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ORIGINAL COMMUNICATIONS.

Case of "Vascular Tumour" of the Female Urethra with observations on "Varicose Ulcer of the Womb." By R. L. MACDONNELL, M. D., Surgeon to St. Patrick's Hospital; Lecturer on Surgery St. Lawrence School of Medicine, &c., &c.

As cases of "Vascular Tumour of the Meatus Urinarius" though common in Europe, are not so frequently seen in this country, at least, according to my own experience, an account of the following case may not prove uninteresting to the profession, particularly as it is a disease of middle age, and seldom occurring in persons so old as my patient.

January 19, 1850, Mrs. —, aged 60, consulted me under the following circumstances: For the three years previous, she had suffered excessive pain in the region of the neck of the bladder, and bearing down pains, accompanied at first by a discharge of a watery character, mixed, at times, with pus, and sometimes having an offensive odour. Believing that these symptoms might be accounted for by her age and change of constitution, she bore them patiently at first, and did not consult any medical man, but about one year from their first appearance, they became suddenly more severe, and now a discharge of bloody serum kept constantly flowing, and sudden hemorrhages to the extent of three or four ounces used to come on whenever she exerted herself too much, and at other times, these bleedings would occur without any assignable cause. She now applied to a surgeon who made no examination and led her (she said) to believe she had cancer of the womb, and that her malady was incurable. Being herself impressed with this idea, she made up her mind to bear her afflictions with resignation, and endeavoured by change of air, and the use of mineral waters, to obtain that relief which seemed denied to her by the science of medicine. It was whilst at one of our favorite "Springs" that she happened to mention her ailments to a skil-

ful practitioner who had attended my lectures upon these diseases, who, even without examination, perceived that the symptoms differed from those of cancer, and advised her to place herself under my care. This she was unwilling to do, being so convinced of the malignant character of the disease and that surgery could afford her no relief. But as the hemorrhages became daily more frequent and more profuse, and as she was becoming exsanguine, and greatly enfeebled by these excessive losses, her family prevailed upon her to send for me, and accordingly, I examined her on the 19th of January, 1850, when I found her in the following condition:—

She was tall and thin, skin of a sallow colour, the lips were pale as was also the inside of the mouth and tongue, a change which had recently taken place, she had œdema of both feet and ankles, the pulse was small, and frequent, 90, she suffered from palpitations, tendency to fainting, headache, noise in the ears and dimness of sight; these symptoms having increased in proportion to the frequency and amount of the hemorrhages. Her appetite was bad, bowels irregular, and her spirits were greatly depressed, being under the impression that her constitution could not long hold out against such frequent losses of blood. She complained of excessive pain *about the orifice of the urethra and in the urethra itself* which was greatly increased by passing urine, which she was obliged to do, almost every half hour, or every hour, the pain was also much aggravated by the least motion, and when walking across her room, she was obliged to stoop forward, for the double purpose of avoiding pain, and not inducing bleeding. She stated that she had felt a small tumour near the orifice of the urethra which was excessively painful to the touch and which bled profusely whenever it was examined; that in addition, some hard growths, not painful to the touch, occupied the orifice of the vagina and extended some distance within: these had commenced growing about a year before the painful ones, and their presence gave rise, she thought, to the distressing sense of bearing down to which she had been subject.

On making an examination I found the following state of parts. The labia being separated, a tumour of the size, shape and exactly the colour of a large ripe red raspberry was found growing from the under lip of the urethra, and under surface of its vaginal aspect, it was largest at its base, was very painful to the touch, and the least contact of a probe gave rise to bleeding. On dilating the urethra, another tumour about the size of a very small pea was seen growing from its under surface, but nearer the bladder, than that outside, and separated from it by an interval of healthy structure. The same pain and bleeding followed the most gentle touch. The orifice of the vagina was blocked up with a

long irregular tumour which ran along its upper wall, for about an inch and a half, opposite to it on the posterior wall, was a second tumour, but of smaller dimensions and more rounded, neither of them was painful and the mucous membrane covering them was very pale. The uterus was perfectly healthy. The nature of the disease being now evident, I proposed removing the tumours, to which the patient gladly assented, and the next day, performed the operation as follows:—

The patient was placed on her back on the edge of a high bed, near a window, the labia being separated by a female of her acquaintance, (as she objected to having another medical man present) the larger of the two vascular tumours, was gently seized by a broad bladed forceps, for its structure was so delicate, that I had difficulty in avoiding breaking it, and then was excised from its base by means of a small scalpel, no hemorrhage ensued, and the surface of the wound showed that I had cut deep enough to eradicate the disease. I now introduced a dressing forceps into the urethra and dilated the passage to an extent sufficient to enable me to cut out, with a delicate scissors belonging to a case of eye instruments, the small tumour which occupied the situation before alluded to. The raw surface appeared free from disease. The speculum being introduced, both the vaginal tumours were dissected out without any difficulty, and as the upper one was so intimately connected with the under surface of the urethra, the latter was kept supported up against the arch of the pubis by a silver catheter introduced for that purpose. Some oozing of blood took place, which was arrested by means of a plug of lint dipped in iced water. The patient bore the operation with great fortitude, and under the influence of an anodyne, soon fell asleep.

The tumours immediately after removal became pale and shrivelled, and though I examined their structure with the microscope, I candidly confess, I could not make out, with accuracy its constitution, and consequently, will not attempt a description of it. Six hours after the operation, I drew off the urine with the catheter, and as some bleeding had taken place from the vagina, an ice plug was introduced and broken ice was kept applied to the external part. The next day she was quite well, and free from all suffering, and nothing unusual occurred until the 8th day after the operation, when the granulations from the seat of the larger vascular tumour, appearing too florid and spongy, were, as a measure of precaution, freely cauterized with the penitrate of mercury, a caustic, which I may take this opportunity of recommending to my readers, as preferable in all cases, to nitric acid, when the part to be touched, is *either very small, or is deeply seated*, for it being free from any fumes, the whole extent of the part can be accurately touched, and

the healthy parts escape unnecessary cauterization. The granulation and cicatrization proceeded without anything occurring, worthy of note, and on the 1st of March she was perfectly well and able to take exercise, and drive about in a sleigh without any pain or inconvenience. The symptoms depending upon loss of blood quickly disappeared, and she has past the last two years free from suffering and in the enjoyment of excellent health for a woman of her age, and is now able to attend to the management of her establishment and to enjoy the society of her family and friends, a change which surely repays her for a few moment's pain.

The foregoing case will exhibit the necessity for accurate examination both by the touch and the speculum before giving an opinion on the nature of a disease of the female organs. Had the practitioner who first examined her, comprehended the necessity of this point, and understood these diseases, much suffering, both of mind and body, would have been saved, and many an anxious and sleepless night prevented; for what can be more appalling than the consciousness of having a disease which produces death by frequent hemorrhages; every gush of blood, threatens to be the last, and when this is excited by the least movement of the body, or by the necessity for emptying the bladder or bowels, the measure of misery is indeed full to flowing over, add to which, the distress that pervades a family about to lose an esteemed relative by such a fearful disease: and yet all this might have been averted in the foregoing case, by a careful examination of the patient.

To the junior practitioner I would say, in all cases of hemorrhage from the vagina, make a careful examination: it may proceed from an easily removeable disease, as in the present case, or from a polypus, which you can also be removed, as happened recently in a case in St. Patrick's Hospital; or it may proceed, on the other hand, from an incurable malady, and you may hold out false hopes of recovery to the patient and her friends, whilst disease is insidiously hurrying her to the grave, as occurred in two cases recently under my observation, in both of which the practitioners had treated the cases as examples of common menorrhagia, but which on the speculum being introduced and a careful examination being made, were proved to be instances of *corroding ulcer* of the uterus, a form of disease not often met with. In one of these instances, the practitioner with whom I was attending in consultation, verified the diagnosis by post mortem examination, which showed, removal of all the neck, and a portion of the body of the uterus. Alarming hemorrhage to the extent of producing anæmia and its attendant symptoms may be caused by a disease which I believe I have been the first to describe in my lectures, under the name of the

“*Varicose Ulcer of the Uterus.*”

