 108, temperature 103½, respiration 29; feels better, coughs less, tongue cleaner, bowels still unmoved.

6 p. m.—Pulse 116, temp. 104½.

September 1st, 7.30 a. m.—Pulse 104, temp. 103½, resp. 24; tongue moister, slept well, gurgling in iliac fossa decreased, no epistaxis, no stool.

6 p. m.—Pulse 108, temp. 105.

September 2nd, 7.30 a. m.—Pulse 110, temp. 103; slept indifferently, cough better, no pain, looks more cheerful.

7 p. m.—Pulse 110, temp. 104; tongue more coated than in the morning, slight pain in iliac fossa on pressure, no stool, less cough.

September 3rd, 7.45 a. m.—Pulse 98, temp. 100½; tongue cleaner, cough prevented sleep, great sense of lassitude, bowels opened thrice during night, colour of stools characteristic, of a yellow-ochre hue. Ordered pulv. cretæ co. c. opio gr. x every 4 hours.

8 p. m.—Pulse 100, temp. 103½; bowels unopened during the day, considerable cough and headache, tongue red but moist, pains in back and limbs.

September 4, 8 a. m.—Pulse 100, temp. 101; no stool during the night, not so much cough, no headache, tongue rather drier, some pain in the back. Omit powders.

7 p. m.—Pulse 110, temp. 103; pain over liver and in right shoulder; vomited in the forenoon and afternoon, but kept down the beef tea. Is better at present.

September 5, 7.30 a.m.—Pulse 98, temp. 101; tongue dry in centre but moist at sides; no diarrhœa, but cough continues.

7 p. m.—Pulse 103, temp. 104; tongue moister, no headache, cough troublesome, not much thirst, spots nearly all away and fading fast, slight pain still over the iliac fossa.

Sept. 6, 8 a. m.—Pulse 88, temp. 100; no pain, no headache, no motion from bowels.

7.30 p. m.—Pulse 108, temp. 103.

September 7, 8 a. m.—Pulse 84, temp. 98½; slept well, tongue moist, coughs less, no headache, bowels still confined.

8 p. m.—Pulse 90, temp. 102½; patient feels still better.

September 8, noon.—Pulse 114, temp. 101; not so well, cough worse, a few bronchitic sounds heard over both lungs, tongue dry and red, did not sleep so well during the night.

7 p. m.—Pulse 108, temp. 104½; experienced two or three slight chills during the day, tingling pain and gurgling in right iliac fossa.

September 9th, 8 a. m.—Pulse 100, temp. 100½; tongue coated, bowels confined, lips dry, slept well; no change in treatment.

September 12th.—No change noticeable for the past three days. Pulse to-day is 98, temp. 101½; patient still weak; tongue cleaning. In the evening there was the usual exacerbation of temperature, being at 7 p. m., 102.

September 15th.—Pulse and temperature normal for the past two days, with an occasional exacerbation towards evening. The treatment from the first has been unchanged till to-day. Dr. MacCullum substituted for the fever mixture, Quin. sulph. gr. ij. ter in die.

September 18th.—Patient has been allowed to sit up for a short time during the day. Bowels are now regularly moved; pulse on an average 84; temperature from 88 to 99½ in the evening; tongue almost clean; patient still weak and easily fatigued; sleeps well at night, and is allowed small quantities of solid food.

September 24th.—Patient is gaining strength and appetite rapidly. She sits up now nearly all day without fatigue, and expresses herself anxious to leave the hospital. An order is given for her discharge.

Case 28.—*Typhoid Fever.* Reported by Mr. T. D. REED.

E. N., male, aged 12, admitted September 1st. Had been complaining of lassitude and malaise for more than a week; no rigors. On admission the following were noted, dilated pupils; iliac gurgling; several rose spots on back; temperature 102 Fah; pulse 92; belly somewhat tympanitic; had passed a peasoup stool during the day. Dr. MacCallum put him on chlorate of potas. fever mixture; milk diet and a pint of beef-tea.

September 3rd.—Temperature 101; respiration 24; pulse 76.

September 4th.—Morning temperature 99·6; pulse 80; respiration 24; two stools since last visit; rested well; abdomen not tender; tongue red at tip and edges, creamy fur in centre; appetite good; no headache; thirsty. Evening temperature 103; pulse 109; respiration 32.

September 5th.—Morning temperature 100·5; pulse 80; respiration 32; feels better; rested well last night; stool; urine acid, sp. gr. 1017;

chlorides diminished; to get one pint of beef tea extra. Evening temperature 102·6; pulse 100; respiration 24.

September 6th.—Morning temperature 99·6; pulse 92; respirations 28; had a good night; one stool; abdomen tense; tongue moist; Evening temperature 102; pulse 108; respiration 32.

September 7th.—Morning temperature 99·5; pulse 84; respiration 28. Evening temperature 101; pulse 100; respiration 28.

September 8th.—Morning temperature 99; pulse 84; respiration 24; rested well; one stool; improvement in every respect, except tenseness of abdomen; spots fading. Evening temperature 102·6; pulse 100; respiration 28.

September 9th—Morning temperature 98·3; pulse 76; respirations 28; slept well; two stools; perspiring. Evening temperature 102·3; pulse 100; respiration 28.

September 10.—Morning temperature 98·5; pulse 72; respiration 28; slept well; one stool; skin moist. Evening temperature 100·7; pulse 76; respiration 28.

September 11th.—Morning temperature 98; pulse 70; respiration 24; slept well; one stool. Evening temperature 99·5; pulse 72; respiration 28; urine sp. gr 1020.

September 12.—Morning temperature 98·5; pulse 70; respiration 28. Evening temperature 99·8; pulse 88; respiration 28.

September 13.—Morning temperature 98; pulse 84; respirations 24; Evening temperature 99·2; pulse 92; respiration 20; one stool; walks around the ward.

September 14th.—Morning temperature 98·2; pulse 72; respiration 28. Evening temperature 99·5; pulse 88; respiration 24.

