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ORIGINAL COMMUNICATIONS.

ART. IV.—*On Gangrene of the Lungs.* Delivered at General Hospital, January, 1857. By R. P. HOWARD, M.D., &c., Professor Clinical Medicine, and Medical Jurisprudence, McGill College, &c., &c.

GENTLEMEN,—In to-day's lecture your attention will be directed to the peculiarities presented by the case of Doyle who has been under your observation now for over two months, and whose chest you have frequently examined under my supervision. Before making any comments, let me read the notes taken by Mr. Levi Church.*

November 6th, 1856, John Doyle, æt. 36, laborer, admitted into Montreal General Hospital, on 17th Oct., 1856, under Dr. Wright, for cough, &c., who was succeeded by Dr. Howard on the 1st November, states that he had always enjoyed good health until about 7 months ago, when he caught a severe cold, while driving during a rain-storm, a distance of 8 or 9 miles in an open waggon, in Western Canada. He did not remove his wet clothes till bed time, and the next day he felt oppressed and heavy; this was succeeded by some fever and prostration, and about the fourth day by copious expectoration of a horribly offensive character. Though feeling very ill he endeavoured to keep out of bed, as he was in quest of employment, and about the eighth or ninth day he actually attempted to work one day, but was obliged by indisposition to desist. The cough,

* I regret to say the original notes have been mislaid by Dr. Church, to whom they were lent to be copied, and I now write the facts from memory.

fœtid expectoration and general prostration continued, and about a week later an abundant spitting of blood was superadded. This hæmorrhage induced him to enter the Toronto hospital, where it, for several weeks, resisted all treatment; discouraged and alarmed he left the institution clandestinely, and placed himself under the care of a private physician. After it had continued daily for about 6 weeks, it at last ceased. His health improved somewhat about two months later, but his cough and offensive expectoration remained *in statu quo*. Somewhere about this period he came to Montreal, entered the St. Patrick's Hospital of this city, under the care of Dr. Macdonnell, but not deriving the benefit he had anticipated, and his general health again beginning to suffer very much, he left that asylum for his present one.

Present condition. Aspect of confirmed ill-health, sallow complexion; wan, not very much emaciated, though much lighter than when in health; frequent soft cough, occasionally paroxysmal; copious, diffuent, dirty-greenish-yellow, horribly fœtid, purulent expectoration; breath has same offensive odour. Deficient expansion of left side chest at base, tested by eye, and by Quain's Stethometer. No flattening nor bulging of any region. Percussion note clear over entire chest except at lower half of left side, and this dull region very resisting to the finger, and not altered in its boundaries by change of posture. Respiratory murmur exaggerated, but not otherwise modified over entire right lung, and upper portion of left is scarcely audible in left mammary region, and quite inaudible in left lateral, dorsal and lower half lower scapular regions; mucous râle audible at several points in this dull region, becoming almost gurgling at inferior angle of scapula where blowing respiration with pectoriloquy are heard; vocal fremitus not obliterated over dull region. Hearts sound, rythm and situation normal. No increased hepatic nor splenic dullness.

A sedative balsamic cough mixture, and cod liver oil were prescribed, and the patient's weight taken. Early in December the fœtor and profuse expectoration continuing kreosote-inhalations were added to the treatment and towards the end of the month he had gained perceptibly and considerably in flesh and strength. About this period he had a relapse, with hæmoptysis, prostration and profuse expectoration of intensely fœtid smell. The physical signs of a cavity in the postero-lateral aspect of lower lobe were very obvious, in the form of cavernous respiration and voice, cavernous whisper and gurgling. He again rallied and improved a little, until the 25th January, when a profuse hæmoptysis occurred, so that a large chamber utensil was two-thirds filled with florid red blood and pus, having an extremely fœtid odour. Notwithstanding the administration

of free doses of gallic acid, acetate lead and digitalis, the hæmoptysis recurred on the 26th, and this morning, the 27th, it is not arrested. He is now pallid, extremely weak, scarcely able to speak aloud, and every now and then expectorates a mouthful of blood and matter. The sœtor is, if possible, more disgusting than ever, and the quantity of mixed blood and greenish-yellow diffuent matter expectorated since yesterday is exceedingly great. Omit gallic acid, &c. for following:—℞ ol. terebinth: ʒ vi. tr. opii. m℥xxx. syrapi. ʒ i mucilag, ʒ v. M. coch. med. ʒda. q. hora sumat.

The question which naturally occurs to one's mind, when investigating the nature of the above case, is, what is the cause of the horribly fœtid odour of the patient's breath and expectoration? The affection in which this combination of fœtid breath and expectoration, with cough, and physical signs of diseased lungs obtains, is pre-eminently pulmonary gangrene; but it has also been observed in bronchitis, with and without dilated bronchi; in tuberculous excavation; pneumonic abscess; empyema, with and without pleural fistula, and after bronchial hæmorrhage.

Now several of these pathologic conditions may be more or less easily excluded as causes of the gangrenous symptoms in our patient. And 1st: *mere bronchitis*, which Andral and Graves long since proved to be occasionally attended with fœtid breath and expectoration, is not the condition present; for the physical signs prove the existence of a cavity with surrounding solidification. Even *bronchial dilatation* which has also been associated with this offensive peculiarity may be excluded; for the size of the cavity and the extent of consolidation as indicated by percussion and auscultation are too great to be consistent with that view, and there are no evidences of a chronic bronchial affection in the right lung, which there would be, did bronchiectasis and its invariable attendant, bronchitis, exist in Doyle's left lung. The profuse hæmoptysis which forms so striking a feature in our patient's history, points to another causation than either of those first mentioned; for I am not aware that it has ever been observed even in well marked bronchial dilatation or in simple bronchitis. 2nd. *Empyema* with or without pleural fistula may also be rejected. For hæmoptysis frequent and copious is not a sign of either condition, nor is there any mention of severe stitch-like pain indicative of acute pleuritis which there ought to have been on the supposition of Empyema. Moreover, did *simple Empyema* exist, the intercostal spaces of the affected side would probably be expanded and prominent, the heart displaced to the right and the limits of dulness altered by changing the patient's position; and there would be an absence of vocal fremitus, respiratory murmur, mucous and gurgling;

râles, cavernous breathing and voice over the dull region. Or, if *Empyema with bronchial communication* were present, in addition to the signs of *Empyema* just mentioned, there would be in all probability those of hydro-pneumothorax, viz., splashing sound on shaking the thorax; marked dulness inferiorly with tympanitic or increased clearness superiorly on percussion, the sites of these phenomena changing with change of posture; amphoric respiration, metallic tinkling, and amphoric voice with metallic echo. I need not remind you that although there was dulness at the lower part of Doyle's left chest, there was no increased clearness at its upper part, nor did the dulness alter its situation when the patient's position was changed;—that in the dull region, although on its confines respiratory murmur was feeble, yet mucous râles were there audible, and towards its centre gurgling, pectoriloquy and amphoric respiration without metallic tinkling; there was no displacement of the heart, nor widening with protrusion of the intercostal spaces.

3d. The fact asserted by Dr. Law in 1829, (1) that the extravasated blood of *pulmonary apoplexy* or of *bronchial hæmorrhage* occasionally undergoes putrefaction and is a cause of fœtid pulmonary exhalation and expectoration, is now admitted by many pathologists, although Dr. Stokes is probably correct in regarding it as a rare event. That such was not the nature of Doyle's case follows from his positive and distinct statement that the fœtor preceded the hæmoptysis by two weeks.

4th. Is it then an instance of *pneumonic abscess*, the fœtor being due either to local sloughing of the walls of the abscess or to putrefactive changes in its contents? I think not; because in our case the fœtor occurred very early and before sufficient time had elapsed for the formation of abscess, viz., on the fourth day after his severe wetting. Indeed so early is the fœtor often perceptible in gangrene of the lung, that the eminent authority last named is of opinion, that "the disease at first is essentially one of secretion," and the fœtid "fluid is originally poured out in a putrid condition." (2) Rare too as is pulmonary gangrene, abscess of the lung, the consequence of pneumonia is a yet less frequent morbid condition, and *a fortiori*, sloughing of such an abscess. The *profuse hæmoptysis* from which our patient suffered two weeks after his exposure, is, in my opinion, rather favourable to the idea of gangrene than of fœtid abscess; for clinical facts prove, as I shall presently show you, that this symptom has been frequently observed in the former affection, while so far as my researches have been prosecuted, they teach

(1) Trans. College Phys. Dublin. N. S. Vol. 1,

(2) Dub. Quart. Journal, Feb., 1850, p. 11.

that it is not a frequent one in the latter. And this is just what might be expected after reflecting upon the teachings of morbid anatomy—the vessels terminating in the walls or traversing the cavity of an abscess—a circumscribed suppuration—are usually effectually sealed, while those involved in gangrenous disorganization, more frequently remain pervious and pour forth their contents. For these reasons then, I do not regard the case under observation as one of foetid *pneumonic abscess*, and in the present state of knowledge but two explanations of the case remain, *tuberculous cavity* and *gangrene* of the lungs. Let us now examine the arguments which favour the latter view rather than the former, and then those which are antagonistic.

Reasons in favour of Doyle's case being one of Gangrene of the Lungs.

1. His previous good health up to the time of the sudden manifestation of severe cough and foetid expectoration, is quite consistent with what we know of gangrene. Whereas, in tubercular disease of the lung, some signs of impaired health, and a more or less dry cough, almost invariably precede foetid or even purulent expectoration.

2. The nature of the apparent cause of the attack—the prolonged contact of cold and moisture. Our patient's clothes were saturated with rain while driving a distance of seven or eight miles, which must have occupied about two hours; a condition than which none could be more efficient in the production of intense congestion and inflammation of the internal organs. That such a cause is competent to the production of gangrene also—nay, that it is a frequent cause of it—is proved by the fact that three out of Dr. Law's four cases of pulmonary gangrene, (1) four out of Dr. Stokes' nine, (2) and two out of Andral's three, (3) i. e. nine out of sixteen cases were induced by the sudden and powerful operation of cold; and further, in five of those nine, the co-operation of moisture was present—thus two fell into the water, two were chilled while bathing, and one by long exposure to a cold sea fog.

3. The short period which elapsed between the wetting and the occurrence of the foetid expectoration—only four or five days, if we can rely upon the patient's statement. This I hold to be almost conclusive of gangrene; for it is impossible to believe, that in that time tubercle could be deposited, a vomica formed, and its walls attacked with gangrene. In one of Dr. Stokes' cases the factor was observed on the fourth day of the illness—in another, "within a week"—in a third, after "some days;" and so on.

(1) Lib. Cit.

(2) Lib. Cit. and Dis. Ches., Am. ed.

(3) Clinique Medicale, t. 3, pp. 443-456.

4. The fœtor preceded the hæmoptysis. This it has been occasionally observed to do in gangrene; but in all probability the hæmoptysis would have preceded the fœtor were it a case of tuberculous cavity; for Dr. Walshe has shown that this symptom occurs in 50 per cent. of all phthisical patients within the first month's illness, and in nearly 72 per cent. during the first stage of the disease. How improbable, then, that Doyle should for the first time suffer from hæmoptysis when in the third stage of consumption!

5. The attack of profuse and protracted hæmoptysis supervening upon a very severe wetting, in a previously healthy person, points to a sudden and serious lesion; and cases are on record to show that such a combination has frequently occurred in pulmonary gangrene. Thus in six of the nine cases of gangrene of the lungs, already mentioned as caused by the sudden and powerful operation of cold, more or less hæmoptysis, was a striking symptom; indeed, in three of them it was profuse, and in one of these seemed to have been the immediate cause of death. The duration of the hemorrhage in our patient has something very striking in it he asserted positively that it continued for six weeks without actual intermission, and that occasionally it was enormous. Such a protracted hemorrhage appears rather indicative of destruction of pulmonary tissue by sloughing, than of the congestion of the lung, which occurs in the early stages of phthisis. And it is quite probable that the fearful hæmoptysis, which began on the 25th instant, and in twelve hours filled with florid red blood a large chamber utensil to two-thirds its capacity, was repeated on the 26th and 27th, to the extent of about a pint (exclusive of the copious and abominably offensive diffuent expectoration) and now continues,—has been caused by a fresh invasion of the sloughing process. Before leaving this part of the subject, I would remark that hæmoptysis is a more frequent symptom of pulmonary gangrene than is generally supposed. In one of the ablest and latest works on thoracic disease, Walshe, when speaking of the expectoration in gangrene of the lungs, says, it is "rarely bloody in adults." Dr. Stokes, it is true, concludes, "that hæmoptysis attends each access of the remittent disease;" but this does not express the whole truth, for I find that the symptom in question occurred in adults in 18 out of 32 cases in which anything like a careful record of the symptoms had been made. In three of the former, tubercle was also found in the lungs at the autopsy; and allowing, for the sake of argument, what certainly requires proof, that the tubercle preceded the gangrene, and was the cause of the hæmoptysis,—there yet remains the proportion of 15 cases of hæmoptysis to 32 cases of gangrene, or nearly one-half. Let me remind you that while hæmoptysis

is a rare symptom of phthisis in children, it is a frequent one in pulmonary gangrene. MM. Barthez et Rilliet (1) noted it in four out of sixteen examples of the disease.

6. Gangrene of the lungs is said to be a more frequent affection than sloughing of the walls of a tuberculous abscess. That accurate observer, Laennec, says that it is "at least ten times more frequent."