In all the instances of this ulcer I have seen, the os uteri was very patulous, its edges thickened and everted, and fissured by deep chinks from which bloody fluid was constantly escaping. The color of the cervix was of a dark purple, and large tortuous veins could be seen traversing its surface, in some spots near the lips of the os presenting themselves in the shape of small blueish-looking elevations, closely resembling piles. The neck of the womb was free from pain, soft and spongy to the feel, but much larger than in health, and the whole uterus appeared to be greatly increased in size. Bleeding goes on almost constantly during the intervals between the monthly periods, but when these latter arrive, the amount of blood lost is much greater than natural, sexual intercourse, or manual examination, causes much bleeding, and if the speculum be introduced, the welling up of blood is so great as, for a time, to prevent careful examination, until removed by a sponge. One of my patients had several miscarriages during the three or four years previous to her consulting me, and on each occasion was near dying from flooding. I have not heard of her for the last four years, and am unable to state if the cure of the disease has enabled her to carry a fœtus the usual period. In two cases, exaltation of sexual feeling attended the disease, in the others, no alteration in this respect was noticed. In some of the cases the patients suffered also, from hæmorrhoids, but in others they were free from this complication, and none of them had varicose veins of the leg. All my patients laboring under this disease were married and mothers. One of them was fifty years of age, but the others were between 35 and 45 years old. Sexual intercourse was not attended with any pain; in one case, the patient lived separate from her husband for eight years, not on account of the pain consequent on intercourse, but because a great increase of hemorrhage always ensued. In this latter respect, the practitioner must discriminate between this ulcer and “*Cauliflower Excrescence*” of the uterus, which being devoid of pain, and the hemorrhage coming on after intercourse might be mistaken for “*Varicose Ulcer.*” Though the bloody discharge is profuse, it is not offensive, differing in this particular from the bloody or sanious discharges of cancer and corroding ulcer. The treatment that I have found most useful has been the following:—rest in the horizontal position, the application of the pernitrate of mercury to the ulcerated surfaces and to the fissures already described, and after one or two applications of the escharotic, I have employed with great advantage, *tannin injections*, in the proportion of five grains of tannin to one ounce of water. I have used various other astringents, but as I did

not find any of them to arrest the bleeding so efficaciously as the tannin it is unnecessary to allude more particularly to them. Should the ulcers exhibit a sluggishness in healing, the use of nitrate of silver will hasten the process. Great attention must be paid to the state of the bowels, as any obstruction in them is calculated to produce venous congestion of the pelvic viscera. As the patient is generally much debilitated and anæmic when she applies for advice, I have found the use of iron and quinine highly beneficial, but if constipation be not present, I prefer the pernitrate of iron to all the other ferruginous preparations, as it acts remarkably well as an astringent as well as a chalybeate. Wine or malt liquors are always indicated when the circulation is languid, and the animal heat depressed, but if these complications be not present, the patient is as well without them.

APPENDIX.—I had the proofs of the foregoing paper before me, and had written some remarks upon the nature of the disease and the different methods of treating it, when our enterprising agent Mr. Dawson, sent us the last number of "*Ranking's Digest*," which reached me August 21st, and as the *London Medical Journal* has never appeared in Montreal, I am thus particular in noting these facts, lest some might suppose that the views put forward by me, were to a certain extent, plagiarisms from Mr. Gream's excellent paper, from which I have much pleasure in quoting the following passage, as it furnishes exactly the amount and nature of the information I had to communicate, with much more besides. I have met with the condition of the urethra that he describes. I cannot agree with him in believing that it is anatomically similar to the "*Vascular Tumour*" of Sir Charles Clarke. I believe it to be nothing more nor less than *Chronic urethritis*, for which no remedy is so good, (after the use of general antiphlogistic measures, &c.) as the local application of nitrate of silver conveyed to the part by means of Lallemands' *porte caustique*, or the modification of that instrument which I have had made, and which is preferred, not merely by myself, but by many of my professional brethren, to the original instrument. If the practitioner should meet with a case of this disease, and not have a suitable instrument with which to apply the caustic, let him make a strong ointment of nitrate of silver, (30 grains to the ounce,) mixed with common lard, and rendered consistent by an addition of bees' wax—let him smear a common gum elastic bougie with this ointment, and having introduced it into the urethra, turn the bougie round a couple of times and he will thus have cauterized the urethra.

The reader will perceive that I have anticipated Mr. Gream in the use of the caustic; the pernitrate of mercury possessing all the advan-

tages without any of the inconveniences of the nitric acid. If from the case I have put on record, which was the most severe I have met with, and appears to have been of a more serious character than any of those treated by Mr. Gream, and from the observations of that gentlemen, many of which have forestalled those I intended to append, the reader should have obtained a more familiar acquaintance, with a rare, dangerous, and excessively distressing complaint, the object for which this article was penned will have been attained, so it matters little whether the observations of Mr. Gream have preceded mine or that mine have anticipated his, but for the character of the Montreal School of Medicine, I will assert, that every point in his paper has been frequently alluded to in my lectures, and illustrated in my practice.*

“Under the name of “Vascular Tumour of the Orifice of the Meatus Urinarius,” this affection was first described by Sir Charles Clarke, in his valuable work on the “Diseases of Women ;” a work giving evidence of the highly practical knowledge of that author, and which, although published more than thirty-five years ago, may still be considered as one of the best guides to the diagnosis of this class of maladies.

“He writes : “There is in most women a degree of projection round the orifice of the meatus urinarius, and from this part sometimes the tumour arises, to which the above name of the vascular tumour of the meatus urinarius has been applied.” I have ventured to refer to this affection under another name, because my own experience, confirmed by that of others, tends to show that it does not always appear as a tumour, but that it may be present under other forms, accompanied by the same general as well as local symptoms.

“Dr. Ashwell has correctly described the disease, but he speaks of it more especially as a tumour, and states that it is rarely seen after the cessation of the menses. I am led to think that he is mistaken in this respect, for I have witnessed the disease as often in elderly women as in the young.

“Dr. Meigs, of Philadelphia, has alluded to the complaint in his volume on “Females and their Diseases ;” but he merely refers to it as a portion of the lining membrane of the urethra, “hypertrophied and inflamed, which may be readily cut off.” His observations, however, are contained in a very few lines, in which the importance of the disease is altogether overlooked.

* *On Morbid Vascularity of the Lining Membrane of the Female Urethra.* By GEORGE T. GREAM, M. D., late one of the Medical officers to Queen Charlotte's Lying-in-Hospital, (*London Journal of Medicine*, 1852.)

“The author is not aware that any other writers have noticed the affection at all ; but certainly none have regarded it with that consideration which it calls for, when we consider the suffering attending it, and its liability to return, unless properly treated and entirely removed. The fact that it is one of those diseases which do not frequently come under the notice of medical men, renders the circumstance of its being so little alluded to by authors especially remarkable.

“It presents itself under three different forms : the first, most likely, being the incipient stage of the second ; and the second, the beginning of the third. But this is only conjecture ; for the opportunity of proving it has not yet been afforded. It may be present as a simple vascularity of the lining membrane of the urethra, without any elevation whatever, extending some little distance towards the bladder ; the membrane itself being highly florid in colour, and extremely tender when touched, or during the passage of the urine. This is the usual character of the disease, when it is confined within the canal ; but Sir Charles Clarke relates the case of a patient in St. Bartholomew’s Hospital, in whose urethra there was a tumour of a scarlet colour, nearly filling up the canal. The occurrence of a tumour, however, within the urethra is unusual.* This is probably owing to the pressure of the sides of the canal preventing the elevation of the dilated vessels, and to the passage of the urine having a similar effect.

“When the vascularity is within the urethra, no morbid appearances present themselves externally ; but if the symptoms call attention to the part and the lining membrane is exposed by making pressure around the meatus, the highly florid appearance will at once be detected.

“The second form in which the disease appears, is that of a flattened vascular spot, with but slight elevation, surrounding the orifice of the urethra, highly florid in colour, and exquisitely tender when touched : it is so little elevated that it can scarcely be called a tumour. The redness extends from it into the canal for some little distance, but the membrane within, although florid in appearance, is quite smooth on its surface ; whereas the external spot of vascularity is slightly granulated, because it is not modified by pressure from the sides of the urethra.

“In the third stage, the disease consists of a distinct tumour, granulated, and attached, sometimes by a broader base, sometimes by a narrow one, and, in some instances, even by a slender pedicle to the side of the urethra, or just externally to it ; and, in almost all cases, some

*The reader will remember that this constituted one of the peculiarities of my case. R. L. M.D.

dilated vessel will be seen extending from its base to within the urethral canal.

“ When there is an actual prominent tumour, the local pain and the constitutional symptoms are greatly increased in severity. In some cases, the peculiar scarlet colour of the part has attracted the notice of the patient ; but in many instances, particularly when the vascularity is within the urethra, not only has the actual seat of the disease escaped her observation, but it has also been overlooked by her medical attendant, who has referred to the uterus as the diseased organ, has stated that its cervix was inflamed or ulcerated, and caustic has sometimes for weeks, or months, been applied, without affording the least advantage to the patient.

“ This vascular disease is not at all to be considered as similar to an affection situated in the same parts, having its origin in a varicose state of the veins, which causes some uneasiness and is accompanied by a mucous discharge, but which does not produce the same acute suffering nor the great constitutional disturbance, nor is the appearance the same. In the vascular disease in question the blood contained in the vessels is arterial, while in the venous enlargement it is dark coloured, and the distended veins have the same appearance which veins have in other parts of the body when in a varicose condition.— Attention is first called to the vascular disease, by an uneasy sensation at the lower part of the body, and pain passing down the thighs ; and pain when urine is voided, or when the part is touched ; slight bleeding also occurs occasionally, owing to the rupture of some dilated vessel, whose covering is always much attenuated. There may be frequent desire to pass urine ; and walking causes great suffering ; while accompanying these symptoms, there is always copious mucous discharge, which is excessive when the disease appears in the form of a tumour. Owing to which, as well as to the constant uneasiness and frequent acute suffering, the patient becomes emaciated and weak, and it is surprising to find so many and such symptoms arising from a disease whose extent is confined within such limited bounds ; but there is clear evidence that it does not produce them in the fact that, immediately upon the destruction of the vascular spot, or even on its partial removal, a comparative freedom from the symptoms is at once enjoyed.