September 15th.—Morning temperature 98·5; pulse 96; respiration 24. Evening temperature 99·5; pulse 84; respiration 24; feels quite well.

Case 29.—*Typhoid Fever with Roseolous Rash.* Reported by Mr. J. A. Reid.

James McKeogh, aged 21, native of Ireland, was admitted into the Montreal General Hospital, under Dr. MacCallum, on the 4th of August, 1870. When first seen symptoms indicated fever, with quick pulse; great heat of skin; mouth parched; great thirst; pupils dilated; face flushed; tongue dry and red; pulse 92; temperature 103; slight gurgling in right iliac fossa; a few rose coloured spots over abdomen and back of chest.

History.—Patient is an emigrant, arrived in this country some weeks ago. Four days before admission was attacked with headache, vertigo,

languor, pains in the limbs, &c., but had evidently not been well for some days previous. This condition continued up to his admission. The spots characteristic of typhoid fever, immediately decided the diagnosis.

Treatment.—He was put on the following mixture: potas. chlor. ʒ ij. acid hydrochl. ʒ j. vin ipecac ʒ ij. syr. zingib ℥ j. aquæ ad ℥ vj., a tablespoonful every four hours; also milk diet and beef tea.

August 6th.—Patient slept well during night; skin hot and perspiring; bowels constipated; pulse 90; temperature 101; treatment continued.

August 7.—Pulse 120; temperature 102½; did not sleep well; slight cough; tongue coated on posterior part and around the edges, tip red and dry; bowels still constipated; rash still apparent; to continue treatment.

August 8th.—Patient looks better; pulse 100; temperature 102; treatment as before.

August 9th.—Did not sleep so well, restless; perspires freely; complains of slight pain in bowels, for which he was ordered a turpentine stupe; pulse 96; temperature 100.

August 10th.—Patient has a peculiar vacant look; wandering through the night; very drowsy; pulse 92; temperature 101½; there was a peculiar mottling of the skin, which resembled very much the eruption of measles, rash quite disappeared; sudamina present; treatment as before.

August 11th.—Looks more cheerful; the whole chest and neck and arms are covered with sudamina; pulse 84; temperature 100; slept well; tongue coated and dry; great thirst.

August 12th.—Much better; pulse 80; temperature 100; tongue cleaning.

August 13th.—Very much better; pronounced convalescent; temperature 100; pulse 76; tongue moist and cleaning from the edges.

August 14th.—Still improving; ordered one pint beef tea additional:

August 15th.—Temperature 98; pulse 80; tongue moist and clean; looks very much better; appetite improving, &c.

August 16th.—The same as yesterday: was up for a short time; temperature normal; pulse 86; due no doubt to the excitement consequent on getting up.

August 17th.—Up to day, quite cheerful.

August 28th.—From this date up to August 29th, the day of his discharge from the hospital, patient has been rapidly improving, he has been up every day, and occasionally takes a walk on the gallery in rear of the building. In this case of typhoid fever, patient had no diarrhœa from the very first; at one time only his bowels threatened to

be loose, but this was obviated by a few grains of pulv. cretæ. co c. opio.; the constipation was never treated but disappeared as patient improved.

August 29th.—Patient was discharged from the hospital in apparent good health, although a little weak, the necessary sequence of typhoid fever.

Reviews and Notices of Books.

Chemistry, General, Medical and Pharmaceutical, including the Chemistry of the British Pharmacopœia. By JOHN ATTFIELD, Ph.D., F.C.S.; London: John Van Voorst, Paternoster Row, 1869. Montreal: Evans, Mercer & Co.

The above is the title of a book received from Messrs. Evans, Mercer & Co., which has been published by Dr. Attfield, to supply a want of the medical practitioner, the pharmaceutist and the general student in chemistry; it is well written, and in every way fulfils the intention of the author. It embraces the new system of nomenclature which it explains in a manner easily comprehended by any one with a little attention and thought. It is supplied with the tables of Fregenius, which are expressed in a short intelligible form, wherein the reactions may be seen at a glance, also the decompositions and chemical changes which occur in the various preparations are copiously illustrated with diagrams and equations; it gives both synthetical and analytical reactions, and at the end of each chapter is a series of questions and exercises by answering which any one cannot fail to obtain a good knowledge of the subject of which it treats. It gives an excellent section to volumetric analysis. In the appendices are tables for the testing of impurities in the preparations of the British pharmacopœia and of saturation of acids and alkalis, also of specific gravities and percentages of acid and alkalis in solution and of alcohol, with lists of apparatus and reagents required in chemical analysis.

There is a section devoted to toxicology and another on morbid urine; illustrated with drawings of microscopic appearances and urinary calculus with the methods of examination; there is also a copious index, so that it is, and we can strongly recommend it as, a most complete manual of chemistry, alike useful to the physician and pharmaceutist.

Surgery.

THE DIAGNOSIS OF ANEURISM.

A clinical lecture on this subject, delivered by Mr. Paget, F.R.S., is given in the *British Medical Journal.*

In speaking of the diagnosis of abdominal aneurisms, Mr. Paget said that the difficulty in these cases was twofold; for, *first*, there were many pulsating tumors not aneurisms, and, *secondly*, aneurisms were occasionally met with which, at the time of examination, did not pulsate. In the case under consideration, the second source of error did not interfere, for the tumour pulsated strongly. The pulsating tumours from which aneurism was to be distinguished, were arranged under the heads of *medullary cancer, arterial vascular tumors, tumors growing from bone,* and *enlarged lymphatic glands,* or any other tumour seated upon or around a large artery; and the following points were insisted upon as furnishing, collectively or singly, the means for arriving at a correct conclusion. The *character* of the pulsation: the pulsation of an aneurism was described as "firm, full, and strong," while that produced by any of the other pulsating tumors was said to be weak and soft. Mr. Paget laid great stress on this difference, and considered it a most important aid to diagnosis. The *direction* of the pulsation: the "expanding pulsation" of an aneurism was to be carefully distinguished from the merely "forward push or throb" communicated to the fingers by a tumor seated on an artery; if a tumor, such as a mass of enlarged glands, however, *surrounded* an arterial trunk, Mr. Paget considered that it might be quite impossible to determine whether an aneurism existed or not, for the pulsation in such a case would be truly expanding in all directions. *Pain* of a "rending" character, and coming on in paroxysms, was mentioned as a valuable sign of aneurism, and probably denoted the occurrence of rapid increase in size. The existence of a *loud rasping bruit* over the tumor and along the artery above and below was said to be a symptom of some value when present, although its absence, as in the patient under consideration, by no means negatived the existence of aneurism, for a soft *bruit* was heard in many cases of vascular tumor.