7. The healthy condition of the right lung. The most careful examination failed to detect any evidence of disease in the right lung, while a cavity and adjacent alterations were clearly established in the left. Now, it is the result of experience that tuberculous disease seldom—very seldom—reaches an advanced stage in one lung, without some traces of a similar disease being present in the other. The same rule does not apply to gangrene; hence a strong argument (when taken in connection with others) in favour of Doyle's being an example of gangrene.

8. The circumstance that the base of the lung is the chief seat of the disease, and that the disease has attained a more advanced stage there than in the apex, points strongly to gangrene, which very frequently begins in the lower lobes, whereas the habitat of tubercles is almost invariably the apex; so much is this the case, that when the tubercular deposit occupies both situations, it is almost always most advanced in the latter.

9. Lastly, Doyle's sallow, wan, and greasy unhealthy appearance is peculiar and reminds one of the "wan and leaden" complexion assigned by Laennec to the subjects of this disease; it is very different from that usually witnessed in phthisical patients.

Let us now discuss the

Arguments which may be urged against our Patient's Ailment being that of Pulmonary Gangrene.

1. His illness after the wetting not having been as severe as might be expected in so serious a disease as gangrene. Bear in mind, however, that his illness did oblige him to lie down at the end of a week, although being of very active habits he resisted as long as possible, and that his symptoms grew progressively worse for eight weeks. Moreover, that gangrene of the lungs, especially when circumscribed, is sometimes very insidious, is admitted by most writers since the fact was mentioned by Laennec; and one of the latest original contributors to this subject, Dr. Silverberg, remarks that "pulmonary gangrene may begin with the signs of an affection presenting little danger; it is only in a few cases that its true nature can be recognized immediately after its commencement."

(1) *Traite Clinique et Pratique des Maladies des Enfants*, t. 2 p. 411.

(1) *Brit. and For. Med. Chir. Rev.*; No. 36, p. 251.

2. The improvement in his condition and partial return of health three months after the invasion of the disease. This improvement, however, could not have been very great, inasmuch as the patient was only able to work for three days. However, gangrene occasionally runs an intermittent chronic course, in which relapses or fresh attacks of the disease succeed temporary recoveries. Dr. Stokes relates two very interesting examples of this nature, both of which presented the following features:—prolonged exposure to cold, followed by symptoms and signs of pulmonary gangrene; temporary recoveries, and without apparent cause; relapses with returns of the previous symptoms. (1) Professor Walshé also has “seen a case in which fœtid gangrenous expectoration continued with intermissions for months, without much attendant constitutional suffering, but with gradual development of the signs of excavation.” (2) Such appears to be the nature of Doyle’s case, as I have already suggested.

3. Some of the ablest writers have affirmed that gangrene of the lungs cannot last five or six months; whereas Doyle’s illness has been of ten months duration. This objection is completely met by the three cases last mentioned; Dr. Stokes’ 2 cases lasted “many months,” and Prof. Walshé’s for “months.” Dr. Law had one case under observation for “more than a year.”

4. Lastly, the comparatively little prostration and emaciation, notwithstanding the extent of the disease and the large size of the cavity. The answer to the second objection meets this—the size of the excavation has increased progressively with the fresh outbreaks or returns of the sloughing process. The patient, too, has been very favourably situated since the invasion of his malady—he has been an inmate of various public hospitals nearly the whole period, where besides freedom from damp and cold, intemperance and hard work, he has had a supply of good nutritious food, and careful medical treatment. Moreover, it is well to recollect that there is no standard by which to measure the tolerance of disease peculiar to different constitutions—one man shall succumb under cholera in four or five hours, another shall resist for twenty or thirty.

On reviewing the statements just made, then, it appears that each of the four arguments against the view that our patient’s case is one of gangrene of the left lung, may be met more or less satisfactorily; but that in favour of that view, there are six good reasons and three doubtful. The good reasons being 1st, the patient’s previous excellent health up

(1) *Deb. Quar. Jour.*, New Series; No. 17, p. 10.

(2) *Dis. Lung and Heart*. 2nd Ed., p. 458.

to the time of the wetting and occurrence of severe cough and foetid expectoration; 2nd, the nature of the apparent cause of the disease—prolonged contact of cold and moisture—being one well calculated to produce, and which has frequently produced, gangrene of the lungs; 3rd, the brevity of the interval (4 or 5 days) which elapsed between the exposure and the development of the foetid expectoration, and its accompanying and preceding symptoms of chills, heat and general indisposition; 4th, the fœtor having preceded the hæmoptysis; 5th, the much greater frequency of pulmonary gangrene than of foetid tuberculous vomica; and 6th, the healthy condition of the right lung.

The three remaining arguments in favour of this view of the case, I have called *doubtful*, because they are of less weight than the others; but taken in connexion with them, they possess a considerable value.

I am thus obliged by what seems to me the state of the argument, to conclude Doyle to be the subject of that interesting and not very common disease—*Gangrene of the Lung*.

While on this subject, let me call your attention to the case of the man, Wolfe, in Ward —, recently admitted, complaining merely of weakness, loss of appetite, rejection of food, indeed, in his own statement, exaggerated as it was, were true, of inability to swallow it; and whom on close examination we found the subject of cough, muco-purulent nummular like expectoration, with some physical signs of tubercula; deposit at the apices of the lungs, and the well developed physical phenomena of a circumscribed pneumonia at the lower part of the left lung. The pneumonia was in the stage known as congestion, but it has since passed into hepatization. In this patient besides an absence of the well marked inflammatory fever and the rusty expectoration of pneumonia, there is a very weak pulse, a peculiar sad, discontented and distressed expression of face, marked general prostration, and most singular of all, at times a horribly foetid odour of breath—in character, precisely like that of poor Doyle's. This fœtor was noticed the day after his admission, and two or three times since, but on no occasion, more sensibly than yesterday. Is this a second case of pulmonary gangrene? an illustration of what almost seems to be a law, that one uncommon case seldom occurs singly, others soon follow it; I believe it is, and shall watch the progress of the case with increasing interest, more especially for the signs of forming cavity consequent in the separation and breaking down of the eschar.

Besides the peculiar combination of excessive prostration, a limited amount of pneumonia in the first stage, (an amount which fails to account for the degree of vital prostration present) and gangrenous odour of the breath, a combination which is generally regarded as almost characteristic of gangrene, there is a point in the patient's history which

favours the probability of any disease of his lungs, taking on a destructive character—his habits have been very intemperate. Intemperance is a item frequently met with in the histories of the subjects of gangrene. Dr. Silverberg [quoted before] states that 8 out of 18 of his patients were drunkards. (1)

Time will not allow me to speak of the pathology of gangrene of the lungs, which is a topic of much interest and about which much information is yet needed; the correctness of the diagnosis in the cases just discussed will, I fear, be tested by an autopsy before many weeks; till then observe.

Sequel to case of Doyle.

The hæmoptysis recurred during the night of the 27th Jany., rather freely and he sank on the morning of the 28th, exhausted.

Autopsy.

Thorax. Obliteration of left pleural cavity by very dense and very thick old false membrane over an extent corresponding to the lower half of left lung, including its diaphragmatic surface. Anterior half of upper lobe of this lung as far as apex free of disease, except a narrow strip which bounds the inter-lobular fissure;—this fissure almost completely obliterated by old adhesions. Posterior half of same lobe is the seat of a somewhat pinkish grey (tuberculous?) hepatization or infiltration, parts of which are beginning to soften, for when scraped small circular cavities remain. Small cavity at surface of lateral aspect of same lobe midway between inter-lobular fissure and apex; pleura covering which is of a dark green hue. This cavity is the size of an almond and is filled with a grumous dirty greyish yellow, diffuent fluid, very foetid and containing shreds of pulmonary tissue attached by one end, free at the other, in a gangrenous condition, and retaining none of the naked-eye character of pulmonary tissue. In the same lobe, but a little lower down and deeper, is a 2nd cavity, about three times as large as the first, also in a gangrenous condition; of a darker colour, with more of a greenish tint; contains debris of pulmonary tissue, and like the last emits the disgusting odour observed during life.

In lower lobe a large somewhat irregular cavity extends from within half an inch of the diaphragmatic surface upwards, along posterior portion of the organ, almost to the interlobular fissure; although torn open dur-

(1) This patient died some few weeks after, and besides tuberculous disease in the upper part of both lungs, a circumscribed gangrenous cavity was found in the lower lobe of the left lung.

ing its removal, it still retains two or three small masses of a dirty white color and of the consistence of fresh mortar, and some fetid bloody fluid like that expectorated. Its walls of a dark green hue, tolerably firm and lined by sort of membrane. Some small agglomerations of semi-opaque tubercles along anterior border of lower lobe; the intervening tissue slightly congested; at some points, this deposit softer and moister than elsewhere as if softening had begun, but no pus, nor any yellow cheese-like tubercle anywhere—left pleura contained a little serum without fœtor.

Right lung has not collapsed, fills right chest completely; pale and anæmic generally, save at some points; posteriorly where it is slightly congested—uniformly crepitant and healthy throughout except a spot at extreme apex, size of a hazel nut which appears to consist of firm semi-opaque whitish tuberculous (?) infiltration; and some pure patches of vesicular and interlobular emphysema. No pulmonary collapse observed; bronchi of both lungs contain blood partly coagulated, chiefly fluid; old adhesions between opposed pleural surfaces, laterally—no serum in the sac.

Body well covered with subcutaneous fat.

Remark.—Although tubercle co-existed with gangrene in this instance, yet for the above reasons assigned during the life-time of the patient and because of the tolerably recent—or at least—not advanced condition of the tuberculous exudation in the apex I am still of opinion that gangrene was the original lesion and that tubercle had been subsequently deposited, and certainly that the fœtor was not due merely to sloughing of the walls of a tuberculous cavity.

Bonaventure Street, Montreal, 1857.

ART. V.—*Foreign body in the urethra.* By CHARLES PICAULT, M. D.
Montreal.

On the 28th May last, M. C., aged 20 years, came from Laprairie to my office at about 7½ o'clock, A. M., for the purpose of having extracted from his urethra, the hook of a watchguard which had been introduced under the following circumstances:

During his sleep, his bedfellow had passed into the *meatus urinarius* a pin, head foremost, leaving it until he awoke, when he told him what he had done. He immediately tried to extract it, but found that he could not, as the point had entirely disappeared beyond the *meatus*, and any attempt to remove it, only pushed it further in.

Being considerably agitated he then introduced the hook of his silver watch chain, with the hope of being able to catch the pin; and after good deal of painful manipulation, he at last succeeded, but on attempting to withdraw the chain, he found that it had become firmly fixed in the passage and resisted all his attempts to remove it.

The hook was rather more than an inch in length, the point being sharp and turned outwards as the points of such hooks usually are. This of course acting as a kind of barb and being caught in the folds of the lining membrane, any force used in attempting to extract it, only served to bury it more deeply and render its removal still more difficult. Finding that all his attempts at removing it only resulted in causing excruciating pain, and copious hemorrhage, he at last decided on coming to Montreal.

On examination, the hook was found completely within the orifice together with about half an inch of the chain. The organ was very much swollen, and on stretching open the *meatus*, lacerations of some extent could be distinguished. The hemorrhage continued and must have been copious, for his clothes were completely soaked through. The pain was intense and the least traction augmented it materially.

On considering as to the best means for removing the hook; three methods occurred to me, viz:

1st. To introduce a grooved director into the canal in such a way as to cause the point of the hook to enter the groove and then to slip it along by gentle traction on the chain till completely extracted.

2nd. By retracting the glans gradually until the eye and a portion of the hook could be uncovered and seized by a pair of strong dressing forceps; then to open the hook forcibly and extract it gradually by causing the margin of the *meatus* to glide back over the greater curve thus produced.

3rd. To cut into the urethra, making an opening large enough to extract the hook and to detach it from the chain.

The state of engorgement and the extreme sensibility of the parts rendered the introduction of a director extremely difficult, and the hook had so completely disappeared in the canal, that the point could not be found, so, after a single unsuccessful attempt, I abandoned this method, and proceeded to adopt the second.

It is unnecessary for me to detail the various steps of the procedure; suffice it to say, that after I managed to secure the upper portion of the hook by means of the dressing forceps, I easily succeeded in opening it out gradually, at the same time retracting the margin of the opening until the whole hook was withdrawn, the point coming out last.

I then directed him to keep the following lotion constantly applied by means of lint soaked in it, viz:—R. Tinct Arnica, ten ounces; aqua, one grain, one drachm, ft. Lotio. The inflammation subsided rapidly and in two days the patient was perfectly well.

The above I have presented without comment. It may perhaps be found interesting as an example of numerous cases in which the young practitioner is obliged to exercise his own ingenuity in modifying the usual rules of surgery.

ART. VI.—*Strychnia*; being extracts from the *Materia-Medica Prize-Essay, of the Session 1856-57, McGill College*. By MR. ALEXANDER REID, London, C. W.