“ Upon a digital examination of the vagina being made, great tenderness is experienced by the patient at the vaginal orifice, and still more if pressure is made towards the pubes ; and bleeding from this part will almost always be induced by the examination. These symptoms

necessarily call for further investigation and the nature of the disease becomes apparent.

“The only mode of cure is the destruction of the entire congeries of vessels; and if the smallest part of it is left, the disease will most certainly return. It has been customary to employ excision with scissors, and afterwards to apply potassa fusa, or to use the latter alone for the removal of the complaint. A ligature has also been recommended as a means of removal; but there are objections to both these modes of treatment, which those who have used them will, the author thinks, confidently admit. In order that the scissors may be employed, the vagina must be held open by an assistant; but the spot to be excised is so covered by the pubes that it cannot be sufficiently exposed to ensure the due performance of the operation, and the potassa fusa applied to the bleeding surface is effectual only in those cases in which the disease is very superficial, and by itself this caustic always fails to destroy the part entirely; hence we have a return of the complaint, and a repetition of a most painful operation.

“If the disease is within the urethra, these means of cure are totally inapplicable. If the ligature is employed, it may in some cases prove efficient; but in others it would be impossible to effect a cure by means of it, as the part affected could not all be enclosed.

“Having several times been called upon to treat cases which had been before apparently cured (by himself and others) by the means mentioned above, the author was led to think of another mode of treatment which would be more successful; and it occurred to him that the application of strong nitric acid, in the manner adopted by Mr. Henry Lee* for the destruction of hæmorrhoids (and which proves so successful), would be equally applicable to the vascularity of the female urethra.

“Sufficient time has now elapsed since its application in three instances, and yet there is not the least inclination to a return of the disease in them; and as in others, although more recently treated, there is likewise no such disposition, the author is liable to speak with some confidence respecting this mode of cure. Its comparative advantages consists in the acid being minutely applicable to each individual part of the affected spot, which it has the power of entirely destroying, whether within the urethra or outside of it; in its producing no fear in the patient as does the anticipation of an operation by a cutting in-

*The plan of treating hemorrhoids by the application of nitric acid was first proposed by the late Dr. Houston of Dublin, and practiced, even before his publication appeared, by Mr. Cusack at Steven's Hospital, Mr. Henry Lee has no claim whatever to be considered the originator of this practice. R. L. M'D.

strument ; and in the pain which it causes very quickly subsiding.—Dr. Ashwell observes : The main trouble we encounter in the treatment of these tumours, is their tendency to reappear. If they are snipped off with scissors, and the part allowed spontaneously to heal, there is every probability that it will repululate and cause the same symptoms. If these growths are not moveable and attached by a pedicle, I have found that the diligent application of nitrate of silver freely applied over and around them, will eventually get rid of them : but the process of destruction is tedious and attended *with great agony*.—It is generally, indeed, necessary to apply opium to the part after application, and to soothe the patient by some morphia or extract of hyoscyamus at night.” Now there is no such necessity after the application of nitric acid : but the patient complains of no pain after a few minutes have elapsed, and she is able to walk about without inconvenience.

“ But there is a difficulty in exposing the part sufficiently, and in preventing the sides of the vagina from collapsing too soon after the application of nitric acid ; and this is overcome by the use of a speculum, invented, the author believes, by Mr. Hilton, for the removal of hæmorrhoidal excrescences. A portion of the side of the speculum, extending nearly to its internal extremity, can be removed after its introduction into the vagina, and if this part of it is just under the pubes, the spot of vascularity will project into the tube ; but should only the lining membrane of the urethra be vascular, it will be readily exposed by pressing the speculum firmly towards the pubes against the surrounding parts : and the acid can be applied while the pressure is kept up.

“ A small rod of glass, or a piece of hard wood in the form of the stick of a camel’s hair pencil, is the best thing with which to apply the acid ; and this should be held to the part for about a minute, care being taken that each enlarged portion of the vessels is completely destroyed, and in about three or four minutes the pain attending it ceases, and the speculum can be removed. It will be better to examine the part in about four days from the time of the application of the acid, and it often will be found healed, with no trace of the complaint left. More frequently it presents an unhealed sore, but an absence of the disease. If, however, there be any vessel remaining having the peculiar scarlet colour, it should be again touched with nitric acid, otherwise the symptoms will rapidly return.”

Acute Pericarditis. By A. H. DAVID, M. D., Lecturer on Practice of Medicine St. Lawrence School of Medicine, Physician to St. Patrick's Hospital, Montreal, and Member of Provincial Board of Examiners.

THE frequency of inflammation of the pericardium accompanying rheumatism is now generally acknowledged, and although slight attacks may escape observation, few persons suffer from severe attacks of rheumatism without having this membrane more or less inflamed, and there are few diseases more insidious and dangerous if neglected. The constitutional disturbance which accompanies the disease, and the nature of the organ engaged easily explain this.

According to late writers on rheumatic pericarditis we have two conditions of the system to overcome—one a coagulable condition of the blood, in which its fibrine is increased in quantity, and the other acute inflammation of the joints, never, or perhaps very seldom, going on to suppuration; therefore, the complication is supposed to depend on some specific connection between rheumatic inflammation of fibrous tissues, and the membrane surrounding the heart, which as yet we cannot correctly explain.

The principal causes of this disease are exposure to damp and cold, and therefore, those who are exposed to these causes are the most subject to be attacked by it, and nothing conduces as much to prevent cardiac complication in cases of rheumatism as close confinement to bed; this is an important remedial agent, and not used merely as a mode of rest—a late writer says:—confinement to bed in acute rheumatism tends, with its hot moist atmosphere to a free action of the cutaneous excretions, it brings the blood and its noxious contents to the surface, it derives from internal organs, and where there is a constricted condition of the secreting surfaces, it goes far in many cases to effect a salutary relaxation.

The cold rainy state of the weather, and the peculiar atmospheric condition of the spring, caused far more inflammatory diseases than had been met with for years in this city, and among those which fell under my notice were, several cases of pericarditis, and as all with the exception of the one I am about to relate, terminated favorably. I am induced to lay this one before the profession, from its having presented many points of interest, and the *post mortem* revealing an amount of disease of both the heart and pericardium exceeding, I have reason to believe any thing of the kind on record.

I have to regret that I cannot give the details of this interesting case in full, having had ample notes of it taken daily by my clinical clerk, but as in the late terrible conflagration which destroyed near a third

of our city, the St. Patrick's Hospital was consumed, my case book, containing the notes not only of this, but of many other highly interesting and instructive cases, was lost. I have to trust entirely to memory and the *admission* and *prescription* books for the meagre details I am enabled to give :—

Moses Mitchell, a colored man, of short, athletic make, aged 42—Cook, was admitted into the St. Patrick's Hospital on the evening of the 26th March last, laboring under a severe and well marked attack of pleuritis ; he stated he had been ill for about ten days, with acute rheumatism, from exposure in travelling, that he had taken several doses of salts, as well as a couple of ounces of spirits of turpentine, which had been recommended to him as a specific in rheumatism, but that he had become much worse after taking this last medicine, and that for the last twenty-four hours he had been unable to rest, cough or take his breath from the increasing pain in his side. He was bled copiously twice, and put on calomel and opium, under which treatment he soon got better, when the rheumatic symptoms, which on his admission had left him, returned with great violence, nearly every one of the large joints in his body being affected. I then ordered four ounces of lime juice to be given him every four hours, and in three or four days he was quite relieved, the pains had left him, and all swelling of the joints had disappeared, and he was pronounced convalescent, and went on improving, for two or three days, till having occasion to go to the water closet during the night, he did so without taking the precaution of putting on any clothes, and on his return to bed was seized with a shivering fit which lasted two hours or more, and at my visit the next day I found him laboring under a second attack of pleurisy, for which he was treated as in the first attack, with the exception that he was cupped instead of being bled, and soon got over it, when during examination before the class I discovered, as the friction sound on the right side, (the side on which both attacks of pleurisy were situated,) diminished, the heart commenced to present a feeble *bruit* with the first sound, which had increased next day to what is called the peculiar "to and fro sound," with acute pain below, and to the right of the left nipple, between the fifth and sixth ribs, and much increased on respiration or pressure. He was cupped repeatedly, blistered and put on the usual calomel treatment, which was varied with colchicum, but all without avail, and he died on the 1st May.

On the examination, about fourteen hours after death, there were strong adhesions on the right side with a large quantity of thick turbid effusion, the pericardium was distended and it and the heart perfectly white from

the enormous quantity of deposit on them, and exactly as if they were pieces of tripe. The pericardium was not adherent to the heart, but was filled with over 8 ounces of straw colored serum, and the heart itself was much enlarged, on removing it from the body, and washing it well it was found to weigh 46 ounces and a half, and measured in circumference $15\frac{1}{4}$ inches and in length 6 inches.