Mr. Paget alluded to another class of cases in which the diagnosis of abdominal aneurism was sometimes made, and in which there was not only no aneurism, but no tumor of any kind. In some persons, a large artery, generally the abdominal aorta, pulsated very strongly; and it was this strong pulsation of a healthy vessel that was mistaken for aneurism. It occurred, Mr. Paget observed, chiefly in hysterical women, or nervous

men; sometimes in association with pains in the back, which render the resemblance to aneurism still closer; or in persons in whom the bodies of the lumbar vertebræ were unusually prominent, the head of the pancreas enlarged, or the colon distended; and, lastly, a certain number of cases were found to be connected with incessant nausea and vomiting in nervous people—a case being mentioned of a woman who was supposed by several observers to be the subject of abdominal aneurism. She was suffering from excessive and continued sea-sickness, and, in fact, died of exhaustion from this cause; and Mr. Paget had an opportunity of confirming his previous opinion, that no aneurism existed. The absence of the lateral or expanding pulsation in these cases of excessive arterial pulsation was mentioned and insisted on. The lecturer alluded to one case in which a phantom tumor of the rectus abdominis muscle was superadded to a pulsating aorta. In this instance, the diagnosis was at length made by placing the patient under chloroform, when the tumor disappeared completely.

Mr. Paget added that the same state of excessive pulsation was sometimes noticed in other arteries, especially the subclavian and the carotid. If the patient happened to possess a cervical rib, over which the pulsation subclavian passed, as in a case lately under Mr. Paget's care, the resemblance to aneurism might be very close. The simulation of carotid aneurism was said to be most deceptive when the internal carotid was elongated and tortuous in old persons, and when the naturally somewhat bulbous condition of the lower part of this vessel was more than usually marked.

Medicine.

STRYCHNIA IN FATTY DEGENERATION OF THE HEART.

By J. Waring-Curran, L.K. & Q.C.P.I., L.R.C.S.I., &c.

During the summer months cases of heart disease appear more frequently and impart the impression that affections of this important organ, by their greater prevalence and the urgency of their symptoms at particular times, are influenced or controlled by the state of the atmosphere in a great measure. In the district in which I reside patients who laboured under fatty degeneration seemed to suffer in a very marked degree during the months of July and August of last year. The majority of those patients whose malady I successfully battled against by a treatment to be presently explained, passed through the winter remarkably well, and did not evince any return of the distressing symp-

toms so characteristic of this form of heart disease until the end of June, Wednesday the twenty-second being one of the hottest days since the hot period of last July. In treating cases of fatty heart accompanied by all the pathognomic symptoms of the disease. I have hitherto experienced much uncertainty, and, in many instances, vexatious disappointment. My attention was first accidentally directed to the great value of strychnia as a therapeutic agent in this malady by my prescribing it for a lady who suffered from a non-inflammatory affection of the spinal cord, and who, at the same time, possessed a fatty heart. Under the action of a mixture whose chief components were liquor strychnia and iodide of ammonium—a drug I have elsewhere shown to be more powerful in its effect, and more strikingly efficacious than the iodide of potassium—I was struck with the effect produced upon the heart, and the rapid manner in which the organ appeared to recover itself after a couple of weeks treatment. I was strongly tempted to push my experiments further, and during the hot months of last summer I had ample opportunity of so doing, and of thoroughly satisfying myself that the strychnia produced a more marked and more beneficial effect than on any other drug hitherto prescribed by me. Under its influence I noticed patients rally and obtain quiet sleep, who dreaded lying on the back, and I observed severe forms of dyspnœa pass off, and sharp attacks of angina subside from its use. The preparation I invariably used, and continue to employ, was the liquor strychnia. I commenced with four grain doses equivalent to the one-thirtieth of a grain, steadily increasing it until I gave what was equal to one-tenth of a grain, together with two grain doses of the iodide of ammonium, a small quantity of spirits of chloroform and camphor julep as a vehicle. In some cases I was forced to forego the administration of the drug (owing to the supervention of muscular twitchings, but, very curious to mark, the twitchings commenced about the pericardial region, and in one instance confined themselves to the left arm), and substitute the citrate of iron and ammonia for a few days instead. I also recommend the iodide of ammonium to be freely rubbed in over the heart in the form of cerate. Should there be fainting attacks I advise small quantities of brandy or sal volatile, but I have ever remarked, once the powerfully stimulating effects upon the muscular system of the strychnine manifests itself, that syncope and cardiac distress pass off. Some authors tell us that strychnine produces paralysis of the heart: an over dose of the drug may have such an effect; but my experience is, that, by its operation on the whole system through the medium of the spinal motor nerves, it produces a powerful tonic effect in certain debilitated conditions of the system, and that in no disease

is this more readily appreciable than in fatty degeneration of the heart, wherein it acts very powerfully in giving tone to, and increasing in a marked manner, the muscular contraction of this organ. My object in combining with the strychnia the iodide of ammonium was that it might act as an alterative and absorbent.—*Dublin Medical Press and Circular.*

Midwifery.

Injection of Solution of Perchloride of Iron in Post Partum Hemorrhage. By Wm. Roe, M.D., F.R.C.S.I., Assistant Master, Coombe Lying-in Hospital.

Mr. President,—I wish briefly to bring before the Obstetrical Society the treatment of post partum hemorrhage by "Injection of a solution of perchloride of iron into the cavity of the uterus." I do not, however, intend to enter into the literature of the subject (which is as yet rather limited), by detailing the various arguments which have been brought forward both in favour of and against this practice. This will be found ably discussed in Dr. Barns' "Lectures on Obstetric Operations."