PREPARATION.—I have tried another method, altogether different from any yet mentioned, (the Pharmacopœal and Molyn's) and which, with the quantities manipulated with, I have found very successful. Every procedure, at present used, is very expensive, so that the value of the manufactured article becomes much more expensive than it would be if a cheaper means were employed. I shall not say that my explanation of this process is correct as regards chemical decompositions, but that you may obtain the desired product is I think certain. One advantage which my method presents is that the substances used to separate the alkaloid from its natural combinations are very cheap, and easily obtained of the proper purity required. The agent I use to separate the alkaloid from extraneous substances is chlorine. If it be applied as chlorine water I have not found it act with much certainty, but if used as the solution of Hypochlorite of Soda, it acts very well. I prefer the Hypochlorite solution prepared by precipitating the lime from the dissolved chloride of lime, of commerce by carbonate of soda. If the other article be used, which is prepared by passing chlorine through a solution of the carbonate of soda, you have a large quantity of bi-carbonate of soda present, which can be of no use in making the alkaloid; and further, when this solution is added to the decoction, it changes to a red colour without causing a precipitate.

I make a decoction of the rasped or powdered nux-vomica seeds, in water acidulated with sulphuric acid; if the decoction be not acidified when the chloride solution is added, in place of a dense white precipitate, you have a very small quantity of a tawny or light-yellow colour. I think that the sulphuric acid in the decoction serves a double purpose; firstly, decomposing the Strychniate, and forming the more soluble

Sulphate of Strychnia; and secondly, of setting free the chlorine in the hypochlorite solution,—thus enabling free chlorine to unite with the free Strychnia, when the acid separates from the alkaloidal base to unite with the soda in preference. And also there is no doubt, but that less boiling is required when the acid is used, than otherwise, because in the former, the stronger acid will at once displace the weaker, and by this a more soluble salt is formed; whereas it takes long continued boiling to dissolve the very insoluble Strychnate of Strychnia.

The acid also has an effect upon the gummy and starchy principles of the seed, but as to whether the sugar formed, hinders or assists the precipitation of the alkaloid, has not been enquired into; or it may remain perfectly neutral, and this is the most likely.

Where the hypochlorite solution is added to the decoction of the seeds, rendered very acid, an abundant precipitate of a white colour is thrown down, which is a compound of Strychnia and chlorine. What may be its chemical composition, is uncertain, but it cannot be the hydrochlorate because that salt is very soluble; it cannot be free Strychnia, as its reactions given further, are clearly shewn; and if it were hypochlorite, I do not think a similar precipitate would be formed when chlorine water is added to a solution of a salt of Strychnia, and also where a stronger acid is added to the hypochlorite solution, as the sulphuric, it is principally hydrochloric acid, and free chlorine that are given off.

Reasoning from these data, the conclusion arrived at is, that it is some compound of chlorine which is not as yet described, as far as I can find out at least.

Now if we look to some of the other halogen radicals for an answer to the question, we find a compound of iodine, which has not as yet had its analogue in the chlorine series, and this is the ioduretted iodide of an alkali, the most common of which is that of potassium.

I think that the hypochlorite solution which I use is a similar compound in many respects with that of iodine, just mentioned, having sodium as its base. There has been a great deal of argument concerning the substance in question, which I think might be almost settled if it be viewed in this light, and compared with the iodine compound of a similar nature.

From these results, (the effects of combining iodine with different bases) we can expect similar reactions with these bodies, when they are placed in similar positions; and as we find that if iodine be added to iodide of potassium, we have a new compound formed, so are we to expect if chlorine be added to chloride of potassium, or sodium, that we will have an analogous compound of chlorine, which reactions I am not

aware of any person having examined into, and which I have not the convenience to perform or examine into, even if I had the will.

In answer it may be said that the hypochlorite solution is not made by adding chlorine to a chloride, but merely to an oxide of an alkali. To solve this I may first state that when the chloride unites with the alkali, it forms a chloride and a chlorate, and continuing the supply of chlorine, is in reality adding chlorine to a chloride, as you add iodine to an iodide. But in this decomposition we have a chlorate, and it may be thought that it takes part in the subsequent decompositions, but I think that it remains almost neutral for two reasons; firstly, it is a very stable compound when united with a base, and not very likely to be acted on, hence it is present in the officinal solution in an undecomposed condition: and secondly, if we add iodine to potassa an iodate is formed as well as the iodide, and nevertheless its general reactions, if more iodine be added, are the same as if none of the iodate were present.

In fact the preparation of ioduretted iodide, and the solution of chlorine are perfectly similar; only in the one, we add iodine, as it is a solid body,—but the other being a gas, it must be handled in a different manner, and this is done by transmitting it into a closed chamber, which contains the substances to be acted on by it.

Reasoning from the facts given, I should say that this solution is not in reality an hypochlorite, but a solution of chlorine in chloride of sodium, with some chlorate of soda present; and if made from the carbonate of soda we will also have some bicarbonate of that base. These latter substances being merely impurities resulting from the faulty manner of preparing it, and which should not be present if it were prepared aright.

I think that if this substance were to receive its proper chemical name it should be called the *Chloruretted Solution of Chloride of Sodium*, or in a solid state as *Chloruretted Chloride of Sodium*, if it be named similar to the like compound of iodine; and that the way to prepare it in its pure state is this.—chlorine gas should be transmitted through a solution of chloride of sodium of the proper strength—or let chloride of sodium, moistened with water, be exposed to an atmosphere of chlorine, until all the gas is absorbed that it will take up; and for lime, to proceed in an analagous manner, but in the latter case the chloride of calcium being too costly, and being only used for the purposes of the arts, the present method is no doubt the cheapest; although as regards soda, I think the method here mentioned would be preferable, not only on account of its certain chemical composition, but also on the score of cheapness: Because in the present method the chlorine is abstracted from the chloride of sodium, and the carbonic acid placed in its stead at great

expense, which is of no use when we take this carbonate and again replace chlorine by substitution for the acid.

I have digressed a little from my subject to explain the reason I have to give a certain name to the Strychnia precipitate; this precipitate I think, from the way that it is formed should be called the Chloruretted Hydrochlorate (chloride) of Strychnia.

When you have this product obtained, it should be washed to remove all soluble substances, and then treated with liquor potassa. By this its appearance is changed and it is not so bulky as it was previously; it seems at first to be almost dissolved, but on standing a little a precipitate forms and settles down to the bottom, which is Strychnia, and is of a gelatinous flaky appearance at first; after having washed and dried it, dissolve it in sulphuric acid and water, by the aid of heat, and when this hot concentrated solution cools, the sulphate in a pure state is deposited around the sides of the vessel, in needle like crystals, which form themselves into star-like groups. If the pure alkaloid be required it is precipitated in crystals by adding ammonia to the hot solution of the sulphate, or in an amorphous form if the solution be cold.

If it be preferred you may take the first precipitated strychnia, dissolve in alcohol, decolorize if it be required, and crystalize from the alcoholic solution. I am not able to say from the quantities with which I manipulated whether brucia be thrown down with it or not; I know the solution after the white precipitate was separated from it by filtration was a little coloured by strong nitric acid, but it may have been a mere casual circumstance; I think that very likely liquor sodæ would answer as good a purpose to abstract the chlorine from the Strychnia, in the white precipitate as liquor potassæ; but as I did not try it I cannot say for certain anything about it. I think that this method would do for some of the other alkaloids, as quina, which have similar reactions with respect to sodium chloradine, but it is out of place here.

I have also prepared Strychnia by adding the ioduretted solution of iodine to an acid decoction of nux vomica seeds; an insoluble compound of strychnia is thrown down of a dark colour, which upon being acted on by liquor potassa, became of the same colour as if chlorine had been used: and the alkali was obtained by continuing out the before mentioned process. By this method I thought, I have obtained only the strychnia and without brucia. If iodine were used in preference to chlorine, the iodine might be all saved, as the iodide and iodate formed might be separated from the mixture, and the iodate converted into iodide, by exposure to a red heat.

Bromine will also answer a very good purpose, as the reactions are similar to chlorine, but it would be expensive and could not be superior to it.

TESTS.—Of all this array of Tests, (those mentioned by Taylor on Poisons, and in other ordinary works of reference) there is not one upon which we can rely alone in the hour of need. (Attention is now invited to the analytical claim of a solution containing Iodine and Iodide of Potassium)* which I have found give very distinctive reactions with Strychnia. This test is best prepared by making a saturated solution of iodine in iodide of Potassium, then dilute it until it is of a dark cherry-red colour, when it will be of about the proper strength.

The only objections (the reactions with various acids, metals, &c., have been examined, and not found fallacious) to this test are quinine, Veratria, and Beeberine, as these give almost similar reactions. With morphine and santonine there is no visible change. Strychnia may be distinguished from veratria by drying the precipitate, when the latter will be of a yellow colour, and the former of a blackish yellow; and from quinine, in not being so dark, as its precipitate is, when dried, of a blackish-brown; with beeberin it gives one similar to quinine, although scarcely so dark in colour. The best way to distinguish the shades of colour is by comparison; when first formed all these are similar in appearance, but they change when kept for some time; but the great distinctive mark is that the only precipitate which is formed from Strychnia gives the play of colours with sulphuric acid and binoxide of manganese. (described as narrated in books on Materia Medica, &c.) There is a peculiarity in the way in which the precipitate conducts itself at first.

If the test be added drop by drop to clear water, it falls down to the

[* This test is not a novel one. Iodine, both in the free and the potassiu-retted state, has been for many years back employed in analytical researches concerning Strychnia. An iodid of this base has been described in Chemical treatises; iodine has been advised as the proper antidote to the alkaloid; iodine and iodid of potassium, both singly and jointly, have been employed as tests, and their reactions described, &c. The merit taken away by the lack of priority is however well supplied by the full elaboration and minute investigations of Mr. R., whereby he has placed the subject in almost a new light; and has procured for the test a claim to notice and adoption, which it never had before. And although exploring a mine in which predecessors had engaged, he was honestly unaware of any other attainments than his own. The principal information upon iodine as a test for Strychnia, was made public, only last summer, after Palmer's Trial, in the weekly medical papers of London, and to these Mr. R. had no access. Here and elsewhere in the text the parenthesis is ours, being introduced in explanation of parts of the essay that have been omitted.—EDS. MED. CHM.]

bottom of the test tube, not even tinging the liquid; after coming to the bottom it lies evenly over it, and when you shake it, it becomes of a clear straw-yellow colour,—as iodine is soluble in iodide of potassium. But if even a very minute quantity of strychnia be present, when the drop of the test reaches the bottom of the test tube, it appears to be fringed with a dirty white precipitate, and by shaking it up a little, this gradually pervades the whole, and it becomes a dark brick red precipitate.

If the mixture be shaken it acquires a reddish colour from the precipitate being mixed up with it. If this be allowed to stand it will gradually settle down, unless the Strychnia be present in too minute a quantity, when in this case the precipitate remains suspended in the liquid, and hence gives it a muddy appearance. If the solution containing strychnia contain blood also, the alkaloid can not be detected with the same delicacy, as the precipitate formed is marked by the colour of the solution; but if the solution be of great strength, then it is brought out as well as if pure water alone was the solvent. If the precipitating test be added to a mixture of boiled blood, a dark-red clot is formed, which does not mix with the other portion of the mixture. The test will not act if it be added to the Strychnia held in solution by alcohol, as the precipitate is soluble in that menstruum, but if it be evaporated or diluted, it then will act in the accustomed manner. The bitter vegetable infusions are not affected by this test, and the strychnine can be detected in these without any difficulty.

The action of acetic acid will also distinguish the dried red precipitate of strychnia from that of the other alkaloids; if it be added to the former precipitate it appears to be partly dissolved, with a little still remaining at the bottom of the test tube; the supernatant liquid also becomes milky, with a yellowish tinge, such that you can scarcely see through it; if heat be applied, that which was dissolved is precipitated, and the mixture becomes transparent, and almost colourless; by continuing the heat it again becomes dissolved, and the solution limpid and transparent. upon adding ammonia to this, no change follows.

If the veratria precipitate be acted on by the same agent, the mixture becomes yellow, but the precipitate is not much dissolved, and it is also rendered of a darker colour; excess of acid does not exert any more solvent power, and the mixture always remains transparent: when heated, it loses the colour and becomes clear; when ammonia is added a milkiness is produced which is dispersed when heated, but again forms on cooling.

If the quina precipitate be treated in the same manner, the supernatant acid becomes of a reddish-yellow colour, but it is not dissolved

unless by the aid of heat; the mixture is transparent, but after heat is applied it becomes of a yellow colour, which disappears when ammonia is added, and a milky fluid remains, not much acted on by heat.

To distinguish each of these three different reactions, it is much better to compare the one with the other, when their difference is then quite visible; but if you use the freshly precipitated products, a difference with the acetic acid is caused. With Strychnia, the same yellow dingy colour is produced, but the precipitate is not dissolved even if an excess of the acid be added; ammonia causes the mixture to become clear and transparent. With veratria, it makes a translucent yellow solution, a few grains remaining at the bottom of the test tube of a black colour, which do not appear to be acted on; ammonia causes a turbidity. With quina it forms a very transparent solution of a yellow colour, from which ammonia throws down at first a whitish precipitate, that is dissolved if a slight excess be added. If these products be acted on by strong sulphuric acid *al. ac.*, the veratria gives a play of colours, first yellow, then red, and then violet; quina becomes greyish brown, and strychnia becomes brownish yellow. Strong nitric acid does not affect either of these very much.

If strong sulphuric acid and binoxide of Manganese act on the Strychnia precipitate, it first becomes purple, inclining to red and then reddish brown; with quina, veratria, and beeberrine, nothing distinctive results. These last reactions are what I lay most confidence in, as the distinguishing peculiarity of Strychnia.

(To be continued.)

REVIEWS.