As I believe, this is the largest heart on record, I place these meagre details before the profession, more for the purpose of showing how insidiously so extensive a disease can run its course, than for any other reason. At the same time a few remarks on the general treatment of pericarditis may be allowed me, as much discussion has been produced on the subject. Some writers trusting entirely to antiphlogistic remedies, and others to mercury. In the case just related both failed, although in general I have found them to succeed, as I never trust to either alone, but combine with local bleeding, by cupping and mercury sufficient to affect the mouth is what I have found the safest and best treatment.

Dr. John Taylor, who is no slight authority, does not seem to entertain the same opinion of the efficacy of mercury that most other writers do. While Dr. Lathan says, "allowing bleeding and antiphlogistic measures to be needful, and even indispensable, I am fully persuaded that let them do all they can, mercury can do something more—something towards saving life and inducing reparation, which nothing else can do so well. Of this there is as satisfactory evidence as we have of most points in practical medicine, which are thought settled." As far as my experience goes, it corresponds with that of Dr. Lathan. Dr. L. recommending both bleeding and mercury.

As before said, pericarditis is a very serious and fatal disease, particularly when as in this case, it is complicated with intense endocarditis; and there is no doubt but that the principal danger arises more from the complication than from the pericarditis itself, as nearly all cases of simple pericarditis, soon will yield to local bleeding and mercury.

It will be observed that other remedies in addition to the cups and mercury were used in this case during its course, purging, blistering, and colchicum, but all with only temporary benefit, as the disease had advanced so far before the patient came under treatment, that all were without avail, and he gradually succumbed.

Case of Latent Aneurism of the Thoracic Aorta, complicated with Oxaluria. By ARCHIBALD HALL, M. D., Lecturer on Materia Medica, McGill College; and R. L. MACDONNELL, Surgeon to St. Patrick's Hospital, Lecturer on Surgery, St. Lawrence School of Medicine.

THE subject of the following case was Mr. D. S., a young gentleman, brought up as a merchant, and in business for himself, aged about 23 years. He had been an occasional patient of mine, as the medical attendant of his family for years, but he had required no professional assistance at my hands since April 1851, when I attended him after his return from a voyage to England, in consequence of a severe sprain of his ankle, received on board the steamer in which he crossed the Atlantic. He again consulted me on the 24th February 1852, laboring under the following array of symptoms:—There was a peculiar anæmic appearance of the countenance with low spirits, and he manifested considerable anxiety about himself, expressing his own apprehension that his disease would terminate in consumption. His appetite was a good deal weakened; there was considerable pain in the region of the stomach, felt nearly equally when it was empty or replete. He was much troubled with eructations. In the lumbar region there existed a dull, heavy pain, which frequently incapacitated him from active exertion, and disposed him to inactivity, which was the reverse of his character. There was nothing remarkable about the urinary organs, the secretion coming off in normal quantity, and unattended with any evidence of irritability of the bladder. The bowels were regular, and the evacuations of natural color. His pulse was perfectly natural, and the temperature of the skin normal. I should observe that he was emphatically of slender physical conformation, and was rather emaciated at the time I first saw him. He informed me that the symptoms under which he labored had existed for several months, and I incidently learned that his friends had experienced considerable uneasiness about him. He had applied once to a medical gentleman of this city, who had prescribed for him without relief, and was subsequently induced to place himself under the care of a globulist, whose doses, as might have been expected, produced but a *minimum* amount of benefit. Suspecting the case to be one of oxaluria, and unable to detect the slightest evidence of the existence of organic disease, I requested him to furnish me next day a phial of his urine passed the following morning.

25th Feb. On reception of the urine this day, its specific gravity was immediately determined, and found to be 1.016. It was of a pale amber color, but otherwise presented nothing remarkable, except its

acid reaction. A portion was poured into a test glass, and set aside for microscopic examination.

26th Feb. This evening a distinct deposit occupied the lower portion of the test glass, vesical mucus being supernatant. The clear portion having been passed off, and the mucus removed as much as possible by a pipette, a drop of the residue was transferred to a glass slide which was placed in the field of the microscope. It exhibited crystals of amorphous lithates of ammonia, numerous octahedral crystals of oxalate of lime, with abundance of epithelial cells. The oxalate of lime crystals were developed without the application of heat.

27th Feb. The nature of the case thus apparently closely determined, attention was directed to the digestive organs, whose assimilative functions were apparently much disturbed. Having learned his proneness to sweet articles of diet, these were forbidden, and a plain diet, consisting essentially of meat, and the blandest, and least flatulent vegetables enjoined. He was permitted the use of a small quantity of brandy and water at his dinner, and at other times, when the pain of the stomach proved severe. Wine and beer were forbidden. The remedial treatment consisted in the exhibition of a mixture of nitromuriatic acid, five minims, tincture of columbo one drachm, and peppermint water, one ounce, to be taken three times a day. A stimulant embrocation was also prescribed to be applied to the epigastric and lumbar regions every evening.

In the course of a fortnight under this treatment, he had decidedly improved in health and strength, and on the 5th April, he discontinued my attendance, feeling, as he expressed himself, "perfectly well." In a memorandum of this date I find that on examination of his urine, no oxalate of lime was detectable, even after heating a small portion on a watch glass.

On the 8th of May I was again requested to visit Mr. S. At this interview, I learned that he had a short time previously to my visit, returned from a business tour in Upper Canada, during which his health continued in the same improved condition, and that compelled to remain a day or two at the Coteau du Lac, he occupied one night a bed placed transversely opposite a window, and that, in consequence of a current of air playing upon his back, he conceived that he had contracted rheumatism, involving the lumbar muscles. I found him seated on a sofa, complaining of considerable pain in the lumbar region, which was also painful to the touch, and prevented bodily movements. There were no other marked symptoms about him, with the exception of a rather anxious expression of countenance which had again assumed its original cachetic appearance, and some pains of an apparently cardialgic

nature. The pulse was of ordinary character, and there was also complete absence of all symptoms of a febrile nature. On questioning him with regard to the urinary secretion, he informed me that it was of normal quantity, and as far as he could judge, of healthy appearance. I requested a small quantity for microscopic examination, and with the exception of a stimulating liniment, to be well rubbed into his loins, and a Dover's powder to be given at bed time, I reserved the further treatment of the case until the quality of the urine was determined.

On the subsequent day I was supplied with a phial of the urine passed that morning. Its sp. gr. ascertained shortly after receiving it, was found to be 1.018, ambre colored, and presenting decided acid reaction. This water, examined on the morning of the 10th, afforded innumerable octahedral crystals of oxalate of lime, with abundance of epithelial cells. I could not now debar myself from again considering the case one of oxaluria, yet the evidence of lumbar rheumatism being now so marked, and Mr. S. suffering such acute pain, even on the slightest motion, in the lumbar region, that I felt myself compelled to direct active remedial measures to this, the now more prominent affection. The ordinary treatment of lumbago was accordingly adopted, and steadily pursued.

On the 18th of the month, there was little amelioration of the disease, and Mr. S. requested me, by note, to call in, in consultation, Dr. MacDonnell, who accordingly visited him with me on that day. At this visit Dr. MacDonnell concurring in the same view of the case which I took, carried out the same principle of treatment.

On the 23rd, finding that the symptoms had not yielded in the slightest degree, I called on Dr. MacDonnell to visit him again with me. The lumbar pain still continued of dull, heavy character; but superadded to this, there had supervened acute deep-seated pain in the left iliac region, extending to the testicle of that side; the pulse of normal beat, although weak, dryness but no heat of skin, the same difficulty of motion, and the same tenderness on pressure in the lumbar region, extended now to the iliac, and felt only on hard pressure in the iliac fossa thus demonstrating its deep-seatedness; the anxiety of countenance was more marked, and he expressed himself as feeling decidedly weaker, and no better. Under the impression that there did exist some deep seated inflammation, of a subacute character, in the left iliac fossa, it was accordingly resolved to apply leeches to that region, and twelve were put on that evening. While performing this operation, I received a hurried call to visit a lady whom I had attended that morning, and having hastily removed four or five of the leeches which had not fallen off, and covered the part with cotton wadding, I left. About midnight I was called to revisit Mr. S. I learned that he had had several attacks of syncope, and when seen by me, was

extremely weak and prostrated, so much so, as to require stimulants to be exhibited, which were given in the form of wine and brandy. The leech bites had bled freely, but not to any unusual extent, yet the effect produced was quite disproportionate to the actual loss of blood. The bleeding was, however, instantly arrested by the application of lunar caustic.

On the 23rd, Dr. MacDonnell met me again in consultation, and we found it still necessary to continue the exhibition of stimulants in consequence of the debilitated condition of the patient, syncope supervening upon the slightest exertion.

On the 24th, some fullness was perceived in the left iliac region, with increased tenderness on pressure, and the part was covered by a blister.

On the 27th, the fullness was more marked as well as the tenderness, the former having much the feeling of a solid tumour in the fossa. The other symptoms continued the same, but the patient became decidedly weaker. The urine passed the preceding day was examined and found still oxalic.