The importance of the subject is, I trust, sufficient apology for occupying the time of this Society; for every obstetric practitioner knows that there is no more anxious time than that of attending a case where we even dread post partum hemorrhage, not to speak of the reality of its occurrence. I will now lay before the Society the short notes of the three cases in which I have adopted this practice, and where I believe it has been the means of saving human life. It was not tried until other means had been found insufficient, and the lives of the patients appeared to be standing in the balance, and where, I believe, the loss of another ounce of blood would have been sufficient to bring down the beam.

Case I.—Ann Coleman, aged thirty-five, fourth pregnancy, was delivered on the 18th January, 1870. She had a good labor, the first stage lasting four hours, and the second stage two hours. After the birth of the child, profuse hemorrhage set in. The pupil in charge of the case sent immediately to the Hospital where I happened to be, and lost no time in seeing her. She was then pulseless, and the hemorrhage still going on. Stimulants were at once administered, and the placenta, which was morbidly adherent, was removed; the hemorrhage still went on, the usual remedies, cold water, &c., not having any effect in controlling it. I then, seeing it a case of life or death, determined to try the perchloride of iron (which I had never before seen used), and having at hand a concentrated solution of the salt in glycerine, I diluted it with about four

parts of water, and injected about half a pint of the fluid into the cavity of the uterus, and was gratified to find that the hemorrhage immediately ceased. Not another drop of blood was lost. Although the contraction was not all that could be desired, because the uterus kept alternate y c n-tracting and relaxing, the vessels, however, were sealed, for she lost no more blood. She remained in a very doubtful condition for some time, the pulse being scarcely perceptible for six hours after the removal of the placenta, beef-tea and stimulants being freely administered at short intervals.

She was now seen by Drs. Kidd and M'Donnell, with a view of trying transfusion; but as there was some slight evidence of her rallying, they thought it better to wait, at all events.

I will not tire you with the daily notes; but in eight hours after the removal of the placenta she commenced steadily to improve, and has since made a good recovery, being now quite convalescent.

I may mention that in March, 1867, this patient was the subject of a similar hemorrhage, from which she made a very slow recovery, but nothing unusual occurred during her pregnancy.

CASE II.—Mary Walshe, aged thirty-three, was taken ill in her tenth confinement on the 21st March, 1870, and was delivered of twins, both male, at the full term, after a labour of about four hours, half an hour elapsing between the births. The first was a breech, the second a head presentation. Immediately after the birth of the second child, profuse hemorrhage set in, which quickly reduced the patient's strength. Stimulants and ergot were administered, but the hemorrhage continued, and the uterus showed no disposition to contract (the usual means being had recourse to). The placenta was now removed together with a quantity of coagula, and a solution of perchloride of iron injected into the cavity of the uterus. The hemorrhage immediately ceased, although the uterine contraction was by no means firm or persistent. This was, however, followed by a most alarming degree of collapse, from which recovery seemed all but hopeless. Beef-tea and stimulants were freely administered, and in a short time her condition began to improve, and she obtained some sleep. On the two following days there was some slight abdominal tenderness, which was relieved by turpentine stupes. In about a week afterwards she complained of pain, soreness, and slight swelling of the right leg, which, however, subsided under the use of hot fomentations, &c., and she has since made a good recovery.

CASE III.—Anne Ivers, aged thirty, in her eighth pregnancy, 62, Lower Clanbrassil-street. The pupils were called to see this patient at two o'clock on the morning of the 2nd of May; she was in charge of a

nurse, and had been delivered of a still-born child before their arrival. The placenta was retained, and alarming hemorrhage going on. I was sent for, and on my arrival found the flooding profuse, the patient pulseless and cold, the temperature being only 94⅗. I ordered some brandy while the solution of the perchloride of iron was preparing. The placenta was morbidly adherent, and on its removal I injected a solution of ½ oz. of perchloride of iron in one pint of water into the cavity of the uterus, in the usual way, which appeared to check the bleeding for some time. However, as the hemorrhage returned, and the patient appeared to be all but gone, I determined to try a strong r solution, and accordingly injected half a pint of a solution double the strength of that I had previously used. It acted like magic. There was no more bleeding. The uterus contracted firmly, the contraction being permanent.

As soon as I felt sure I had a genuine contraction, I had her well bound, applying a small compress over the fundus, and ordered her 15 grs. of ergot every two hours, with half an ounce of brandy, and beef-tea *ad libitum*.

She progressed favorably, the temperature rising one hour after the removal of the placenta to 96⅕.

She took plenty of beef-tea and milk for some days, and is now convalescent.

I have endeavored to give, simply and accurately, the facts of the cases as they occurred. I may, however, mention that I used in the first two cases, a concentrated solution of the perchloride of iron in glycerine, diluted with four parts of water, simply because I had it at hand, and there being no time to lose; but I have since thought the glycerine acted beneficially, by its antiseptic properties upon the decomposing coagulæ, as there was very little fetor in the lochial discharges which followed.

In the third case I used the perchloride of iron diluted with water only, and the fetor was much more remarkable.—*Dublin Quarterly Journal.*

August, 1870.

A CASE OF RUPTURE OF THE UTERUS.

By Thomas F. Moses, M.D., of Glendale, Ohio.