ART. V.—*The Diseases of Women*; including those of Pregnancy and Childbed. By Fleetwood Churchill, M.D., T.C.D., M.R.I.A., Vice-President and Fellow of the King and Queen's College of Physicians in Ireland; one of the Presidents of the Obstetrical Society; Professor of Midwifery, with Diseases of Women and Children in the King and Queen's College of Physicians in Ireland, &c., &c. A new American edition revised by the author. With Notes and Additions by D. FRANCIS CONDIT, M.D., Fellow of the College of Physicians of Philadelphia, &c.: Blanchard & Lea 1857.

In the present volume the diseases of women are described in three books, the first of which is devoted to the consideration of the diseases of the

organs of the sexual system, the second to diseases of pregnancy, and the third to those of childbed. The number of distinct subjects they embrace is, as might be supposed, very large. No important disorder or lesion appears to have been omitted, and the whole is discussed in a manner which is condensed, at the same time that it is comprehensive. Like the other works of its distinguished author, it exhibits to a remarkable extent a high character for profound research, and gives the purport of much that is found in treatises beyond the reach of practitioners ordinarily. Its value is further augmented by affording a statement of Dr. C.'s personal experience, and under this consideration, the present edition has claims to professional regard transcending to any other. He not having suffered the intervening time to pass unutilized, but applied to profitable account the numerous opportunities of ascertaining peculiarities in the specialities of women's diseases, which an increasing practice afforded. Three entirely new chapters have been added upon Tetanus, Paralysis and Arterial Hæmorrhage. And another feature of novelty is the introduction of illustrations by wood cuts; these are forty in number, and have been copied from various sources, as from the drawings of McClintock, Clarke, Boivin, &c.

Dr. C. considers diseases of the uterus as divisible into the two simple classes of functional and organic. Under the first, the initiatory is Amenorrhœa. Of this state, which we are accustomed to receive as abnormal, several strange facts appear which would almost justify us in believing that when it exists it is not always a morbid phenomenon. It is generally understood that the setting up any diverticulum, after its establishment, in favour of the uterus or the occurrence of a vicarious action similar in kind or in design, is a protection or immunity to the system at large against the evil consequences that would otherwise be entailed by the suppressed function. And accordingly the ever present examples of gestation, lactation, as well as the more rare ones of vicarious menstruation, are commonly familiar. But it is not known in the same way that amenorrhœa may exist in women in whom no compensatory event is proceeding. It is to this class our original remark more especially applies, and was suggested by learning from the work before us that "the mother of a large family had never menstruated;" and that in a family there "were five daughters, whose ages ranged between 13 and 26, who, though in excellent health, had never menstruated." The first fact is also a contradiction to the idea usually entertained, that females who are afflicted with *emansio mensium* do not conceive. Happening under singular circumstances like these, it is not extraordinary that the proximate cause of amenorrhœa should be *in obscuro*. Dr. C.

observes of the pathology: "The question is very difficult, if not impossible, to decide, in the present state of our knowledge: but it appears very probable that, in many cases, the disease depends upon some condition of the ovaries." The treatment of this malady is confessedly difficult. A great variety of different remedial means, intended to fulfil dissimilar indications and acting upon discordant principles, have been used. One fact, however, seems well ascertained: that all cases are not to be cured by any unvarying administration of a single set of agents. Says Dr. C.: "The treatment must be varied according to the constitution of the patient, and according as it may be undertaken during an interval, or at a menstrual period." To which we would add, it should be mainly *conditional*, and adapted to the particular state of the system at the time; by attending to which important circumstance a cure is often accomplished without any further trouble, owing to the failure of the catamenial secretion being but a part of an error or vice pervading the entire frame. This fault is, usually speaking, one of two extremes arising either from a universal plethora or anemia. There appears to be a growing distrust among practitioners of the powers of the so-called Emmenagogues. Undoubtedly, with the majority of substances comprised by this designation, it would be more proper to say that the word can only be legitimately received, in strict medical usage, when it has reference to a possible end which the reputed agents may perchance attain; and that, virtually, it is inexpressive when applied to express that the medicines in question possess a specific power by which they are capable of invariably producing an absolute result. Nevertheless, that there are sanative measures directly emmenagogue, we cannot deny; and, although they may fail occasionally, yet such an accident is no more than is observed to attend the employment of any other particular class of remedies, and may in this one, as in these other cases, be appropriately referred to an existent impediment to their efficient action present at the time of their employment. Under absolute emmenagogues, we would include, with medicines, certain obstetrical auxiliaries which have been recommended to public notice from time to time. One of the latest of these Dr. C. thus describes:—"Dr. Simpson has tried congestion and irritation of the mucous membrane of the uterus, produced by the introduction of a silver catheter, with a number of perforations at its inner extremity; to this an exhausting syringe is fixed, and the air repeatedly exhausted. When withdrawn, the extremity of the catheter is filled with blood; and, in many cases, the artificial menstruation thus established is continued naturally." Of medicines, Strychnine has enlisted Dr. C.'s approbation in its favor. Out of twelve cases treated by Sir James Bard-

ley, of Manchester, ten were cured and two relieved. "And to this number I can add several cases in which the cure was complete and permanent."

Of the organic diseases of the uterus, none is as appalling as Cancer, Indubitably fatal when left to itself, it spares no age. I has been met with in young persons under 20; and in the aged who have advanced beyond the time of humanity, prescribed as three-score-and-ten by the Royal Psalmist; and its prevalence is comparatively of extreme frequency, as may be even proved by looking over the statistics of the dead, and keeping out of consideration those that concern the living. From quotations given by Dr. C., we find that in 1831 there were 370 deaths from diseases of the female genital organs, and of these 276 were from cancer. In 1834, of 436 deaths, 304 were due to cancer. In some years the mortality was smaller, though still, in the aggregate, large. In 1835, of 508 deaths, only 285 were from cancer. As all medicines have been equally useless in this lesion, its treatment has been referred to the powers of the surgeon. Various operations have been recommended; mostly, however, resolving themselves into those, where the neck of the uterus is excised, and those where the entire uterus is extirpated. In summing up the various statements made of the first, or excision:—

1. As the only hope of benefit from the operation rests on the possibility of removing the *whole* of the disease, it would clearly be a wanton barbarity to attempt excision, except when the cervix within reach alone is affected. The limits within which an operation can be safely attempted are marked by the insertion of the vagina into the superior part of the cervix uteri.

2. Again, it would be useless and injurious if the surrounding parts, (lymphatic glands and cellular membrane) are affected, inasmuch as the fatal progress of the disease would rather be accelerated. The uterus, therefore, should be perfectly moveable. It has been stated, however, that if the enlargement of the lymphatic glands depends upon irritation merely, and not upon deposition, it will subside after the operation, and need be no obstacle to our undertaking it.

3. Congestion of the body of the uterus is contended for by some as an objection to the operation. M. Lisfranc remarks, in answer, that if not excessive, it need not deter us, since to a certain extent it exists in all cases, and subsides spontaneously after the operation.

4. Congestion of the ovaries is not regarded as an obstacle by the daring operator of La Pitié. He argues that as Baron Larrey used the cautery with impunity under such circumstances, no harm will result from excision.

5. Circumstances, which would forbid the performance of any of the great surgical operations, equally forbid this; such, for instance, as any affection of the thoracic and abdominal viscera.

6. The development of the cancerous cachexia and the consequent breaking up of the constitution, by indications of an advanced stage of local disease, will of course prohibit the operation."

"If we now inquire in what cases, in accordance with the foregoing observations, the expectation of benefit from this operation may be reasonably entertained, we shall find our range very limited:—

1. If we could find a case of cancer in which the deposition should be strictly limited to the cervix, without contamination of the neighbouring tissues, or deterioration of the general health, but which nevertheless presented symptoms justifying our interference, we might be warranted in the attempt. But how exceedingly rare is such a combination! and yet I cannot think the operation justifiable in any other case of cancer uteri than the one just described."

After such a decided expression of his own individual opinion we are prepared for expecting that extirpation should be yet more condemned. What applies to the part is equally so to the whole, deriving besides additional opponent arguments from its much more grave nature. Removal differs essentially in point of importance according as to whether the uterus be *in situ* or displaced. Dr. C.'s conclusions on each are:

"After a careful examination of the results of the operation, when the uterus is *in situ*, it is really difficult to find adequate reasons in its favour, except the repugnance which every one must feel to give up entirely the hope of affording relief from the most agonizing sufferings to which the female sex is exposed."

"Our conclusion will be different as regards the removal of a displaced uterus. The operation is far less formidable, is attended with less shock to the constitution, and has been performed repeatedly with the most perfect success. There can be no objection against undertaking it under favorable circumstances, and when the case may require it."

CLINICAL LECTURE.

On Anchylosis of the Knee. By JOHN ERICHSEN, Esq., F.R.C.S., Professor of Surgery at University College, and Surgeon to the Hospital.
(*Medical Circular.*)'

GENTLEMEN,—What I wish particularly to direct your attention to to-day is the subject of anchylosis of the knee, as we have a case of the

kind in the ward up stairs, to which I intend doing something, in order, if possible, to restore some degree of mobility to the limb.

Of all the deformities that affect the human frame none are of more frequent occurrence than that of stiff knee; and it is of great importance that you should be acquainted with the different forms in which it is generally met with, the causes that commonly give rise to it, and the treatment best calculated to restore the usefulness of the limb, in cases where surgical interference is proper. There are two positions in which ankylosis of the knee generally takes place—the straight and the flexed position; the latter being a much more serious occurrence than the former, and much more frequently met with. When the knee is ankylosed in the straight position, its usefulness in locomotion is not seriously impaired, the greatest inconvenience being experienced when the person sits down, as he is then obliged to thrust the leg out in front of him; and this is often more inconvenient to those near him than to himself. You all know how awkward it is to have a person with a straight leg in an omnibus, or in any situation where room is of consequence; with this exception a person having a leg in this position gets on very well.

When, however, the knee is ankylosed in the bent position, it is perfectly useless, and the person has to walk on a wooden leg or pin attached to the knee, his leg projecting backwards at a right angle with the thigh; or if the knee is not flexed so much as this, he may limp very much, resting the toes on the ground, being unable to bring down the heel. In this position of the limb also the circulation becomes impaired to a certain extent, and the patient is liable to have chilblains, chronic ulceration, &c., consequent on imperfect nutrition of the leg.

Now, there are two forms of ankylosis which may take place in either position, these are, first, complete or osseous; and, second, incomplete fibrous and muscular.

In the first mentioned form, that of complete ankylosis, the osseous surfaces become fused together; the new osseous matter thrown out in the joint becomes cancellous in texture, and the line of demarcation between it and the ends of the tibia and femur is lost, the old and new bone becoming quite continuous.

When incomplete ankylosis takes place the knee is stiffened, but mobility is not entirely lost as in the complete form, the joints yielding to a greater or less extent when force is applied to it.

There are two forms of incomplete ankylosis, viz., the fibrous and the muscular, and the diagnosis between these forms is often difficult. The knee may be so stiff in some cases of the incomplete form as to

give the idea of osseous union; and again, the fibrous and muscular forms may closely resemble each other. Now in all cases the best way of making a diagnosis is to lay the patient flat on his face, and let the thigh rest on the plain surface of the table, then the knee being in the position, will project upwards. Now if there is complete ankylosis you will not be able to move the foot in the slightest degree when the thigh is kept firm on the plain surface, but if it is of the incomplete form there will be a certain degree of mobility, more or less, according to the length of time that the disease has existed; in a comparatively recent case the foot may be made to describe an arc of a circle. It is of importance to diagnose between the fibrous and the muscular forms. And this you may be able to do with tolerable accuracy by attending to the following points,—In the fibrous form there is no tension of the ham-string muscles and they are not rendered tense when you make traction on the foot, and the limb moves to a certain extent and then comes to a sudden stop; but in the muscular form the tendons are found to be tense, and the rigidity is increased by force applied to the foot; these two forms may co-exist. The fibrous form is the most common, and arises from inflammation round the joint. It is sometimes associated with rheumatic inflammation, or it may be the result of synovial inflammation, numerous bands are formed, and are attached in various places and stretching in all directions round the joint bind it in position.

In the muscular form the rigidity is due to the contraction of the muscles, and may arise from two causes; it is sometimes associated with detachment of the uterine system in females, and then you see what is called the hysterical knee; the patient complains of pain in the knee, which after a time becomes contracted without any sign of inflammation; in such cases the knee becomes gradually contracted. It may be due to the irritation of worms in the intestinal canal, producing spasmodic contraction of the muscles by reflex action, or from the causes that give rise to squint and the various affections of that kind. It may sometimes be due to paralysis of one set of the muscles, but this I think is not a frequent cause, and I believe that this form of the disease occurring in the adult is always due to spasmodic contraction. When it begins in infancy or childhood it may be due to congenital shortening of the muscles, or to an arrest of development, and I have seen cases which appeared to me to be due to this cause, when the tendons appeared naturally too short. This, however, is a point that has not been sufficiently made out yet, and will require further investigation before a satisfactory conclusion in regard to it can be arrived at.