28th, 9 A. M., patient evidently sinking. Dr. Sutherland was now called in. The tumour in the left iliac region was more prominent, and was now for the first time *felt* to pulsate. Mr. S. continued sinking until death occurred early in the afternoon of the same day.

On the morning of the 19th, the *post mortem* examination was held. Its details I leave to Dr. MacDonnell, who most skillfully performed the dissection, with such reflections as the case, considered as a whole, seems to merit. To avoid prolixity I have given a resumé of the case, rather than the details, either of minute symptoms or treatment. I have detailed the chief features, (those only interesting to the intelligent practitioner,) which characterized an obscure, and totally unsuspected disease, which must have been of long standing; and the case demonstrates a diagnostic error under most peculiar circumstances.—A. H., M. D.

Post Mortem Examination, 12 hours after death. When I entered the room in which the body lay, I found that the abdomen had been opened, and the first object that attracted my attention, was a large, black looking mass which occupied the left lumbar region, completely filling it up and extending forwards to near the mesial line, having the sigmoid flexure of the colon lying on its right side, which it had pushed out of its place. It was smooth on its surface, covered with peritoneum, and measured *sixteen inches in length*, and as near as we could ascertain, was about *fourteen inches in circumference* at its middle portion. It was composed of firmly coagulated blood, which had evidently escaped recently from some large vessel, and insinuated itself under the peritoneum, and under the descending colon. On closer examination we traced the coagulum into the pelvis, and here it had separated the

peritoneum from the iliacus and psoas muscles, and dissected it off the obturator internus and levator ani of the left side, the ureter and iliac vessels were stretched over its surface, and it encroached upon the situation of the bladder and rectum. Its upper portion passed between the crura of the diaphragm. Supposing that this immense mass of blood had escaped from a rupture or ulcerated opening, either in the renal artery or one of the mesenteric branches, or the abdominal aorta, we carefully examined these vessels even to their minute ramifications, but could not detect any source for the hemorrhage. The kidney was dislodged from its situation, and lay in the centre of the clot, just like the stone in the centre of a large peach, on every side it was surrounded, or rather suspended by the coagulated blood. It was quite healthy in its structure, as was also the opposite one. The abdominal aorta and its large branches were next examined and found healthy, and we were almost inclined to abandon the dissection, when we discovered some roughness of the spinal column on passing the finger through the aortic opening in the diaphragm, and then we ascertained that this roughness was the result of erosion of the bones, caused by a small aneurismal sac, which sprung from the posterior part of the vessel, opposite the tenth and eleventh dorsal vertebræ, exactly in that portion when it gets a covering from the crura of the diaphragm, and which may be considered as a neutral region between the abdomen and thorax. The sac was not very strong, it was about the size of a turkey egg, and communicated with the vessel by a round opening about half an inch in diameter; it had concentric lamina attached to its walls, but they were less numerous in the inferior portion of the sac, where the blood had escaped through a rent about a quarter of an inch long, and the artery and sac being both so compressed by surrounding structures, the hemorrhage was kept in control, and gradually and insidiously filtered through the subserous areolar tissue, dissecting the membrane from the muscles, and pressing the organs out of their normal situations. The other viscera were all healthy. As is usual, the intervertebral cartilages were not affected by the process of erosion.

The foregoing case presents many features of interest in a pathological and diagnostic point of view, upon which a few remarks may not be out of place, and first I will allude to the very unusual situation of the aneurism. If we take the statements of some pathologists, the exposure to dilatation from the current of blood, as at the arch of the aorta, the mobility of the part, and its exposure to injury, as in the popliteal and subclavian, afford satisfactory explanations for the great tendency these vessels display in becoming the seat of aneurism, and the same cause is

assigned for the formation of the disease in any of the vessels of the extremities. But a situation could hardly be discovered where a vessel is so securely lodged as in the foregoing instance:—where there is a special provision made, by the tendinous interlacement of the crura of the diaphragm, to protect the vessel against injury, and prevent its being pressed upon by the frequent contractions of that important muscle. It is also remarkable, that contrary to the ordinary course of thoracic aneurism, the disease here sprung from the back part of the vessel, which accounts for the absence of many of the symptoms which usually denote the existence of the disease. These symptoms may be referred to two classes. 1st. Those arising from the pressure of a tumour on important organs; 2nd. Those depending on the nervous communications between organs; the first are *mechanical*, the second *neuralgic*. Let us inquire if the absence of these symptoms can be accounted for by the size, situation, and the direction of its growth. The anatomist will readily perceive that from the locality of the tumour it could not have produced the more prominent and characteristic symptoms of thoracic aneurism, such as dyspnœa, stridor, dysphagia, feebleness in the strength of the respiration in one lung as compared with the other; aneurismal cough, aphonia, &c. Whilst the neuralgic symptoms depending upon pressure of the large nerves, whose branches communicate with those of the neck and chest, were, for the same reason, absent, and it is a singular fact, in this obscure case, that those symptoms which usually follow erosion of the spinal column, were likewise wanting. On this point I made particular inquiry when I first visited the patient, and ascertained that he had never suffered from racking pains shooting up and down the spinal column, and that he had only very recently experienced *dull constant aching pain*, which was never combined with those of an acute lancinating character, which some writers as Professor Law,* have stated to be pathognomonic of this disease, but which my own experience has proved to be common to other tumours pressing upon the spine as was, indeed, shown many years ago by my friend Dr. Battersby, of Dublin,† that dull pain about the kidney increased by pressure. The absence of rigor of true spasmodic intermitting pains in the ureter, tended also to embarrass the diagnosis, and though we were convinced on the last day, of a pulsation in the tumour, not before manifest, the history of the case, the *gradual* sinking of the patient, the want of aneurismal symptoms, and the *rapid formation of a growth* occupying the whole of the lumbar region, did not countenance the idea of an aneurism, and pointed out rather to a sudden formation of matter around the kidney, which

* Dublin Journal of Medical Science, vol. xxii.

† Dublin Journal of Medical Science, vol. xxiv.

received an impulse from the aorta, thus accounting for its pulsation. It was not until the blood had escaped under the diaphragm, and that the tumour became *abdominal* that pressure signs manifested themselves, and these were more calculated to direct attention to the kidney, whose function was known to be already impaired, than to throw light upon the nature of the malady. These symptoms were, the presence of an obscure swelling in the left renal region which gradually increased and gave rise to a pain not only in the spot, but to neuralgic pains, shooting to the testicle with some degree of re-action of that organ and constant dull pains about the kidney increased by pressure. I need hardly mention that the mode of rupture, and the manner in which the blood escaped are both very unusual. The bursting of an internal aneurism is but too rapidly fatal to need comment, but it is strange that so slight and emaciated an individual could lose, a quantity of blood, capable of forming a tumour sixteen inches long, and fourteen in circumference without instant, or at least, almost instant death occurring, yet this patient survived seven days, though we cannot, with accuracy, determine the exact moment when the sac gave way, blood being pumped out at each stroke of the heart, probably during the whole time. The formation of the large coagulum, though an ineffectual effort of nature to arrest the hæmorrhage, no doubt did materially retard it. It will be readily granted, that a young man of active and abstemious habits, who was accustomed to cross the Atlantic every year, besides travelling a great deal every summer on business tours through Canada, and who never complained of more than some obscure lumbar pain, which usually disappeared on the application of an anodyne liniment, and who was, moreover, the subject of oxaluria, the physician could hardly have suspected to have been the victim of such a disease as aneurism, particularly as the signs of oxaluria were so manifest, and so capable of accounting for all the phenomena, whilst those of aneurism were completely absent.

R. L. M. D.

ART. XXXVI.—*Case of Internal Hemorrhage after parturition.*
By ROBERT PETCH, Surgeon.

I WAS called to see Jane Donagh, October, 45, primipara, on the 1st of May last, I found the vagina well lubricated, but the os uteri very undilatable. As the pains appeared to arise from sympathy with the bowels, (they being constipated) I ordered a dose of castor oil and laudanum, which gave almost immediate relief. The next day true labour

pains set in, but, the *os uteri* was very unyielding. I was very particular in my examination, and received from her the following information:—shortly after quickening, she fell through a trap door into the cellar, and hurt her left side materially, from that time until I was called to visit her, she continually complained of tenderness upon pressure in the left iliac region. The *os uteri* being so unyielding, I used the lancet, and administered tartar emetic, but without producing the usual effects. On the following morning, I used the tartar emetic, in gr. $\frac{1}{2}$ doses, until such time as it produced vomiting, considerable dilatation of the *os uteri* followed, but not sufficient to answer the object required. About 3 o'clock P. M., the pains became very severe, and continued so until about 3 A. M., when the liquor amnii came away. After the escape of the liquor amnii, the pains left her entirely, I waited 2 hours for their return, but they did not return, I examined her vaginam, and found the *os uteri* well dilated, but the uterus appeared to be in a state of atony. I then used the *secale cornutum*. The pains returned in about an hour, and in 2 hours afterwards she was delivered of a living female child. In about 20 minutes after her delivery, she complained of slight after pains, which I hoped would expel the placenta, but suddenly a violent hemorrhage set in. I introduced my hand into the uterus, and found the placenta partially separated and partially adherent. My suspicions were then awakened and I dreaded the result of the injury previously received. I detached as much of the placenta as possible, and the uterus contracted and expelled both my hand and all the placenta excepting about the size of an American half dollar, (which I could not detach) I applied the bandage as usual and watched the uterus carefully. For 24 hours she appeared perfectly comfortable, the lochial discharge was regular, and there were even symptoms of the secretion of milk. The next evening I was called upon suddenly to visit her again, I went, and to my surprise, found the uterus (which was not larger than my hand when I left her) easily to be felt in the umbilical region, and even in the epigastric. The cause of this was no doubt the removal of the bandages by the old women, and the administration of certain *cure-all's*, during my absence. I employed friction and 2 or 3 clots were discharged, after their being discharged, I endeavoured to procure contraction of the uterus, which was of no use whatever for the *os uteri* was firmly contracted, and it was impossible to dilate it. I administered the ergot of rye and sugar of lead, but she expired before they had time to effect the purpose for which they were given. The friends objected to a Post Mortem examination, but I found by an external examination that the uterus was fully the size it was before the birth of the child.