On the 27th of February I was called to attend in labour Mary P. V., a German woman of small, almost dwarfish stature. An examination disclosed a breech presentation, and as the labour was proceeding normally and was likely to be tedious, I went away to return after a few hours. On my arrival in the evening the pains were very frequent and violent,

and there was a constant escape of meconium. The os was fully dilated, and the breech firmly impacted in the pelvis. The woman showed no signs of exhaustion, and the presenting part continued to advance slowly, so interference was not deemed necessary. I was particularly struck with the violence of the pains. All at once, during a pain, he woman uttered a sharp, terrible cry, and complained of intense pain over the lower part of the abdomen. The presenting part immediately receded, and it was evident that rupture of the uterus had occurred. A state approaching syncope supervening, I did not immediately deliver the child, and the friends of the patient sent for a priest, thinking her dying, which opinion I shared. After receiving the last offices at the hands of the priest she revived a little, and requested me to relieve her, if possible, from her agony. I stated to her the small probability of her recovering, and proceeded at once to deliver, passing my hand through the rent in the anterior wall of the womb, and finding the feet in the abdominal cavity I brought them down separately, and soon completed the delivery. Only the lower part of the body of the child had passed into the abdominal cavity. The rent extended from the fundus quite through the os, and communicated with the bladder. After accomplishing the delivery, I introduced my hand again into the womb to make sure that no loop of intestine was entangled in it, and at the same time removed a large clot.

The child, which was a finely-formed boy of more than 12 pounds weight, was of course dead. My only idea now was to make the poor woman as comfortable as possible during the remaining hours of her life, and I administered at once hydrate of chloral in solution, 30 grains, leaving a weaker solution to be given at intervals, in order that its influence might be kept up. Next day found the abdomen enormously distended and tympanitic; pulse 130, and the face pinched and expressive of great exhaustion. Continued the chloral and ordered turpentine stupes over the abdomen. Patient dozed most of time during the day, but was easily roused. The following morning the abdomen was still distended, but less than on the previous day, and the pulse had fallen to 80.

Twenty-four hours later there was a still further improvement, and the abdomen was softer and less painful under pressure. The next day, 72 hours after the delivery of the child, there was such a marked improvement that I considered the patient out of danger, and from that time on she continued to improve so that in three weeks' time she was about her usual avocations.—*Philadelphia Medical and Surgical Reporter.*

Materia Medica and Chemistry.

CHLORAL.

Theory of its action.—The question whether chloral passes through the blood unchanged, or not, is still *sub judice*, and directly opposite opinions are maintained.

M. Personne supports Liebreich's view, and concludes that chloral, on its entry into the blood, is decomposed into formic acid and chloroform, which again is ultimately converted into chloride and formiate of sodium, the final products of its elimination. The odour of the blood conceals that of the chloroform, but he demonstrated its presence by using the process employed in toxicological research for chloroform. Neither chloral nor chloroform could be found in the urine, but the formiate of sodium eliminated in that secretion has the power of reducing the cupro-potassic solution. (*Journ. de Ph. et de Ch.*, Fevr., 1870.) But, on the other side, Dr. A. Gamgee recently delivered an interesting lecture, in which he urges some very strong objections, chemical and physiological, against the probability of Liebreich's hypotheses of the action of chloral being due to the gradual development of chloroform. No doubt, chloral is readily decomposed by free caustic alkalies, but the blood does not contain any of these substances. The alkalinity of the blood is due chiefly to alkaline phosphate of sodium, and probably in part also to bicarbonate of sodium. Now with regard to the first salt, Dr. Gamgee finds, that even when it is heated to boiling point in contact with a solution of chloral, it fails to decompose it, while with regard to the second, it is only after the temperature has been raised above 70°C that chloroform is given off, the evolution becoming extremely free when the liquid is boiled. Moreover, the symptoms which are produced by small doses of chloral, are quite out of proportion with those which we can suppose would be caused by an equivalent quantity of chloroform existing in the system; and, in addition, when we contrast the action of chloroform and chloral, we find evidences of very great differences. For example, in the former instance reflex action is soon abolished; in the latter it appears often heightened, or nearly, if not quite, unimpaired.

Physiological effects.—Dr. J. R. Reynolds relates a case, in which very serious symptoms were produced by 45 to 50 grs. chloral in a middle-aged lady who had previously taken several 10 and 15 gr. doses with benefit. The symptoms came on in an hour, and were mainly those of extreme prostration, an intolerable sense of sinking, gasping, breathing,

and confusion of thought, and weak, irregular, and intermittent pulse. Under suitable treatment the symptoms were relieved, but returned with increased severity in the course of an hour, while the mind wandered, Relief was again obtained by the administration of white of egg, stimulants, fresh air, &c.

Mr. Streatfeild and Dr. Clifford Allbutt, call attention to the fact of the occasional postponement of the effects of chloral for twenty-four hours, as is also the case with morphia hypodermically, and Dr. Maund thinks that its occasional uncertainty of action may be explained by the knowledge, that its influence is resisted by those habituated to the use of alcohol. Mr. Waren Tay in one case observed, that when a stimulant (wine) was administered at the same time as the chloral, the effect of the latter was less marked.

Modes of Administration—Mr. P. Squire states, and others add their testimony, that peppermint water sweetened with syrup of tolu covers the taste of chloral better than anything else. M. Limousin proposes to avoid the unpleasant taste and irritating qualities of chloral by administering it in gelatine capsules or in *dragées*, and a "prescriber" recommends the following form:—Hydrate of chloral ʒ ss.; aq. chlorof. ʒ ii. (sp. chlorof. ?); syr. aurant. (or tolu) ʒ i.—ʒ ii.; tr. zingib. m. vi.—xii.; water to ℥ iss. Sir J. Simpson found that sickness is obviated by taking the chloral with lemon juice.

Therapeutic Uses.—The practical applications of chloral will fall, as before, under the heads of relaxing muscular spasm, of assuaging pain, and as a nervous sedative and hypnotic.

1. *Muscular Spasm.*—Dr. Richardson anticipated good results from ts use in tetanus especially, and it has since been employed in a few cases, Mr. Ballantyne in a traumatic case gave ʒ doses of chloral every four or five hours, with apparently good success, for out of nine cases of traumatic tetanus with which he has met, the only one which recovered was that treated by chloral. Mr. Waren Tay also tried chloral in a severe case of idiopathic tetanus of eight days' standing. Though the issue of the case was fatal on the tenth day after admission, relaxation of the tetanic spasms and the production of calm sleep constantly followed the use of the chloral. The fall of temperature too, as soon as the patient slept, was definite, and remained so as long as she was not roused up. Dr. More Madden is well satisfied with the use of chloral in cases of difficult labour from rigidity of the uteri and soft parts.