Now with regard to position. Fibrous ankylosis may take place

either in the straight or the flexed position. When it occurs in the straight position it is generally caused by some inflammation taking place in the joint during the treatment of fractures of the thigh, when the limb is kept for a long time in the straight position, but the most common position in which we meet with it is the semiflexed. Now, why should it take place more frequently in this position than in any other? I think the best explanation is this:—The semi-flexed position is that in which the limb instinctively, as it were, places itself as the most easy, when inflammation is present in the joint, as both sets of muscles are then relaxed in an equal degree; but, in an addition to this, it has been found by experiment that when a joint is injected with fluid it assumes the bent position, and when there is effusion into the joint this cause may operate with the one already mentioned in determining the position; but whether effusion is present or not the position is the same, so much for that. Having now gone over the different forms of the disease and its causes, the next point is the treatment to be adopted, and this must of course vary according to the position of the limb and the form of the disease.

If complete ankylosis takes place in the straight position it must not be interfered with, as no operation can restore mobility. If, however, you have a case of incomplete ankylosis in the straight form, you may use passive motion and friction, and by a long continuance of these means some degree of mobility may be restored. When there is complete ankylosis in the bent position, there are two lines of practice, either of which may be indicated by the circumstances of the case.

One plan is to take out a wedge-shaped piece of bone from the front of the joint, and then bring the leg into the straight position, and keep it so until osseous union again takes place, thus converting a bent into a straight stiff limb. This operation has been successfully performed by Dr. Rhea Barton, of Philadelphia. It has not, I believe, been performed in this country yet, but I consider it a feasible operation, and one which I would not hesitate to perform if a favourable case for it came under my care; it does not differ in any material degree from excision of the knee-joint, which is now so frequently resorted to. To be successful, however, the muscles of the limbs ought to be sound. The other plan to be adopted in this position of the knee is amputation, and this will be the best course to pursue if the muscles of the leg are very much wasted or affected by fatty degeneration for it would be useless to perform the operation for bringing the limb straight under these circumstances; therefore, it would be better to take it off and let the patient get an artificial leg. You may remember that I adopted this course in the

case of a girl we had in the hospital about a year ago, who had fatty degeneration of the muscles of the leg.

With regard to the treatment proper to be adopted in cases of the incomplete form when the limb is in the bent position—in most books you are told to divide the hamstring tendons, but this is only necessary in the muscular form, or it may be necessary when the fibrous and muscular forms co-exist. The treatment of the uncomplicated fibrous forms is simple, and such as you have often seen me have recourse to in the hospital. The plan is to bring the limb into the straight position by forcible extension, under the influence of chloroform; a good deal of force is often required to effect this, and you often hear loud cracks as the fibrous bands and adhesions are ruptured. When you get the limb straight it must be placed on a long splint for a few days, after which it may be put up in a starch bandage and the patient allowed to move about.

In the congenital muscular form it is generally necessary to divide the hamstring tendons; in some cases you may succeed in bringing the leg straight, after a long process of splints and screws, but it is always doubtful. The outer hamstring is the one generally most affected; some little care is necessary in dividing them, especially the inner one, which is often in close relation to the popliteal artery. After having divided, then you may let the patient rest for two or three days, and then bring the limb straight as in the other form. When the disease is of the hysterical kind, it will be proper to use forcible extension and constitutional remedies, aloe, the shower bath, and such remedies as are calculated to relieve the constitutional disorder, and the same rule is to be observed in all cases where the disease is due to constitutional causes.

It might be thought that forcible extension would be likely to set up inflammation in the joint, but such is not found to be the case; the synovial membrane resembles the serous membranes in this respect, and they appear to undergo some change in disease which renders them less sensitive to causes that would in health produce inflammation. We know that in health we cannot puncture the peritoneum without danger of producing inflammation, but in disease, in dropsies for instance, it may be punctured time after time without producing any such result. The synovial membrane appears to become modified in a similar way during disease, and you may, therefore, extend the joints without danger; indeed it is astonishing what liberties we may take with a joint under such circumstances.

After having brought the leg into the straight position, it often happens that the head of the tibia is thrown a little backwards, and that the

end of the femur and the patella overhang the joint; in fact, there is a partial dislocation produced which would greatly interfere with the strength of the joint, the femur only resting on about half of the head of the tibia. This must be counteracted by a kind of boot, which you have often seen me use, and which by means of an iron bar and of continually acting screws, which are made to act on the anterior aspect of the thigh, and posteriorly on the tibia, the joint may, in the course of a few months, be brought into its natural position.

THERAPEUTICAL RECORD.

(*Philadelphia Medical and Surgical Journal.*)

Anodyne Mixture R. Chloroform, Tr. Arnica; Tinct. Camphor, Tinct. Aconite *aa* oz. iv Sptl. Vin. Rect. oz. viij M. to be applied 3 or 4 times a day or internally 25 drops every 3 or 4 hours.

Diarrhœa Mixture.—Tannin, dr. x; Tinc. Opii Acet, oz. ii; Spts. Ammo. Arom oz. ij; Tr. Lav. Com. oz. vj; Aq. Camp, oz. xxiv; Muc Gum Acacia, oz. vj. The dose a teaspoonful every 3 or 4 hours.

Tonic Alt. Syrup.—R.—Rad. Sarsap. Cont. oz. vij; Rad. Sassa. Cont., Lig. Guaiac rasp., Rad. Glycyrrh, *aa* oz. iij; Mezereon Cont., dr. vj; Dulcamara, Eupatridi, *aa* oz. vj; Aqua Cong. l. To stand 3 or 4 hours, then boil half an hour strain and mix with simple syrup, then add oz. x Hoffman's Anodyne and oz. ss, Ol. Galth, to each gallon. Dose, a tablespoonful 3 times a day.

Rheumatic Mixture.—R.—Tinc. Sem. Colchici, Tinc. Stram., *aa* oz. xvj; Tinc. Opii Acet oz. v; Tinc. Lav. Comp. oz. vij; Aqua Cinnam. oz. lxxiv. M. A teaspoonful every 8 hours in those not so urgent.

Anti-Bilious Pills.—Ext. Colocynth Comp. dr. i, Ext. Jalapi grs. xv; Sub. Mur. Hydg. grs. xv; Tart. Antim. gr. l; Pulv. Gamb. grs. iij; Ol. Card grs. vj. M. In pil xxx div. Dose, one to four at bed time.

Vegetable Purgative Pills.—Ext. Colocynth Comp. dr. i; Ext. Jalapi sc. ij; Pulv. Garboj. grs. iij; Pulv. Ipecac. grs. v; Ol. Anisi. gtt. vj. M. In pil xxx div. Dose, one to four at bed time.

Dyspeptic Elixir.—R.—Rad. Colomb. Cont., Rad. Gentian. *aa* oz. iv, Sem. Cardam oz. ij; Bi. Carb. Potass, dr. vj; Spts. Vin. Rect. oiss; Aqur. Pura. ovj. The articles are to stand in water 24 hours, stirring occasionally. Dose, one or two table spoonfuls an hour after each meal.

Fever and Ague Mixture.—R.—Sulph. Quinine dr. vj; Aq. Pura oj; Acid Sulph. sc. ij; Tinct. Gentian. C. Oiss; Tinc. Capsici Oss; Syr. Simp. Oj; Ol. Gaultheri gtt. xv; Alcohol Oj. M. Dose a tablespoonful every hour for six hours preceding time of chill.

Whooping Cough and Asthmatic Mixture.—Tinc. Lobelia oz. v; Tinc. Belladonna oz. iv; Chlorform. oz. ij; Muc. Gum. Acacia. oz. v; Aqua Pura. oz. ix. M. Dose, a teaspoonful every 3 hours.

Cough Mixture.—R.—Muc. Gum. Acaciæ; Syr. Tolu; Syr. Scille, Syrp. Ipecac, aa oz. vj; Tinc. Belladon. oz. ij; Tinc. Lobelia oz. ij; Tinc. Colchici oz. iss; Vel. Tinc. Sem. Colchici oz. i. Spts. Nitre Dulci oz. ij. Dose, a teaspoonful every 3 hours.

Nervous Cordial.—R.—Quassia, Rasped, lb. iiss.; Rad. Valeriana, lbs. iiss.; Artemisia Absinth. lbs. ij.; Rad. Serpentaria, lbs. iiss.; Aq. Bulliet; Cong. vj. M. fr infusion, and add Tinct. Gentiana: C. Cong. ivss; Strychine, grs. cxx.; Acid Acetic oz. iss; Tinct. Santal, oz. viij. M. Dose, a table-spoonful 3 times a day.

PERISCOPE.

On the inutility of depletion in syphilitic iritis. By JOHN HAMILTON, —
Surgeon to the Richmond Hospital.

"I believe that in the treatment of syphilitic iritis, even the most acute cases, all that is necessary to be done is to administer mercury properly suited to the constitution of the patient, and the nature of the case, and till full salivation: and the application of the extract of belladonna round the eye, or of the solution of atropine in the eye. I totally disagree with those authors—Mr. Tyrrell for instance—who recommend, in cases where the patient is broken down, to administer tonics, &c., till he is able to bear the mercurial course, the real fact being, that the best tonic is the mercury, combined with opium, which by expelling a depressing poison from the system, invigorates it, at the same time that it arrests the ravages of a destructive specific disease; whereas, while waiting for the effects of tonics and diet, the eye may be lost. There could not be apparently more feeble or depressed subjects than No. 3, Mary Byrne, or No. 4, John Callaghan, particularly the latter, who was literally nothing but skin and bone, with a pale sallow face, contrasting with the large red tubercles with which it was studded, and so weak he could scarcely stand; yet under the beneficial action of the mercury, while the eye was saved, his flesh, strength, and complexion, all became rapidly restored, so that in his last letter to me, he describes himself, in language more remarkable for strength than orthography, "as strong as a horse, and as fat as a wheel!"

Many surgeons do not deplete, but the large majority still do, by leeches and cupping, rarely, I believe, in this country, by venesection, as recommended by Mr. Mackenzie. During fourteen years, a very large number of cases of syphilitic iritis have been under my care in the Richmond Hospital, and I have only cupped in one case; and with my present experience, I am sure if that case presented itself now, I should not do so. It is one of those practical questions best decided by facts. I have there-

fore, taken a few cases from my case-book, which will help to prove, I trust, that depletion is unnecessary in this disease.

1. James Prendergast, æt. 30, a labourer, October 30, 1844, ten weeks since contracted a sore near the orifice of the urethra, where there is still a small one, presenting the characters of superficial chancre. He took no mercury. A fortnight after the chancre, the anus became tender, and six weeks after a rash broke out. Nine or ten days after the eye became inflamed.

He has iritis of the left eye, marked by very great redness, particularly intense round the cornea; slight yellowness of the iris, compared with the blue-grey of the other eye; some dulness of the aqueous humour, and irregularity of the pupil at its upper margin. Suffers pain in the eyebrow, beginning at four o'clock in the evening, and keeping him awake all night. There is a rash of scurfy papules thickly scattered over the body; very extensive condylomata round the arms; two small white raised ulcers on each tonsil. To take two grains of calomel, and one-eighth of a grain of opium, three times daily.

Nov. 4. Mouth is sore, and became so yesterday. He has taken ten pills, and had a little griping yesterday. There is great improvement in the eye, which is nearly well. The redness much lessened; the cornea and aqueous humour clear. The iris has regained its natural appearance, except that there is still slight irregularity of the upper edge of the pupil. He says he can see nearly as well as ever. For the last two nights he rubbed in some extract of belladonna round the eye, and has had no nocturnal pain. Omit the pills.

Nov. 15. The iritis is now perfectly well; the iris bright, and the same colour as the other; the pupil regular as to size, but irregular at the upper edge; but so little that it would not be noticed.

He was kept under the influence of mercury, chiefly by frictions, for six or seven weeks, and left the hospital well some stains of the syphilitic eruption alone remaining.

2. *Double Syphilitic Iritis cured without Depletion*—Case taken by Mr. Frazer. Peter Craven, a labourer, æt. 23, admitted February 3, 1847, into No. 1 Ward, with iritis of both eyes. There is vascularity of the conjunctiva and sclerotic in both eyes. The pupil of the right eye contracted and irregular; the left pupil larger, and the inner circle more even. The irides naturally brown, have bright orange-coloured lymph deposited in them, chiefly round the inner ring. The tears run over his cheek, and light pains him. He has pain in the brow and temple, worst during the day. No pain in the balls of the eyes. Vision is a little dim in the left eye, and more obscure in the right. Aqueous humour clear.

On the abdomen, loins, thighs and calves of the legs, arms and fore-arms, are the drying scabs of small pustular eruption, in patches, leaving, where they have separated, small depressions. He complains of pains in the joints, and periostitis of the shoulders and sternum. The submental glands are enlarged. On the other surface of the penis, about its middle is a cicatrix the size of a half-penny, silvery, and without hardness.

He was infected about the end of August, (1846), and a month after admitted under Dr. MacDonnel. He remained in five weeks, when he was dismissed cured. A fortnight after the eruption appeared, preceded by headache, sick stomach, and shivering. The right eye became dim and red three weeks ago, and painful about a week since, when the left eye got bad.

Feb. 3d. Five grains of Hyd: c. cretâ, three times a day; extract of belladonna to be smeared round the eyes.

5th. the pupil of the right eye slightly dilated; vascularity of both eyes less.

6th. His mouth is sore. Omit the pills.

8th. No pain in the eyes; vascularity diminishing; pupils dilating, but very irregular: the irides regaining their clearness and natural colour, being less yellow; vision still dim.

9th. Eyes paler; the left pupil is now dilated, and presents a curious appearance., the inner circle being quite fringed with tags of lymph, to the number of twenty, where the adhesions had existed between the iris and capsule of the lens. To take a pill night and morning.