ART. XXXVII.—*Review of "a few observations on Dr. Howard's Lecture by Medicus."* By R. P. HOWARD, M.D., &c.

THE above "observations" professedly written, only lest the medical student should be misinformed or led into "error" by the teachings of the lecture alluded to, require, in this point of view, some examination: though it may be shown to be highly probable that the author of the "observations" was influenced by some other motive besides. Thus let me examine the opening criticism, in which, after quoting a part of my diagnosis as follows:

"No disease of the aortic valves; *possibly* disease of the mitral, obstructive rather than regurgitant; or, *perhaps*, softening or weakness of the heart." Medicus answers, "the only portion of this clause verified by the subsequent *post mortem*, was "no disease of the aortic valves." Now do not the words "*possibly*," or, "*perhaps*," clearly intimate that on this point there was *then* doubt in my mind: and is it not plainly stated farther on that at that stage of the case "I was at a loss how to decide, and could not confidently say which" of those conditions obtained? Why does Medicus omit to notice the following passage in the lecture which shews that the doubt felt on the 17th, was removed on the 21st?

"Four days after the commencement of the treatment, some important changes, you may remember, were accorded in the physical signs, which threw additional light on the case. The heart's sounds had become more distinct, and more extensively audible, and the first had less of its sharp clapping character, while the rhythm was restored and the pulse had regained its regularity. And now you can perceive the value of repeated examination. The restoration of regularity to the heart's rhythm, and to the pulse, was incompatible with much mitral obstruction; softening of the heart to an extent capable of rendering the pulse so weak and intermitting as it was here, could not have been cured in four days: so that the only supposition upon which the progress of the case could be explained was, that the urgent dyspnoea and pulmonary obstruction so embarrassed the heart as to overpower it—to render it temporarily weak."

Is not the existence of mitral obstruction and softening excluded here? And does not the history of the cadaveric examination confirm this opinion? Why then does the impartial critic say, "the mitral valves were found quite healthy, and instead of softening of the muscular structure of the organ, the walls of the ventricle were found "firm and red;" intimating that such a condition was quite opposed to my anticipations?"

Again, what induces the writer of the "observations," towards their close, to drag forward the fact that "there was an adherent pericardium which was not diagnosed," when the following passage occurs in the lecture itself? "But it, (speaking of the post mortem examination,) also revealed a condition which was not expected—which had not indeed been thought of; viz.: universal adhesion of the pericardium to the heart." Does he mean that the condition in question ought to have been diagnosed under the circumstances of the case? Or even that it generally can be ascertained during life in all uncomplicated cases?

But to proceed with the "observations." Medicus says, "I must confess to a complete ignorance of any pathological condition of the heart termed 'weakness of the heart.'" I have read somewhat of Cardiac pathology, but in no author that I have had access to, have I found any notice taken of a morbid state to which such a denomination has been given." For the employment of the terms "weakness of the heart," "weak heart," "debilitated heart," I beg to refer to the following eminent writers on cardiac diseases, Law, Latham, Walsh, Blakiston and Ormerod; their authority may excuse my using similar terms.

While I admit the right of the critic to "take objection to" anything in a lecture calculated "to perplex or mislead the student." I cannot allow any erroneous statement in that objection to pass unnoticed, more especially when the paragraph objected to, in my opinion, is not calculated to perplex or mislead. "Fatty degeneration of the heart," says the observer, "is treated by all modern writers on heart disease in distinct terms, and is never associated, as a cause, with the pathological state treated of under the name of 'softening.'" Now in Dr. Blakiston's late work on "diseases of the chest," (p. 198,) fatty degeneration of the heart is described as a cause of softening of the organ.

The reason why I "omitted to notice," "violent and continued vomiting" as a "sign of polypus of the heart of *great diagnostic value*" is, that I do not regard it in that light. The only modern authority presented to my recollection, who mentions "nausea and vomiting" among the symptoms of polypus is Hope, and he lays no stress on the point; and farther, these symptoms are but too common inconveniences in many forms of severe cardiac disease.

Medicus attempts to show that "the second part of the diagnosis" was incorrect. But had he reflected (not to say read) more, he might have arrived at a more charitable explanation of how "dilatation" of the heart could exist, although at the opening of the body the organ was found "closed by rigor mortis;" than that I "felt myself bound

by my conviction to assert its presence." When the heart was examined after having been kept a few days in spirits, the dilatation was manifest, and when writing out an accurate statement of its condition, that fact, as well as its weight and dimensions, was recorded with the appearances previously noted at the autopsy. Fortunately, too, the heart concerning whose dilatation Medicus entertains "serious doubt," is still in my possession, and has been examined by several medical friends. If then I am correct in stating that "dilatation of the right ventricle" existed, and that the right auriculo-ventricular orifice measured 5 inches in circumference, it is plain that "slight regurgitation" through that orifice might occur, would almost necessarily occur, as the patient suffered greatly from dyspnœa. Hence, on this point too, the diagnosis was correct.

Lastly, the "observations" respecting "enlarged jugular veins," are founded upon a misapprehension of the passage alluded to. It does not state that Dr. Blakiston established "enlarged jugular veins" to be a "sign of a dilated right cavity;" no one who had ever read the book invariably consulted by students of auscultation could be ignorant of "Laennec's" allusion to "Lancisi" as the discoverer of the connexion between a "swollen state of the jugulars" and dilatation of the right ventricle, and of his own adhesion to Lancisi's view notwithstanding the dissent of his "illustrious" teacher "Corvisart;" but it says "the *general dropsy* and enlarged jugular veins pointed to *tricuspid regurgitation* as established by Dr. Blakiston, &c.," which is quite another thing.

In conclusion, it may not be contrary to the "laws of criticism" or professional etiquette to advise Medicus, when commenting upon the writings of others, to adopt the practice which he has so thoughtfully urged upon me, and let every statement be concise and rigidly correct."

Montreal, August 23, 1852.

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

PIRRIE'S SYSTEM OF SURGERY.—In the last number of this Journal we noticed in a few words the receipt of this excellent treatise. Since then, we have made ourselves more intimately acquainted with its details, and can now pronounce it to be one of the best treatises on surgery in the English language. It does not profess to treat upon every disease, consequently is not so complete as some others, but what it does touch upon, is discussed, in a clear and satisfactory manner. We were par-

ticularly pleased with Professor Pirrie's chapters on dislocations and fractures, and quote the following passages as a sample of his method of imparting instruction :—

Treatment of the three classes of Fractures of the Forearm.

“ The treatment of all these fractures of the forearm consists of two parts; the procuring and maintaining coaptation. This is procured by bending the forearm at right angles to the arm, and placing the hand midway between pronation and supination; then using slight extension, if necessary, and pushing back the protruded muscles between the bones. To maintain coaptation, we must call in the aid of both attitude and mechanism.

“ *Attitude.*—In each class of fractures the forearm ought always to be at a right angle with the arm, that the muscles of the arm may be uniformly relaxed; and the hand ought to be placed midway between pronation and supination, that is, with the thumb upwards and the little finger downwards. If this be neglected, the fractured portions will unite, so as to form an angle with each other; and the consequence will be the loss of the power of supination, if the hand be kept in a state of pronation, and if the power of pronation, if it supinated. The only variation of attitude in the different classes of fractures is in the relative position of the hand and the long axis of the forearm; in fractures of both bones the long axis of the hand should be in a line with the long axis of the forearm; in fractures of the radius, the hand should be depressed; and in fractures of the ulna slightly elevated.