2. *Pain.*—Its anodyne virtues seem to be subordinate to its hypnotic powers, and to be less certain in their operation. Smaller repeated doses appear to act more beneficially in this case than a single large dose; ten grs. as often as required may be suitably prescribed. Dr. Swift Walker claims for chloral a marvellous effect in cardialgia with excessive secretion of gastric juice, and also in allaying the sympathetic palpitation of dyspepsia, and Mr. Morgan has also employed it in acute suffering from burns, ulcerated nodes, &c. Dr. Ogle confirms Liebreich's expectations of the value of chloral in the treatment of inflammatory painful affections, such as acute rheumatism, gout, muscular rheumatism, &c.; and Mr. Weedon Cooke is more than satisfied with the excellent results obtained in painful cases of cancer. Sir J. Simpson, Dr. More Madden, and Dr. Brady, attest its use in painful affections of the bladder, and in ovarian pain the happiest effects have followed its use, after morphia and atrophia had been abandoned.

In the eclampsia both of uræmia and of the puerperal state Dr. von Seydewitz checked the convulsions speedily by chloral, after chloroform inhalations and other means had failed, and in puerperal mania and other nervous affections incidental to delivery, a most favorable opinion of its use is entertained by Drs. More Madden, Alexander, A. M. Adams, and others. In a case of acute mania, recurring for the third time, and attended with complete insomnia, twenty-five grs. of chloral were productive of wonderfully good effects in Dr. Crawford's hands; opium and morphia had been previously tried extensively with the result of making the patient worse.

Dr. Tuke has most carefully and searchingly tested the action of chloral in certain cases of insanity, and was invariably satisfied with it in chronic cases of insanity in which violent outbursts of excitement occur. He confirms the possession by it of the various advantages already claimed for it, and "believes it to be the most valuable means of procuring sleep which has yet been introduced into the Pharmacopœia of the asylum physician."—*Dublin Medical Press.*

A NEW IODINE PAINT.

By J. Waring-Curran.

I have been requested by some professional *confrères* to bring under the notice of the profession, a new *iodine paint*, which I have had prepared and used with satisfaction and success, in the cases of glandular enlargements and scrofulous diseases, wherein iodine is called into requi-

sition. In the hands of esteemed and eminent practical surgeons, it has proved equally beneficial as in my own practice, and they speak or write in flattering terms of it to me.

I rub down half-an-ounce of iodine and a like quanity of iodide of ammonium in a Wedgwood mortar, and gradually dissolve it in twenty ounces of rectified spirit; to this I add four ounces of glycerine, shaking the solution well together. A very nice paint is thus obtained, which has the following advantages:—

1. The iodine is prevented escaping owing to the combination which, in the form of ordinary tincture, in warm weather it is very apt to do.

2. It preserves the iodide of ammonium instead of iodide of potassium; the former being a more powerful absorbent than the latter, which recent investigation has verified.

3. The action of the glycerine is soothing to the skin, keeping it soft and pliable, a contrast to the shrivelling of cuticle produced by the ordinary tincture in common use, which frequently acts as a vesicant. But where absorption is desired, the part affected and its neighbourhood influenced, as well as the system generally, by iodine, and no local irritation required, this combination in form of paint will be found superior to the old tincture.

I have not confined the use of the preparation alone to glandular swellings or scrofulous gatherings. I have employed it in chronic cutaneous diseases, to nodes, over enlarged livers, diseased joints, to hypertrophied parts or morbid growths, and in cases wherein it was necessary to alter an abnormal action or promote absorption, and the result was uniformly satisfactory, and I think I may safely say the effect of the iodine was more readily appreciable, and more quickly demonstrated in its action on the system generally, as well as by its absorbent properties locally, than the old tincture of the British Pharmacopœia, *minus* its disadvantages.—*Dublin Medical Press and Circular.*

POISONOUS EFFECTS OF CARBOLIC ACID.

The *Edinburgh Medical Journal* says: Pardeleben found that when externally applied in surgical cases carbolic acid was absorbed and acted poisonously in about one case out of ten. This poisonous action was revealed often so early as the second day by a peculiar effect on the urine which, pale at first, gradually became darker on standing. No albumen was present in the urine, but the patients lost appetite and strength. He

recommends as a substitute the sulphocarbolate of zinc, first employed by Wood. Mr. Lister states that he has never observed the peculiar dark urine since the paste was replaced by the lac plaster.

Dr. J. Wallace applied carbolic oil (1 to 8) to an abscess connected with morbus coxæ, in a child aged five. In about two months time it was remarked that vomiting and dysphagia invariably followed each dressing, and on examining the urine he found it to possess a dark, smoky tint, very similar to the appearance of the urine in bad scarlatinal nephritis. Nitric acid added to the boiling urine threw down a heavy, dark precipitate. No trace of albumen. This deposit of pigment invariably appeared after each dressing with the carbolic acid, and disappeared again in a few days. A fortnight after the above symptoms were noted, he adopted Prof. Lister's most recent method of carbolic dressing by oilskin, coated with dextrine and shell lac, and carbolic acid plaster; matters became more favorable and the urine resumed its normal appearance. (*British Medical Journal*, April 30th). Dr. Lightfoot in the same Journal reports a case in which alarming symptoms resembling those of pyæmic poisoning clearly resulted from the application of a weak aqueous carbolic lotion (1 to 50). The symptoms were developed three successive times when the lotion was employed and gradually subsided on its removal. Vomiting was dangerously severe, so that the patient's life was almost despaired of, but the urine was not darkened in colour. Numerous observers have recently met with cases of poisoning in connexion with the use of carbolic acid, and it is very necessary to observe caution as to the too free external use of this agent. The *black* or darkened urine, which is the most constant symptom, has been shown to occur in an equally marked form, whether tar or some colourless preparation of it be the agent employed. The exact cause of the coloration is still an open question, but it is at least probable that the coloring matter is not derived from the blood. The constitutional disturbance is sometimes very grave, and seems to bear some connection with different forms of solution of carbolic acid, the lac plaster appearing to be the safest, while a weak watery solution, freely used, apparently involves the most risk.