The improvement in the eyes was accompanied by equal improvement in the eruption and pains. The mercury was continued, either in the form of Hyd: c. cretâ., or small portions of mercurial ointment, to the 11th of March. He was dismissed quite well, and the eyes in every respect natural, on the 23rd March.

3. Mary Byrne, æt. 25, rather a delicate-looking woman, who had been infected by her husband several months before, and been in the hospital with syphilitic eruption for two months, under the care of Mr. Hamilton, with a slight attack of iritis. She left the hospital well, but returned in a fortnight, the iritis having relapsed, and become most acute, accompanied by a most alarming sloughing ulceration of the throat. She had been permitted to return home only on the condition of continuing the treatment, but neglected entirely to do so.

Dec. 30, 1856.—The right eye presents the appearance of intense ophthalmia; the conjunctiva very red and vascular; a pink zone round the cornea; intolerance of light; profuse lachrymation, and tumid eyelids. The iris is dull, of a greenish-yellow colour, with rusty specks of lymph

scattered over it. They are most numerous at the outer circle of the iris; but there is one large lump projecting at the lower and outer part of the inner circle, which is evidently the commencement of a tubercle. The pupil is contracted and irregular, rather of an oval form, and adherent at its lower margin to the lens, and also at its upper and inner edge. It is quite fixed. There is scarcely any sight. Pain in the eyeball, and in the brow and temple; becomes severe at night, but usually commences about three o'clock in the afternoon, gradually grows worse till twelve at night, when it ceases. The throat is very painful, the ulceration extending over the tonsils, and up the arches of the palate to the uvula; the surface covered with adherent ash-coloured sloughs. The adjacent parts intensely red and inflamed. A good deal of sympathetic fever; skin hot, pulse 94, full and hard; tongue white and loaded. She was put on five grains of Hyd. c. cretâ, with a quarter of a grain of opium, every fourth hour. Extract of belladonna to be smeared round the eye; and a solution of nitrate of silver, dr. ii to oz. i of water, to be applied freely over the throat.

Thursday, Jan. 1st. The gums were effected, and the eye at once became less inflamed, the intolerance of light and the pain less.

Sunday, 4th. Redness much diminished, pupil dilated, and the rusty deposit of lymph is evidently undergoing absorption. The throat easier, its surface clearing, and small white sloughs separating, leaving a clean red surface beneath. Mouth fully affected for the last two days.

8th. Scarcely any vascularity of the conjunctiva or sclerotica; the tubercle nearly gone; she can bear the light, and vision is returning. After this she got quite well of the throat and the iritis; the only trace of the latter being some irregularity of the pupil at the lower and outer part, where the tubercle had been. This, Mr. Hamilton thought, would be permanent. She left the hospital about the end of the month, the Hyd. c. cretâ having been continued in smaller doses.

4. John Callaghan, æt. 24, transmitted into No. 4 Ward of the Richmond, from the Whitworth Hospital, February 26th, 1857. He is one of the city police, and was once a stout powerful man, but is now sickly-looking, sallow, and emaciated. A thickly scattered eruption of tubercles over the face, on the eyebrows, sides of the nose and chin. He became infected with syphilis about ten months ago, and has since suffered from pains in his bones, sore throat, and eruptions, with rapid decline of health and strength. He has taken mercury irregularly. Ten days ago the right eye became tender and inflamed, and quickly got very bad. His only treatment had been one leech and a blister to the temple, and bark mixture; but he had taken no mercury for a month.

The right eye is affected with acute iritis; the sclerotic of a deep dull

red, most marked round the cornea; the conjunctiva also is traversed by many large red vessels: the iris of a dull yellowish-grey, contrasting with the clear blueish-grey of the other eye; the pupil hazy and irregular, adhesion existing at the lower and outer rim, where the iris is of a dull reddish-brown, as if a tubercle was about to form there; the pupil is nearly as large as the other, perhaps slightly affected by the extract of belladonna which was applied last night; sight very much injured—though he can see me in a bright light at three feet, he cannot discern a feature of my face; intolerance of light, and some lachrymation; pain in the brow, extending to the eyeball and temple, begins at ten o'clock at night, and lasts till one o'clock, A. M. Submur. hydrarg: ℥i, opii gr. ii. in pilulas x.

Third day. Eye somewhat clearer; the deposition of rusty-coloured lymph appears less: not so much pain last night. He has taken eight pills, but no perceptible effect on the mouth, nor any griping. The belladonna has had no influence on the pupil.

Fifth day. The mouth is sore, and there is some griping. The eye is better, and he can distinguish my features, and the studs on my shirt. To take a pill night and morning.

Seventh day. Mouth fully sore; a very decided improvement in his vision, and the appearance of the eye; the iris clearing, and the rusty lymph absorbing; pupil clear and black, and the redness much less. He bears light much better; no nocturnal pain of the brow the last two nights; the eruption of tubercles on his face and body are fast disappearing.

On the twelfth day the eye was not so well, more vascular and uneasy—evidently an attempt at a relapse. By increasing the quantity of mercury for two days he got better; all traces of the iritis afterwards entirely disappeared.

On the twenty-second day, having been quite well for several days, he requested his dismissal, wishing to go to the country. I had a letter from him a few days since, saying that he had regained strength and flesh, that the sight of the eye was as good as ever, and no traces of the eruption existed. He had continued to take the mercury so as to keep up the mercurial action in the system, altogether for about ten weeks.

6. *Syphilitic Iritis of the right eye, cured by Mercury, without Depletion*—Case by Mr. M'Farland. William Quin, æt. 17, admitted March 12th, 1857, under Mr. Hamilton. About five months ago observed a small pimple on the prepuce, sometime after connexion, which broke and healed in a week. Six or seven weeks after, an eruption (syphilitic lichen) broke out over his body, and has remained ever since; at the same time his throat became sore. He got some pills at a dispensary, which slightly affected his mouth. His eyes were tender but the right eye became

so inflamed that he was admitted on the 10th into the Whitworth, from whence he was transferred to the Richmond Hospital.

The right eye presents the usual appearances of subacute iritis; the iris dull, of a dusky-yellow colour, as compared with the clear blue-grey of the other iris; the pupil *dilated* (though no belladonna has been applied) a slight adhesion at the lower edge; a pink zone round the cornea, and the conjunctiva vascular; some intolerance of light and lachrymation; little pain in the brow or temple, but the sight very misty. There is an eruption thickly covering his entire body, of small papules, in many parts scurfy and shining; whitish soddened ulceration over the right tonsil, adjacent part of palate, and uvula.

March 15th. He was ordered five grains of Hydrarg. c. creta, three times a day. On the ninth day after this he became affected with griping, and the mercury had to be discontinued for a day, and then resumed twice a day for six weeks, when he was dismissed quite well. He was one of those in whom mercury does not cause ulceration of the gums or salivation; and yet its beneficial influence was not less marked. As the eye got gradually better under its use, till all trace of the iritis had disappeared, including a band of lymph, which had extended from the lower margin of the iris to the capsule of the lens, it was curious that in proportion to the improvement, the pupil became less dilated, till it reached its natural proportions. He was rather slow in getting clearness of vision; when all other symptoms had gone, some imperfection of sight continued, like a cobweb before the eye, or between him and any object he looked at.—*Dublin Hospital Gazette.*

Menstruation, an Exfoliation as well as an Ovulation.—By D. W. Brickell, M.D., Prof. Obstet. N. O. School of Med.—“About six months ago, I was performing an autopsy in the dead house of the Charity Hospital. On an adjoining table lay the body of a stout young female, who was said to have died of disease of the heart. She had died a few hours previously, and was still quite warm. The thorax and abdomen were laid open. The body had been abandoned, and curiosity led me to examine the internal organs of generation. The uterus and appendages had been cut from the pelvis, and the anterior wall of the organ had been laid open. The moment I saw the organs, I was struck with their being highly engorged with blood, and the uterus was considerably larger than usual. The pelvis was filled with blood, which had flowed from the vessels when the organs were detached. The next thing that attracted my attention was the most palpable specimen of *recent corpus luteum* in one ovary. The corpus was large and prominent, and the

depression on its centre, exhibiting the point of escape of the ovule, was evident beyond all cavil. In this same ovary one other Graafian vesicle seemed fully matured, the parts surrounding it being highly congested, but the ovule had not escaped. The other ovary was generally congested, but there appeared to be no mature Graafian vesicle.

But the most interesting feature in the case was the *complete absence of the lining membrane of the cavity of the body of the uterus*. The moment my eye alighted on the inner surface of the organ, I recognized the woodcut of Tyler Smith, in the May, 1856, number of the *Lancet* (Amer. edition), representing the inner surface of the uterus of a woman who died of apoplexy during the catamenial flow. Nothing could have been more striking than this resemblance; and if I had ever been sceptical in relation to the observations of the author, I was now bound to admit his accuracy. Down to the *os uteri internum* the mucous membrane was gone, and the inner surface of the organ rough, with innumerable blood-spots scattered over it. All below the os internum was smooth, and in every respect natural in appearance. The difference in sensation conveyed to the finger by touching the two surfaces was as palpable as the impression conveyed to the eye.

"The only doubt now remaining about the case was, whether it might not be a uterus which had very recently been delivered of an early ovum. More extended examination, however, proved clearly that this was not the case. The vagina was very small, and its mucous membrane highly corrugated; and there was a well-defined hymen. To add to this the mammae showed none of the changes generally produced by early pregnancy.

"The subject was, to all appearance, about eighteen or twenty years of age, and quite robust. She was the subject of anasarca to a considerable extent, and was said to have died very suddenly—her death being attributed to disease of the heart. I tried to get a more accurate history of her from the nurse of the ward in which she died, but, as is too often the case, she only knew that such a woman had been in the ward, had lived, and then had died.

"Tyler Smith says, 'According to my view, the mucous membrane of the uterus becomes excrementitious every month, and is discharged from the cavity of the uterus in a state of disintegration, and the uterus forms a new mucous coat, by a process similar to the reproduction of lost parts.' Coste and others speak of the exfoliation of the mucous membrane of the uterine cavity under certain circumstances; but, so far as I am aware, Tyler Smith is the original advocate of the theory above laid down. After reading all the observations I could procure on this inter-

esting subject, I was altogether inclined to adopt this theory, and the case I have thus inscribed only the more strongly tends to prove its correctness."—*N. O. Med. News and Hosp. Gazette*, Feb. 1857.

The Medical Chronicle.

LICET OMNIBUS, LICET NOBIS, DIGNITATEM ARTIS MEDICÆ TUERI.

OUR NEW VOLUME.

The subscribers to the MEDICAL CHRONICLE, those who from the commencement have given us a hearty support, must be exceedingly gratified with the marked improvements which Mr. Dawson has introduced into the fifth volume. The paper on which the journal is now printed is fine English, and not surpassed, if indeed equalled, in quality by that of any medical journal on the Continent of America; it has also been increased in size by eight additional pages, while the subscription price is still kept at the very small and unremunerative amount of *Two Dollars per annum*. When the CHRONICLE was first issued, a considerable number of copies were returned by gentlemen from whom we expected better things than the refusal to give ten shillings yearly for the support of a medical journal in the Province, more particularly when they were getting what we humbly considered full value for their money. The reason of their refusing to subscribe, however, may have arisen from the doubts which were naturally entertained at the time regarding the success and stability of any enterprise of the kind. As we have entered on the fifth year of our existence, there need be no apprehension of our speedy demise. We hope, therefore, that every one of our professional confreres, both in Canada and the Lower Provinces, to whom Mr. Dawson has sent a specimen copy, will not only become a subscriber, but what is of equal or even greater importance, a regular contributor to our pages. In its present form, at its present subscription price, the Journal cannot possibly remunerate the publisher unless additional names are added to the list of subscribers, and all attend as far as possible to the terms specified on the cover, viz., "*payable in advance.*"

All original communications intended for the columns of the Journal, must be addressed to the Editors. All communications relating to the business of the Journal, to be addressed to the Publisher, B. DAWSON, No. 23 Great St. James Street, Montreal.

CANCER CURERS.

Whenever a disease is pronounced by the profession incurable, or even difficult of cure, it is immediately adopted by the quack, and employed by him as a means wherewith to deceive a too credulous public. Cancer and phthisis appear to be the favorite affections of the horse-leech fraternity; for curers of cancer and curers of consumption abound in this and other countries, where they invariably flourish for a limited period. That they succeed at all in attaining notoriety is to be attributed to the fact, that there is a widely-spread and fearful dread existing in the community regarding these two diseases, and it needs only that a female should have a slight and limited induration of the breast, or a simple cough, to excite in the minds of herself and friends the greatest apprehension as to the final result. The person, moreover, who boldly announces that he possesses an infallible cure,—that he holds, as it were, the issues of life and death in his own hands,—knows his own interests too well, when called upon for an opinion, to do otherwise than favor the most gloomy and hopeless view taken of the case, certain that when, in the one instance, the hardness is removed, and, in the other, the bronchial irritation subsides, his name will be trumpeted abroad as a successful practitioner in malignant or fatal diseases. Failures however soon appear, and becoming more and more numerous, they finally force themselves on the notice of the public; and when this point in the quack's career is reached, it is really astonishing how rapid is his descent. A few months suffice to change his position entirely. Instead of being the highly lauded of inconsiderate admirers—the great be-puffed of the public press—his name is scarcely ever mentioned except in execration, and his flaming advertisements fail to call forth the slightest notice from “we” of the editorial chair. The crowd of eager faces that were wont to be seen at his morning levée, are now no longer there, and a desolate quietude reigns in the dispensing and consulting rooms. The cheerful ring of the glittering coin of the realm which fell on his ear and gladdened his heart, as he transferred the broad pieces from the pockets of his dupes to his own plethoric purse, is heard no more; and at length he wakes to the disagreeable consciousness of being thoroughly known and appreciated, and forthwith departs to play his game over again in other and foreign parts.