“ The object aimed at in these peculiarities of position is to prevent the diminution of the interosseous space; which is accomplished, in fracture of both bones, by uniformly extending the muscles connected with the radius and ulna; in fracture of the radius, by extending the muscles attached to the outer side of the radius, and in fracture of the ulna by the extension of those on the inner part of the bone, and these conditions of the muscles are produced by the above described attitudes of the hand. The following directions exhibit at one view the attitudes to be observed :—

1. “ Bend the forearm *at a right angle* with the arm.
2. “ Keep the hand midway between pronation and supination.
3. “ In fractures of both bones, *keep the hand in a line with the long axis of the forearm.*
4. “ In fractures of the radius *depress the hand.*
5. “ In fractures of the ulna *raise the hand.*

“ *Mechanism.*—Various appliances have been used to preserve the parts at rest, and in apposition. Some surgeons use paste-board splints,

softened in hot water, and then moulded to the forearm ; some employ splints composed of several parallel pieces of wood sewed together by a piece of linen or leather, while others make use of wooden splints, slightly concave on one side and convex on the other.

“ Baron Boyer recommends that a small oblong pad should be applied between the concave surface of each splint and the forearm, in order more effectually to press in the muscles, and to preserve the interosseous space. But if the splints be applied closely, the pressure in the direction of the antero-posterior diameter will be sufficient ; nor will any padding be requisite, except a little cotton to prevent the pressure from irritating the skin. In fracture of a single bone the splints should extend only to the wrist ; but when both bones are broken, one of the splints should reach to the finger, that the hand may be kept in a line with the long axis of the forearm ; the longer is usually applied to the front of the forearm.

“ To preserve the mechanism in its proper situation, various means have been employed. The common roller and starch-bandage are both objectionable, in as much as they tend, by pressing the radius and ulna together, to diminish the interosseous space, besides which they keep up a degree of heat about the part, and create trouble in taking off the splints, which must occasionally be done to ascertain whether the part presents the desired appearance. The loop-bandage is not liable to the same objections, but the most convenient and elegant manner of treating these fractures is to use the wooden splints, retaining them in the proper position by the buckle. Two or three may be used, and the forearm should be kept in a sling.

“ Direction as to mechanism :—

“1st. In fractures of one bone, apply two splints of equal length, not extending beyond the wrist.

“2nd. In fractures of both bones, use two splints of unequal length, the larger being applied to the front of the forearm, and reaching to the ends of the finger ; the other need not be extended beyond the wrist.

“ The objects aimed at by treatment in these fractures are to obtain coaptation, to preserve the interosseous space, and to keep the parts at rest in a proper position.

“ For the attainment of these ends, attitude and mechanism are both necessary ; the former should be used from the very beginning of treatment ; but the application of mechanism should be delayed until either the danger of inflammation supervening is over, or the inflammation, if it has already taken place, has been subdued.” p. 133.

In conclusion we recommend very strongly this excellent work, both to the practitioner and student.

SCIENTIFIC INTELLIGENCE.

ANATOMY AND PHYSIOLOGY.

On the Molecular Origin of the Tissues. By Dr. BENNETT.

THE great generalisation of Schwann was that all tissues are derived from cells. Subsequently, it was ascertained that the nucleus, or cell-germ, exercised an influence on the tissues, independent of its cell wall; and it was endeavoured to be shown, that some tissues might be derived directly from nuclei. The object of this communication was to point out that the nuclei themselves originated from smaller bodies—viz., molecules; that these were the origin of every texture, and to indicate some of the laws which governed their formation, arrangement, and subsequent development. From a review of the observations of Schleiden, Schwann, and Martin Barry, the author pointed out how the first appearance, observable in all developing organisms, was a mass of molecules and granules, which, by aggregating or melting together, constituted the cell germ. Around the cell germ other molecules were formed, which again, by melting together, constituted the cell wall. Further development, in like manner, proceeded by the apposition of molecules. At any period in the process of evolution, the onward progress might be checked when the structure became disintegrated in the inverse manner to its formation: First, the cell wall became dissolved, then the nucleus, both of which were reduced, first to molecules, then to a fluid. Hence there were molecules of evolution and molecules of disintegration. Occasionally, between the cell wall and nucleus, secondary molecules were formed, which constituted peculiar secretions, as they have been termed: these might be called molecules of transformation. The author described the origin and mode of formation of these three kinds of molecules, their physiological and pathological importance, and pointed out the advance which had been made in our knowledge of molecular formation by the observations of Ascherson, Harting, and Melsen. In complex organisms, the higher tissues were formed by an elaboration of blastema, mainly due to the successive evolution, transformation, and disintegration of matter, by means of the three different kinds of molecules, of which the author gave numerous examples, derived from the elaboration of the ovum, of the blood, the transformation of insects, the process of fissiparous division in the lower animal forms, &c. He pointed out that molecules had independent movements, sometimes

physical, as in the case of Brown's molecular movements, at other times vital, as seen in many organisms. That occasionally we had molecular fibres, from the aggregation end to end of molecules, in the same way as we have nuclear cell fibres. Moreover, each kind of fibre could assume inherent contractility, as in the case of vibriones, which might be called contractile molecular fibres, as spermatozoa might be denominated contractile nuclear, and cilia contractile cell fibres. The author concluded a lengthy communication by remarking, that not only did a study of the molecular element indicate the origin and development of healthy and morbid product, but it pointed out the basis on which a rational treatment was to be founded, as far as diseases of nutrition was concerned. Thus in tubercular diseases, where molecules of evolution were deficient from absence of the fatty element in the chyle, animal oils were indicated to favour the production of such molecules. When the blood was diseased, in cases of gout, rheumatism, rachitis, scurvy, &c., such morbid conditions could only be removed by the introduction of substances which either directly or indirectly, physically or chemically, favoured the production of certain molecules of transformation, as those in the blood; and when any of the tissues seem redundant and hypertrophied, tumours constituted the morbid condition; thus the cure would depend on the discovery of those means, whereby granules of disintegration might be induced and subsequently eliminated.

On Pathological Cell Development.

DR. GAIRDNER made a verbal communication of considerable length, on certain peculiarities of pathological and other structures, as bearing on the different theories of cell development. He considered the cell theory of Schleiden and Schwann, although it led to the discovery of many interesting facts, and really important morphological generalizations, to have been utterly overthrown, as a general theory of development, by the progress of scientific inquiry. The "cell" of these physiologists, so far from having the fixed and uniform character of a basic type of form, was the most fluctuating and uncertain of all morphological creations. Its form, size, law of development, were either confessedly uncertain, or had to be stated in terms so vague as to lead to the conclusion that form and substance, and perhaps microscopic size, were the only attributes essential to the idea of a cell. No one could tell, in practice, what was a cell wall and what was a nucleus, and no one could give a satisfactory theoretical definition of either, or resolve,

for all cases, which of the two preceded the other in the course of development. The theory of "germinal centres," held by Mr. Goodsir, in so far as it ascribed to certain "nucleated particles" the function of the cell, was, in Dr. Gairdner's opinion, subject, in like manner, to the imputation either of vagueness or of want of comprehensiveness. If these nucleated particles came under any more precise definition than was applicable to every kind of organic or inorganic structural atom, it would be very difficult to show that they monopolised and centralised the whole functional activity of the organism, or were more necessary than other parts to its growth and preservation. He (Dr. Gairdner) believed that there was no distinction in the organism of passive and active atoms, and considered every point and every molecule as endowed with its own life, and placed, in its own peculiar sphere of activity, in harmony with the rest. He agreed with Dr. Bennett in thinking, that many tissues arose from elements far more minute than any to which the term cell or nucleus had been applied; indeed, he was far from thinking that our microscopes had conducted us back to the real germs of the tissues, and considered that the structural, like the chemical atom, still lay in the remote region of hypothesis. He firmly believed, however, in these hypothetical germs, and could not conceive of the tissues being formed by any thing like what the Epicureans would have called a concourse of atoms, according to their physical and chemical properties. Hence he did not think, that by the mere introduction of peculiar molecular elements into the food, we could either create new tissues or destroy old ones, so directly and simply as had been hinted by Dr. Bennett. The positive part of Dr. Gairdner's communication consisted in the detail of observations on the structure and development of the pus, corpuscle and other pathological structures, intended to show that the so called cell walls were often generated in great numbers without nuclei; and that the whole of the facts of cell development contradicted the idea of any part of a cell being, more than another, the source of its functional activity and development. In regard to the development of fibres, Dr. Gairdner thought there was no evidence that these were ever produced from cells, under any circumstances; and he had long been in the habit of regarding the so-called fibre cells as merely transition types in morphology, and not parts of a physiological succession of stages of development. It was difficult to prove this view any more than its opposite, but he thought any one who would give it consideration in original observations, would find it in harmony with all the known facts, both physiological and pathological.

Dr. SANDERS remarked, that Kölliker had demonstrated unstriped muscular texture to be composed of permanent fibre cells, whose development by elongation of spherical nucleated cellules he had traced in the pregnant uterus. This texture, therefore, had been lately found a corroboration of Schwann's views, which it was previously thought to contradict. Doubtless some textures were formed without passing through the form of cells ; thus, particularly, fibrous tissue, as observed in cartilage by Redfern and Donders ; yet the constant presence of nuclei and cellules in skin, mucous membranes, glands, and bone ; their transition forms ; their extensive development in the fœtus ; their occurrence in newly forming textures in all organized beings, animal and vegetable, gave immense weight to Schleiden and Schwann's views, and justified our adherence to them in physiological anatomy. In pathology, their application appeared more limited, and less satisfactory. Dr. Gairdner's statements, and a gaining distrust among observers at home and abroad, proved the necessity of submitting the "cell theory" to the criticism of new and extended observations ; it ought not, however, to be rejected, but only thoroughly reinvestigated.