Canada Medical Journal.

MONTREAL, NOVEMBER, 1870.

MEDICAL DEPARTMENT OF VICTORIA COLLEGE.

The winter session of this institution was begun the first week in October. The introductory to the course was given by Professor Berryman, to a large audience, composed of students and the general public, on the evening of the 5th, at the College, Yorkville. The Dean, in introducing the lecturer, referred to the very great services which Dr. Berryman had rendered to the College, having taught for thirteen sessions, and also acted as representative in the Medical Council. The learned gentleman delivered a most interesting and eloquent address on the duties and responsibilities of the medical profession. During its delivery he was frequently applauded, and at the conclusion a vote of thanks was passed, on motion of W. W. Dean, Esq., of Belleville, seconded by Dr. Hodgins, of Toronto.

On Friday evening Dr. Sangster delivered his introductory to the course on chemistry. The lecture was a most able one and gave evidence of very extensive acquaintance with the science of chemistry and its relations to vital operations.

We are glad to learn that the prospects of the College are very encouraging, a larger number of students being present than at the commencement of the previous session; and with the recent additions to the faculty we have every reason to believe that the institution will continue to maintain its high position. The opening of the session was also marked by the annual meeting of the Medical Alumni Association; the meeting was well attended and a number of papers on medical subjects were read and discussed.

The medical graduates residing in Toronto took occasion to entertain the Alumni with a supper, which was given at the Queen's Hotel, on Tuesday evening the 4th instant. Among the guests were the Professors of the Medical Faculty, Dr. Hodgins of the Educational Department, W. W. Dean, Esq., of Belleville, Drs. Tuck and McGuire of Guelph, Corbett of Derrytown, and others. The Dean of the Faculty was requested to preside, and speeches were delivered by a number of the graduates, all expressing a warm interest in the welfare of the College.

Among the toasts of the evening was one to the venerable Dr. Rolph, late Dean of the Faculty; Dr. Canniff was requested to respond, and, in doing so, expressed his sense of the high honour conferred upon him to

respond to this toast. He referred to the many excellencies of the veteran teacher, and stated that the retirement of Dr. Rolph from the position which he had so long held was exceedingly regretted by all his colleagues.

MEDICAL ALUMNI ASSOCIATION OF VICTORIA UNIVERSITY.

The annual meeting was held the first Wednesday in October; the following officers were elected for the ensuing year:—

President—Robert Edmondson, M.D., Brockville. Vice-Presidents—Edward Hornibrook, M.D., Mitchell; J. Widmer Rolph, M.D., Mitchell; Daniel Clark, M.D., Princeton; H. F. Tuck, M.D., Guelph. Secretary—John A. Mullen, M.D., Toronto. Treasurer—A. M. Rosebrugh, M.D., Toronto. Directors—E. J. Barrick, M.D., Toronto; F. S. Diamond, M.D., Toronto, H. Strange, M.D., Hamilton; S. C. Corbett, M.D., Derrytown.

MONTREAL GENERAL HOSPITAL.

We have received the forty-eighth annual report of this Institution and from it we gather the following information, which we are sure will be read with interest by a large number of our readers. The income for the year was $20,741,83, and the expenses amounted to $19,727 42 when to this is added the deficiency of the previous year amounting to over $4,000, there is still a deficiency of $3,708,53. The reduced expenditure is due to the diminished number of indoor patients admitted during the year, the Committee of management having instructed the medical officers to restrict, as far as possible, the daily number of indoor patients to one hundred. The total number of indoor patients admitted during the year was one thousand three hundred and ninety-two, being less than the preceding year, by one hundred and eight. Eleven thousand nine hundred and thirteen out-door or dispensary patients received advice and medicine during the year. Of those received for treatment within the hospital during the year, ninety-three died; twenty-six of them have expired within three days of their admission. During the year there was a large accession to the list of life governors by the payment of one hundred dollars. The total additions to the Endowment Fund during the year amounted to $4,264. Everything being taken into consideration, we consider the statement a satisfactory one.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

The members of the profession in Montreal have made another effort to establish a society, under the above designation, for the reading of papers and the discussion of topics of medical interest. A preliminary meeting was held on the 29th of October, and the matter having been fully discussed, a committee was appointed to draft a Constitution and Bye laws. This committee reported at an adjourned meeting, held on the 12th of November. Their report, with modifications, was adopted, and the society being duly organised proceeded to elect their officers, the ballot resulting as follows:

President, Dr. George W. Campbell; 1st vice president, Dr. Robert Godfrey; 2nd vice president, Dr. Hector Peltier; secretary treasurer, Dr. Thomas G. Roddick; Council, Drs. Fraser, David, and Reddy. The society will meet once in two weeks during the winter months and once a month in summer. The first regular meeting will be held on the 2[illegible]th inst. We hope to be able to enrich our pages with many of the papers read by the members of this society.

THE LEGGOTYPE PROCESS.

The portrait of Professor Simpson in our last number, as well as that of Professor Syme in our present issue, have been reproduced by the process discovered by Mr. Leggo, of Montreal, and now known throughout Canada as "Leggotyping." We feel sure all will admit that they are but little, if anything, inferior to the very best wood engraving, while the rapidity with which they can be multiplied render them comparatively cheap. Judging from the very marked improvements which have taken place in the *Canadian Illustrated News* (illustrated by this process) since its commencement one year ago, we think we are not wrong in predicting for Mr. Leggo still further success in a process which, if such should be the case, will entirely revolutionize the illustrating of the periodical press.

Dr. John Brandon, of Ancaster, (Ont.), writes us as follows:

"Some years ago I began to use horse hair as a substitute for silver wire, silk thread, &c., for sutures, and I think that it possesses these advantages. It is more pliable than silver wire, also finer, which renders it more suitable for wounds about the head and face, and it is quite strong enough for most incised wounds, large flaps, perhaps, excepted. It does not absorb moisture, therefore it does not act as a seton. In using it, however, it is necessary to be a little careful in knotting—a double reef—or give the ends an extra turn, will make it as safe as any thread can be made."