The profession have lately been interested in investigations made by certain authorities into the virtues of two modes of treatment of cancer, stated by their originators to be eminently successful. The first investigation was held on a treatment proposed by Landolfi. His mode of treating cancer having obtained a favourable reception in Austria, he

was desirous of securing the endorsement of the French Surgeons as to its efficacy, and visited Paris accordingly. The Imperial Academy of Sciences appointed a commission, consisting of M.M. Broca, Cazalis, Furnari, Manec, Mounier, and Moissenet, to examine the subject thoroughly and report on it. A certain number of patients were allotted to M. Landolfi at the Salpetriere, and the results of his treatment were closely watched. The committee reported most unfavourably. His internal treatment, which consisted of the administration of chloride of bromine, did not "possess the slightest special therapeutical value in the treatment of cancer." The local treatment consisted in the application of a caustic, which was nothing more than Canquoin's paste, disguised by the addition of a coloring and odorous substance. It was composed of chloride of bromine, 3 parts; chloride of zinc, 2 parts; chloride of antimony, 1 part; liquorice powder, 1 part. "Of these substances," say the commission, "the chloride of zinc and chloride of antimony have been long known and employed as caustics. These two chlorides combined in the same proportion as in Canquoin's caustic form the only portion of M. Landolfi's preparation that is really active. To sum up, his method can only be applied to certain cancers; it is more painful and more uncertain than several other modes of cauterization; and it is, in particular, inferior to Canquoin's method, of which it is only an altered copy. Like all the other methods of treatment, it may succeed in destroying certain tumours, and cicatrization may follow; but it is quite powerless for the prevention of relapse, which it would seem rather to provoke, and so far from forming a step in advance, it adds but another to the illusions that so abound in the history of cancer."

M. Landolfi treated nine cases of cancer of the breast and three cases of canceroid with the following results:—Of the 9 cases of cancer of the breast 2 died, 4 suffered a notable aggravation of the disease, while in 3 cases, in which cicatrization took place, the disease immediately reappeared,—so that the nine cases were unsuccessful. Of the 3 cases of canceroid, 1 was cured, 1 cicatrized, but the disease reappeared, and in the third an exacerbation took place that necessitated the amputation of the limb. The application produced excruciating agony, for the relief of which opium and other narcotics were altogether powerless. So much, then, for M. Landolfi's mode of treatment; and come we now to notice the pretensions of the second aspirant to the honor of cancer-curer *par excellence*.

We have observed in our English exchanges for some time back remarks on the advent of an American physician in London, named Dr. Fell, who professed to have discovered a plan of treatment whereby

cancer could be cured. He was allowed to treat a certain number of patients in the cancer ward of the Middlesex Hospital; and in the London Medical Circular for June 10th we perceive that he has recently issued a work on "Cancer and its treatment," and that the Surgeons of the Middlesex have reported the conclusion they have arrived at, after witnessing his peculiar mode. Dr. Fell believes that *Sanguinaria Canadensis* possesses certain wonderful properties, which, when the drug is administered internally, and applied externally to a cancerous tumour, will cause the enucleation of such tumour and cure the patient. Strange to say, however, the doctor finds it necessary to mix the *sanguinaria* with chloride of zinc whenever he applies it externally. The following is his formula: \mathcal{R} *Sanguinaria Canadensis*, \mathfrak{z} ss. vel. \mathfrak{z} i; Chlor. Zinci, \mathfrak{z} ss. el. \mathfrak{z} ij.; Aqua, \mathfrak{z} ij.; Pulv. Sem. T.itic. Hibern., q. s. Mix, and form a paste the consistence of treacle. Now is this not a miserable insult to the profession? To attempt for a moment to impress them with the belief that the caustic effects of this paste are due to the presence of bloodroot instead of chloride of zinc, is certainly most absurd. *Sanguinaria* has been employed topically as a stimulant in indolent and ill conditioned ulcers, but it does not possess the caustic power of chloride of zinc.

The Surgeons of the Middlesex Hospital report as follows:—

"The undersigned have great pleasure in now stating that Dr. Fell has fulfilled the obligation contracted by him frankly and without reserve; and whilst they regret that the limited period which has elapsed since the treatment in the hospital was commenced (January 22nd) prevents their coming to any positive conclusion upon certain points of great importance, they have yet no hesitation in stating their unanimous opinion—

"I. That Dr. Fell's mode of treatment is in entire accordance with known principles of surgery, is ingenious, safe, and easy of application by well-instructed surgeons.

"II. That it may be employed in all cases in which surgeons use the knife and in many others in which no prudent person would recommend a cutting operation.

"III. That Dr. Fell confines himself to the enucleation of the tumours merely; and, in the case of the breast, does not remove the entire gland, as is commonly considered necessary in the excision of the mammary cancers in this country.

"IV. That it is a great advantage attending this mode of treatment that the patients are not confined to bed or to the house; but that, on the contrary, they are able to obtain the benefit of exercise in the open air. In some instances their health has manifestly improved during the treatment.

"V. That the patient being exempt from the immediate hazards of a cutting operation such as exhaustion and hæmorrhage, and being able to pursue the treatment without confinement to bed, they appear little prone to such constitutional affections as erysipelas and pyæmia.

"VI. That the enucleation of the diseased mass is succeeded by a healthy granulating and cicatrizing surface. From the inspection of Dr. Fell's private cases of longer duration than those in the hospital, the undersigned have had opportunities of observing that healthy cicatrices are eventually formed.

"VII. That all the patients have suffered pain during the treatment; some have spoken lightly of their sensations, others have complained much. No one, however, has sustained that acuteness and severity of pain which characterises the action of caustics as ordinarily employed; and it has been observed that the pain which has been felt has usually been referred, not to the tumour itself, but to parts at some distance from it, as, in the case of the mamma, to the shoulder and arm.

"VIII. That, although the treatment is less expeditious than that usually resorted to, yet, taking account of the average time that elapses before a patient has completely recovered from a cutting operation, it is probable that the difference between the two modes of treatment, in point of expedition is by no means great.

"IX. That the undersigned have not as yet had time to ascertain the average duration of the benefit conferred by the treatment, nor have they any means of knowing whether, in the event of a return of the disease, there be any difference observable from what is known to take place after excision.

(Signed)

"ALEX. SHAW.
 CAMPBELL DE MORGAN.
 CHARLES H. MOORE.
 MITCHELL HENRY."

In the foregoing nine paragraphs the Middlesex authorities merely state that the tumour can be enucleated, and that the application of the caustic induces pain. What else could they say if they were speaking of chloride of zinc paste simply? They have not ascertained whether there is a liability to a reappearance of the disease. This is a very serious omission, and makes their report a mere bagatelle, that will excite the smile of every practical surgeon.

LATE CASE OF STABBING.—"An inquest was held at the Military Hospital on the body of lance-Corporal Richard Reynolds, aged 20, of Her Majesty's 39th Regt. of foot, who was stabbed in the abdomen, on Thursday, the 14th of May, by Private William Jones, of the same Regiment.

It appears that on the day in question, the deceased, accompanied by an escort, went to the bush at Logan's Farm to arrest the prisoner; after some trouble they succeeded in doing so, and brought him to the barracks, in a cab, handcuffed. While getting out of the cab at the guard-room gate, the prisoner seized hold of a musket, with a bayonet attached, and threw it at the Corporal, which caused a wound in the abdomen, of

about half an inch long, and one-eighth of an inch broad. On the following day, (Friday,) intense inflammation set in, which resulted in the death of the deceased on Saturday night, about 12 o'clock.

Dr. A. F. Holmes and Dr. John Ross, Assistant Surgeon of the 39th Regiment were sworn, and after the jury had examined the body, directed to make a *post mortem* examination.

John Ross, M. D., examined: The deceased was brought to this hospital on the evening of the 14th instant, about half-past eight o'clock. When stripped, we found a small wound about half an inch long at the bottom of his abdomen. I saw the wound next morning about nine o'clock. He then complained of severe pains in lower parts of his bowels. Found intense inflammation had set in. I treated him in the usual way. He died close to midnight on Saturday last. Have made a *post mortem* examination. The wound was only about half an inch deep. It was a puncture about half an inch deep. There was a great effusion of blood on the walls of the abdomen, the result of a severe contusion. We found the marks of severe inflammation on the membrane of the bowels. This inflammation was the result of the contusion and wounds which caused his death. The deceased stated to me that Private Jones had thrown a musket at him, which caused the wound. Perfectly satisfied that death was caused by the effects of this wound.

Dr. A. F. Holmes corroborated the evidence of Dr. Ross, as regards the *post mortem* examination, and as to the cause of death.

Dr. Woodman, Surgeon of the 39th Regt.—I was present when deceased was brought into the Hospital to my room, on Thursday night about 8 o'clock. Told me he had been wounded by a fixed bayonet thrown at him. Examined him, and found the wound to be very superficial. There was no blood flowing at the time. He complained of pain in his abdomen. I questioned him about the wound, and where he was standing. Considering the wound so very slight, I told him he had better have some plaster put on and return to his duty. He went to the Hospital to have this done, but in a few minutes the Sergeant returned to tell me he had fainted, and I then feared he had received more severe injury. I then ordered his detention in Hospital. About half an hour after Dr. Humphrey arrived, and examined deceased. The Coroner summed up, and the Jury, after about half an hour's deliberation, returned a Verdict of WILFUL MURDER against the Prisoner.

We should state that the Jury were divided in opinion—12 were for a verdict of Wilful Murder, and two for manslaughter."

LONDON AND PARISIAN HOSPITALS.—“From an interesting report of the Committee of Beneficent Institutions, it appears that London and Paris present a striking contrast in the methods which they adopt for affording relief to the sick poor. In London, a great part of our medical relief is dispensed at the houses of the poor themselves by the physicians and surgeons attached to our dispensaries. In Paris, on the contrary, comparatively little relief is afforded otherwise than in the hospitals themselves. Thus, in the year 1853, the number of in-patients in hospitals in Paris amounted to no less than 91,754, against only 45,808 in hospitals in London—this calculation, in the case of London, being exclusive of patients treated in workhouse infirmaries. But, on the other hand, under the system of out-door medical relief recently set on foot in Paris, 102,472 persons received gratuitous attendance, against upwards of 600,000 patients similarly relieved in London. The nearest approach to a fair comparison between London and Paris which it seems possible to make is that afforded by a statement of the sums contributed by the medical charities and poor-rate taken together as follows: In London, income of medical charities and poor relief, £1,150,900,; in Paris, expenses of l'Administration Générale, £560,853.”

CORRESPONDENCE.

A STUDENT'S LETTERS.

No. I.

In penning these few lines I may commence by stating what is a student's best plan, when he intends leaving Montreal to spend a short time in the Metropolis of England. He will find no trouble in travelling between the two places, as every thing will be found quite comfortable, particularly on board the ocean steamers. When arrived at his destination he must decide upon what branches he is to follow, and as he has already fully studied the four primary branches, Anatomy, Physiology, Chemistry and Materia Medica, and also, most probably, the final branches likewise,—I think the best plan (which I have myself followed) is to attend those lectures that are not given as a separate course in Montreal, viz:—Botany, Pathological Anatomy, the use of the Microscope, &c., as taught in the lectures on Practical Physiology and Histology, Practical Chemistry, and if he thinks fit Comparative Anatomy, and the lectures on the Eye. There will still be plenty of time to attend the Hospitals, which is the great aim, even when attending a requisite number of the preceding lectures, which I may state “en passant” are only delivered in London during the months of May, June and July.

The best way to accomplish this object is to get the student's number of the *Lancet* which will give the names of lectures, days and hours of delivery, and price of each, in the 13 different Medical Schools of the Metropolis. He can board in two ways, either by staying at an hotel, which is very expensive, or by taking a suit of apartments which he will get for from 14s. to 20s. a week, well furnished in every thing requisite, and then get meals at an eating house, where he finds it handy according to the part of the city he may be in. This is the manner in which very many live here, and they find it most convenient.

A word as regards Hospitals. There are operations here at some of the different hospitals every day in the week, except Sunday, and in the greater number he will have a choice of two or three, and on Saturday of four. It will be found difficult to get a ticket for the surgical practice at any of the hospitals for less than six months, and for which he will pay 10 guineas, and the same sum for the medical practice, if taken separately, or 15 guineas for both. My view of the case is that as Students come here to see Practical Surgery, not generally stopping for more than two or three months, it is the better plan not to attend any hospital in particular, as in that case the operations you see would be confined to that one alone; but to see operations chiefly every day, as there appears to be no restriction about attending the theatre (as it is termed.) If you mention that you are from Canada you are received with every respect; you by this means see practice, and it is for this purpose you come here. I, for the most part, attend the operations of five hospitals in the week, and you may frequently attend two in one day, the one at 1, the other at 2 o'clock, P. M. You seldom see less than two cases, and very often three, four and five, at each hospital, generally attended.