JAMES SYME, F.R.S.

The many admirers and pupils in Canada of the late Mr. Syme, will, we feel sure, accept with pleasure the portrait of him which accompanies the present number.

Medical News.

The Edinburgh Committee appointed to consider the best form for a national memorial to the late Sir James Y. Simpson, Bart., have decided to erect a suitable monument, including a statue; also if possible the establishment of an institution for the treatment of diseases of women, open to sufferers from any quarter—over £2,000, has been raised for a Syme testimonial.

Sir Thomas Watson has succeeded the late Sir James Clark as physician in ordinary to the Queen.

Alexis St Martin, the Canadian who was shot through the stomach, and upon whom Dr. Beaumont experimented, is still living at Dutonsville, Vermont. He is married and has a family.

The record of vital statistics of the State of Massachusitts for the past year, developes some interesting facts. There were twice as many American marriages, as foreign ones. There were double the number of births to foreigners, that there were to natives. In Boston the proportion was 7 birth to the former and 3 to the latter. It is not hard we think to tell the cause for this.

A Dr. Carroll of Laurens County, Georgia, met with his death on the 2nd July, in a singular manner. He was approaching the house of a patient, late at night, when he was attacked by a fierce watch dog, who chased him to the front door. The proprietor of the house, hearing the noise rushed to the door with a gun, and shot the physician dead.

Dr. Gunning S. Bedford, died at New York, on the 5th September, aged 64 years. He was an eminent obstetrical writer.

From the Journal of the Gynæcological Society of Boston, October, 1870.

Writing at Ottawa, at the close of the session for 1870 of the Canadian Medical Association, we find ourselves chronicling events of more than ordinary interest to thoughtful physicians upon our own side of the border. Following the lead of the American Association, the principal men of the Dominion organized themselves into a national body, very soon after the confederation of the Provinces, adopting very closely our

own Code of Ethics, Constitution, and By-laws. Though the interests to be consulted were myriad,—for no one who has not studied them with care can have any idea of the intricate commingling of nationalities religions and politics, local and of a more general character, here obtaining,—the movement was very generally acquiesced in by the profession, and the results have been already far more positive and satisfactory than could have been anticipated.

For the past year it has been known by those of us in the States who are interested—as who of the profession at large is not—in the elevation of the standard of medical education, that at this meeting of the Canadian Association the outline of a bill would be reported by the committee having the matter in charge, of whom Professor Howard, of Montreal, is chairman, to be entitled "The Medical Act for the Dominion of Canada," and having for its object a more complete repression of charlatanary, is improvement of the system of medical education, already in some respects far superior to our own, and a recognition by the schools, of the outside profession, as a counselling, supporting, and, to a certain extent at least, controlling power. It had been foretold by the most conservative men,—and it will be recollected that conservatism is as distinguishing a trait fo the colonial as of the native Briton,—that the Association could come to no common understanding upon any of these points, much less upon them all. The event proved the contrary.

The Western Province, in what is known as "The Ontario Act," passed some little time ago, had given a more than tacit recognition to "the sects," as they are here called, or to repeat the baptismal name conferred upon similar individuals in the States, to "those who choose to walk in the paths of pseudo-science,"*—and in consequence Homœopaths and Eclectics, as such, had been admitted to an influential position in the Council of Ontario, and, strange as it may seem, they now form members of its Examining and Licensing Board.

To retrace a false step is not always easy, providing even the inclination to do so exists. There can be no doubt, however, that in this instance, such will practically be done, and there can be no question, unmistakable as is the position of the Province of Quebec and the Maritime Provinces in reference to every form of quackery, that the profession in Ontario is equally indisposed to degrade itself to a level with the guerillas of the medical age.

We were not displeased, though apparently it might seem to conflict with American ideas, to see the general leaning to a Central Examining

* Boston Medical and Surgical Journal, May 19, 1870, p. 382.

Board, with non-reception of college diplomas, no matter what their source, save in presumptive endorsement of a candidate's professional fitness. It was a painful shock to us, as Harvard men, to hear it stated in open session that in Ontario the Cambridge degree had peen pointedly refused recognition by the Examining Board, because of the gross incompetence of persons who had presented themselves fresh from graduation at that school. Well known as it is that scores of provincial students for many years have flocked to Boston to get their diplomas more easily than at home, and that the college by the means familiar to canvassers has particularly bid for this class of students, the fact we refer to becomes the more distasteful.

As gynæcologists, the action of the Association in fixing the minimum of instruction in our own department at "two courses of study of six months each, in the diseases of women," independently of midwifery, to which also an equal amount of attention must be given, as well as "attendance on the practice of a lying-in hospital for six months," has afforded us much pleasure.

By this and similar positive action upon the part of our Canadian friends, more has been done in three days to necessitate an elevation of the standard of medical education in the United States than has been accomplished by the many years' discussion of the subject at conventions of our medical teachers, all told. Hereafter, provincial students intending to practise at home cannot come to our schools unless these are raised to the Canadian standard, nor can our own graduates cross the border with the intent to enter upon practice.

In one very important point the Canadian Association has improved upon the proposed Medical Act of the mother country. There, the Central Council is to be taken wholly from the schools and universities; here, one half of its members are to be elected from the outside profession. It is the first distinct and authoritative recognition of the doctrine enunciated and accepted at the meeting of our own Association the present year, that the profession, as such, has a controlling power over the colleges. That power each year will make more and more manifest.

Of the courtesy with which, as a delegate from the American Medical Association, we have been received at Ottawa, we need not speak. Meeting many old friends, encircled by men by far the majority of whom have been bred across the water, and who acknowledge the same teachers and doctrines as ourselves, our trip has been indeed to a professional Mecca, and we return more sure than before that our daily path, over whatever roughnesses it may be, points towards the only true and worthy goal.