I shall make a few remarks on a class which I think should be established at Montreal, viz:—Practical Physiology and Histology, and I shall describe it as taught by Dr. G. Harley, University College. The subjects treated of are—The structure of the healthy tissues and organs of the body. The changes which the textures undergo in the diseased states most commonly met with. The chemical examination of the fluids, viz:—blood, bile, urine, milk, &c. And demonstrations in experimental physiology, such, for instance, as an illustration of the development of the ovum by artificial incubation, &c. Each student is furnished with a microscope and apparatus for which he is responsible, and it is at his command when he wishes it, but he must remain in the lecture room which is always open. Each microscope has two powers, 1 inch and $\frac{1}{2}$ of an inch, and two eye glasses, giving powers of 40 and 220, or 80 and

350 diameters. Each student is required to draw what he sees before him in the field of the instrument, and the sketch is corrected, if wrong, when the Professor comes round. I may state here "en passant" the best way to examine crystals with the microscope. Take crystals not too large for the field of the glass, place them on the glass plate, and a drop or two of a liquid, water will not do as it dissolves them generally. The best fluid by far is the saturated mother water from which they have been formed, or a liquid in which they are insoluble, then put the small thin glass cover over it, and use the lowest power to commence with, and then gradually pass to the highest. By this means you find which power answers, best for your particular specimen.

I shall conclude this communication with a few words on the following simple experiment, which I saw at our practical physiological lectures and can be performed by even the most unskilful hand without difficulty, and will serve to print on his memory several facts in physiology, (which are in general thought only to be proved by those men who devote all their time to such pursuits,) more firmly than weeks of reading. It shows, 1st. That the liver, as proved by Bernard, has the power of forming sugar, when only animal food is taken. 2nd. That what we see in certain diseases, viz., venous regurgitation, is only an exaggeration of a natural phenomenon, existing both in arteries and veins. 3rd. That the pause in the contraction of the heart is between the two contractions of the auricle and ventricles, and the next two following. 4. How sudden the action of the auricles is compared to the ventricles; their very sudden contraction and dilatation, and continued dilatation, and also for what a long time they keep up their action after cessation of either ventricle. 5. How irritation of the phrenic nerves causes contraction of the diaphragm, and when they are cut in two, that irritation of the distal extremity causes contraction, and when the central is touched no effect is produced. 6th. The lacteals conveying the chyle towards the receptaculum and passing through the glands. 7. How the vermicular motion of the intestines is carried on during life, and after this has been observed if you irritate one part, it will cause action through nearly the whole length of the canal; also how the action of the distinct sets of muscular fibres proceeds separately, one contracting the circular dimensions more than half, and then the tube appearing to grow shorter when the longitudinal fibres act. The intestine itself becoming quite rigid. 8th. The particular action of these sets of fibres in the large intestine. 9th. The natural movements of the stomach, and that irritation does not produce so sudden effects as in the intestines, but very slow first, one set of fasciculi and then another, shortening until every irritated fibre is contracted, and

then again slowly relaxing, if this be performed near the pyloric orifice; the duodenum or commencement of the intestine will quickly act from the excitement and the fibres of the stomach not for some time afterwards. I may also state that you can find sugar in the urine likewise, that other circumstances may be noticed, but they are not worth the while mentioning.

Take a puppy of about one month old, and to prove the first experiment mentioned, be sure that it has always fed on an animal diet. It must be sacrificed by pithing, namely, put the edge of the common flat pointed awl, if no better instrument be at hand, behind the occipital protuberance, care must be taken not to direct it towards the brain, and when it has passed through the medulla oblongata, work it laterally across the canal, so that the medulla is divided, the animal dies instantly, but all the extremities are moved convulsively from the irritation, and to stop this if you think fit direct the instrument down the canal, and destroy the chord when they cease. This being done, let an assistant take hold of the fore, and another the hind legs, and open up the animal by a longitudinal incision from the neck to the pubis. Care must be taken not to wound the intestines, because if so you cannot see their natural motions so well; then open the chest as is usually done, and expose the heart, and in doing so you will see the natural contractility of muscle, when you cut the pectoral muscles. Having done so, you will find the heart still acting naturally, and by examination will perceive what I have described under sections two, three and four, namely, that during the contraction the impulse is communicated to the arteries and veins, &c., &c., which being done you may perform experiment 5 by irritating the phrenic nerves if the diaphragm be not too much injured, as it is not likely to be with care in manipulating. By looking closely you will be able to see the lacteals, as little white vessels resembling nerves and quite distinct. I may state, however, to do this the animal should have been killed shortly after taking a full meal. Next do as stated in 7 and 8, but first watch the intestines closely to see their natural actions of contraction and their several movements. Then part 9 can be performed as regards the stomach, by proceeding in the same way, first watching the natural action. Now as to the first experiment with the liver, tie the portal vein to test the portal blood for sugar, likewise if you choose cut the organ into very small pieces, or bruise it in a mortar, have a dish at hand full of boiling water, then add the liver when thus prepared, by this means you get a colorless solution, whereas if the water were cold when it was added, and then boiled, all the coloring matter would be dissolved out, with the blood proceed in a similar way. Then filter and apply the tests.

I will just say a few words about their application. Have the test tube about one-third or one-fourth full, and boil the top of the fluid, first by applying the heat at the surface, by this means you can see the change produced by heat as compared to it primitively, which at the bottom of the tube will not yet be in the least acted on. This is the better way undoubtedly, because when the colors may not be very marked you will not be able to detect slight changes, so readily when the whole contents are boiled at once. You may then boil the whole if you choose. Treat the urine in the same way by the liq. potass. or liq. potass. and sulphate of copper, but only add a few drops of each in either case. It does not require any previous preparation, except taking care that no blood gets mixed with it, when removing the bladder. I forgot to state that a few drops of acetic acid should be added to the boiling water, before the liver is added to neutralize any alkali which it may contain, but take care not to add too much, or it will dissolve out coloring matter.

A. R.

London, England, 29th May, 1857.

HOSPITAL RETURNS.

Monthly Return of Sick in the Marine and Emigrant Hospital, Quebec, from the 30th April to the 3rd June, 1857.

	Men.	Women.	Children.	Total.
Remained	11	15	2	28
Since admitted	95	8	3	106
	<hr/> 106	<hr/> 23	<hr/> 5	<hr/> 134
Discharged	34	15	2	51
Remaining	72	8	3	83

DISEASES.

Fever	2	Ulcers	1
Inflammation of lungs	4	Wounds	1
Inflammation of liver	2	Contusions	9
Dyspepsia	1	Ophthalmia	2
Rheumatism	10	Pregnancy	3
Dysentery	3	Feb. Intermittent	3
Small Pox	1	Subluxatio	1
Cynanche	2	Hypochondriasis	1
Diseases of skin	3	Hypertrophy heart	1
Inflammation of testicle	1	Scarlatina	6
Syphilis	23	Catarrhus	6
Fractures	2	Periostitis	1
Abscess	10	Phthisis	1

C. E. LEMIEUX,
House Surgeon.

MONTREAL DISPENSARY ANNUAL REPORT.

From 1st May 1856 to 1st May 1857.

Patients admitted, 414:—Attended at their own residences, 24. Patients discharged,—cured, 204;—relieved, 209;—died, 4,—sent to Hospital, 1.

AGES.—Under 2, 36; from 2 to 8, 49; from 8 to 20, 63; from 20 to 40, 131; from 40 to 60, 98; over 60, 37.

DISEASES AND ACCIDENTS.

Febricula.....	1	Dysenteria.....	6	Syphilis consec.....	2
Febris Com. Cont....	4	Dyspepsia.....	28	Ecythyma.....	1
“ Intermitt.....	1	Enteritis.....	1	Eczema.....	4
“ Remitt.....	1	Flatus.....	1	“ Chron.....	1
Rubeola.....	1	Gastralgia.....	3	Erysipelas.....	2
Scarlatina.....	1	Gastrit Chron.....	1	Erythema.....	2
Vaccinia.....	1	Gingivitis.....	1	Herpes Circin.....	2
Varicella.....	7	Helminthiasis.....	14	Intertrigo.....	1
Variola.....	1	Infl. Glandul Sub....	1	Lepra Vulg.....	1
Rheumatism.....	9	Odontalgia.....	2	Lichen tropic.....	2
“ Chr.....	4	Cephalalgia.....	1	Maculae.....	1
Pleurodynia.....	2	Cerebri Congest.....	1	Pediculi.....	2
Cachexia.....	2	Chorea.....	1	Porrigo.....	3
Debilitas.....	4	Delirium Tremens....	1	Porrigo.....	1
Marasmus.....	1	Ebriositas.....	1	Psora.....	3
Scrofulosis.....	1	Epilepsia.....	3	Psoriasis Palm.....	1
Ascites.....	2	Hemiplegia.....	2	Tinea Favosa.....	1
Hydrops Scarlatin...	1	Hypochondriasis....	4	“ Capitis.....	10
Irritatio.....	21	Hysteria.....	1	Ophthalmia.....	2
Asthma.....	2	“ Epileptic.....	1	“ Scroful...	1
Bronchitis.....	18	Megrim.....	2	Palpebr Carcin.....	1
“ Chron.....	14	Melancholia.....	1	“ infr. ulc.....	1
“ Asthenic.....	1	Neuralgia.....	2	Cophosis.....	1
Catarrhus.....	22	Neurosis Incert.....	2	Abscessus Chron....	1
“ Chron.....	3	Paralysis.....	1	Ambustio.....	2
“ Senil.....	3	Tic Doloureux.....	1	Contusio.....	8
Laryngitis Aedem...	1	Vertigo.....	1	Fractura Radii.....	2
Pertussis.....	1	Anuria.....	1	Furunculus.....	2
Phthisis Pulm.....	35	Hæmaturia.....	2	Luxat. Cubit.....	1
Pneumonia.....	1	Nephralgia.....	1	“ Sub. Verteb dors.	1
Aphthæ.....	1	Amenorrhœa.....	3	Periostitis.....	1
Cholera Infant.....	5	Leucorrhœa.....	4	Phlegmon.....	1
“ Canadens...	3	Mammæ Absc.....	1	Porticollis.....	1
Constipatio.....	19	Mastitis.....	1	Tumor.....	2
Cynanch Parotid....	1	Mutatio Vitæ.....	1	“ Malign.....	1
“ Tonsill....	4	Prolapsus Uteri.....	1	Ulcus.....	5
Dentitio.....	8	Vaginitis.....	1	“ Phagaden.....	1
Diarrhœa.....	21	Balanitis.....	2	Vulnus.....	5
“ Chron.....	1	Syphilis Primit.....	2		

DISEASES PROVING FATAL.—Bronchitis Asthenic 1, Hemiplegia 1, Marasmus 1, Phthisis Pulm 1.

ATTENDING PHYSICIANS, January, April, July and October, DRs. BOYER AND WRIGHT. February, May, August and November, DRs. JONES AND PELTIER. March, June, September and December, DRs. FEWICK AND R. P. HOWARD.

MEDICAL NEWS.

An advertisement appeared in one of the Boston papers of April 8th, which ran thus:—"Wanted a gentlemen or lady with a natural tendency for the practice of medicine"—Dr. Miller, of Providence, R. I. recently recovered the sum of \$2,500 of Orville S. Balcomb, of Attleboro', for damages suffered from a collision with the plaintiff's carriage. The amount of damages claimed was \$10,000.—The Third Annual Convention of American Dentists will be held in Boston, on Tuesday the first day of August next.—A Statute exists in an American Institution declaring a professor no longer qualified to teach, on arriving at the patriarchal age of 65.—A lady died suddenly in Richmond, Va., from the bite of a spider. She was bitten on the cheek the night before the fatal event.—A celebrated Oculist in Paris lately, as an act of charity, fully restored sight to a blind man by operation. In a few days the restored sued the Dr for destroying his profession as a blind man, and laid the damages at 20,000 francs.—The great Boerhaave was more proud of his success as a flutist than of his scientific glories.—Orfila in place of becoming the founder of modern toxicology, had well nigh turned his magnificent baritone voice to profit on the stage.—Dr. Goadby has dissolved his connexion with the Medical Independent in consequence, it is alleged, of other engagements.—A Vicar once asked his Veterinary Surgeon how it was he had not called upon him for his account. Oh said V. S. "I never ask a *gentleman* for money." "Indeed," said the V. "then how do you get on if he don't pay?" "Why," replied the V. S. "after a certain time I conclude that he is not a gentleman, and then I ask him."—Liebig has analysed the bread sent to him from Hong Kong, and has found it to contain a quarter gramme of Arsenic for every fifty grammes of bread, or more than sufficient to cause death, it had been mixed with the dough.—Animal and vegetable substances may be kept for a long period, perfectly free from decomposition, when immersed in glycerine.—An Iebriate Asylum is about to be founded in New York. collections in aid of it have already been raised to the amount of \$32,000. The total amount to be raised is \$50,000.—A woman was lately delivered, says the Wolverhampton Chronicle, of two dead children, who had grown together, and were united at the lower part of the stomach.—Mr. Erichsen, Professor of Surgery, in Univerity College, London, has been appointed Dr. Lees' reader in anatomy, in the University of Oxford.—A Dentist has been lately elected to St. George's Hospital, London, the *lucky* gentleman is a Mr. Vesey, of Bond Street, he was selected by ballot from six candidates.