THE SALIVA.

The following account of recent discoveries respecting the nature and uses of this secretion, must possess an interest to a people characterized as the spitting nation. It is taken from a Paris letter in the Boston *Atlas* :

M. Claude Bernard, young as he is, (he is only 32) has acquired by his individual labours, and those in connection with Magendie, whose *vice* and coadjutor he is, a widely extended fame in physiological science. He has recently laid before the Academy of Sciences a magnificent memoir. The organs that secrete the Saliva in man and mammiferous animals, are composed of three principal glands, the parotid, placed in the hollow of the articulation of the jaw, the under maxillary, placed in the thickness of the floor of the mouth, and the sublingual, whose name clearly indicates its position. Until quite recently, anatomists, judging from the analogy of structure which exists between these different glands, agreed that their secretions had identical properties, and were destined to the same usage. They had even given the name saliva-gland to the pancreas, which is situated in the abdomen, and pours its secretion into the intestine, not far from the stomach. It was M. Claude Bernard, who first demonstrated the special functions of this organ, which is charged with the facilitation of the digestion of *oleaginous matters* by pouring upon the aliments an exceedingly sapid liquor. In applying to the glands of the saliva the same method of observation,

M. Bernard has ascertained that they secrete different liquids, each affected to a distinct use.

In considering the saliva as a simple fluid, physiologists made a mistake, there being really three species of saliva, more or less mixed together in the mouth—the saliva of the sublingual gland that is viscous and gluey; the saliva of the parotid, which is abundant, and liquid as water; and the saliva of the under maxillary gland, which participates in the qualities of the two others. The first sort lubricates and glues, as it were, the bodies it touches, but it can neither penetrate nor dissolve them; the second, on the contrary, moistens, penetrates and dissolves the soluble principles of the aliments with the greatest facility; the third seems to aid the perception of savours. That you may not set these down as mere subtle distinctions, allow me to enter into some details showing the part of the three great glands of the saliva. Nothing is easier than to show upon the living animal that the parotid secretion is exclusively destined to imbibe the dry aliments and favor their mastication. The variations of that secretion will be found in exact proportion to the degree of the dryness or humidity of the aliments. To make certain of this fact, the parotid canal of the horse is cut, and is exposed; and it is shown that the flow of saliva, very abundant when they give the animal hay, straw and bran, dry, on the contrary becomes sensibly less, when the same aliments are given moistened. The same experiment succeeds equally well upon dogs and rabbits; the parotid may be excited to secrete in less than an hour more than eight or ten times its weight of liquid. The conditions of the secretion of the sublingual gland are entirely different from those of the parotid. When the mastication is going on and the parotid saliva flows abundantly, the sublingual saliva, on the contrary, does not flow at all, or flows very slightly. It is only after mastication is over, and the animal about swallowing, the sublingual saliva flows abundantly.—The successive secretion of these two salivas, one fluid and the other viscous, can be easily ascertained by examining in the œsophagus of a horse the hay which has been insalivated; it will be found that the aliment is paste like, and completely moistened in the interior by a non-viscous saliva, which from its physical qualities may be easily recognized as the parotid saliva, while the exterior of the aliment is covered with a thick coating mucous and gluey saliva like the saliva of the sublingual gland. The movements of deglutition excite the activity of the secretion of the sublingual saliva, whether the aliments be dry or humid. So that even during the deglutition of water when the animals drink, the sublingual gland secretes and communicates a very perceptible viscosity to the water, which forms a marked contrast with the absence of saliva in the parotid canal. As to

the conditions of the secretion of the under maxillary gland, it has been observed that they are altogether different from the others. It obeys influences which are always connected with the sense of taste. In pouring down the throat of a dog, after having isolated the three saliva canals, any liquid, like vinegar, &c., it has been remarked that the canal of the under maxillary gland immediately pours out saliva in great quantities, and then the motion the animal makes to swallow brings out the parotid saliva, and complicates the experiment. But by acting directly and mechanically upon the nerve of taste, it is easy to react upon the special secretion alone, and to show that secret relation between the secretion of the under maxillary saliva and the sensation of taste, with a clearness which leaves nothing to desire.—When, with a pair of pincers, the lingual nerve may be irritated, and the flow of a single species of saliva induced at will, does it not seem that some of the most secret springs of our organization have been exposed ?

In consequence of the natural succession which exists in the tasting of the food, the mastication and the deglutition, the three saliva systems which are relative to each of these acts do not perform their functions simultaneously, but successively, each after the other. This is indeed the constant result of experience. When meat is given to a dog whose three saliva ducts have been exposed, it is always seen that the under maxillary saliva flows first, then the parotid, and lastly the sublingual saliva.

M. Claude Bernard has also ascertained that the physical and chemical properties of the saliva are perfectly in sequence with their physiological destinations. By the aid of these physiological datas the modifications and real signification of the saliva organs in the different classes of vertebrated animals, may be easily studied and comprehended in several if not all their bearings. All at once comprehend why we do not find in birds either the parotid or the under maxillary glands. These glands cannot exist in animals which have no occasion to exercise taste or mastication. The usages of the saliva glands found in this class being merely for the purpose of deglutition, they have but a gluey, viscous saliva, like that secreted by the sublingual gland in the mammiferæ. In the mammiferæ who masticate hard and dry substances, the parotid requires its maximum of development, while with those, the seal, for example, who live in the water, and are nourished by humid aliments, this gland diminishes excessively, or even wholly disappears.

Such is an imperfect analysis of M. Claude Bernard's brilliant memoir. The professional reader cannot but shudder at the horrid tortures which must have been inflicted upon poor horses, dogs, and rabbits, before these results were attained.

STRUCTURES OF ARTERIES.

Mr. DRUMMOND exhibited several preparations of the middle coat of the aorta in the ox, for the purpose of showing—1st, that many of the fibres present a distinctly transverse striated appearance. They are branched generally, and anastomose with neighbouring fibres, presenting an appearance very similar to the branching striated muscular fibre, however, they differ in their chemical constitution, agreeing in this respect with yellow elastic tissue. They are in all probability analogous to the striated fibres occurring in the ligamentum nuchæ of some animals. When viewed with a high power, many of them seem to present a series of cup-shaped depressions, arranged in linear series in the longitudinal axis of the fibre, with intervening ridges or partitions, to which the striated appearance is owing. 2nd. That the structure described under the name of the fenestrated coat of Henle, as it occurs in the middle coat of the aorta in the ox, is formed by the amalgamation of the net-work of the yellow elastic fibres, the fenestræ or perforations being merely the remains of the areolæ between the fibres. The fibres which go to the formation of this coat often present traces of the transverse striated appearance above described. Preparations were also shown illustrating the development of the yellow elastic tissue as it takes place in the ligamentum nuchæ of the calf. A description of the development of this tissue will be given in a future report.

Dr. BENNETT showed, under the microscope, demonstrations of the blood in a case of leucocythemia, in the practice of Dr. Monro of Dundee.

Dr. GAIRDNER exhibited various organs, as well as the clot of the blood, and a slightly enlarged and softened spleen, in what he considered as an incipient case of leucocythemia, probably the earliest stage of the affection yet observed. The patient died of acute rheumatic endocarditis, with disorganization of the aortic valves and septum ventriculorum. The tissues, the blood, and the spleen, contained an excess of white corpuscles.

Dr. SANDERS was requested to investigate the spleen in this case.

SURGERY.

Strangulated Hernia in a Child five months old; Operation; recovery.

Under the care of Mr. ERICHSEN.

THE following particulars were obtained from the notes of Mr. Turle, Mr. Erichsen's house-surgeon.

Arthur C—, aged five months and a half, was admitted April 12, 1852, under the care of Mr. Erichsen. It appears that when the boy

was three weeks old, a hernial tumour appeared in the right groin ; it could be easily reduced, and would only come down occasionally—viz, about once a week. The tumour then used to remain apparent for several hours, and afterwards ascend spontaneously into the abdominal cavity. When the child was four months old, a truss was applied, but the apparatus proved ineffectual, as the tumour appeared again on the following day by the side of the pad. The truss seemed also to cause considerable pain, and the mother therefore brought the child to the hospital.

The little patient was found, on examination, to be affected with oblique inguinal hernia of the right side ; the intestine had descended into the scrotum, and was greatly distending it. There were, however, no symptoms of strangulation at the time ; some attempts were made to reduce the tumour, but these having failed, the mother was desired to leave off the truss and to bring the child immediately she perceived any unpleasant symptoms.

Six weeks after this (April 12, 1852) the mother applied to Mr. Erichsen again, as alarming signs of strangulation had manifested themselves. The tumour, which had remained unreduced, was now large and tense, its neck appearing to be tightly constricted by the external abdominal ring. In following the intestine down into the scrotum it was remarked that the latter was not only distended by displaced intestine, but likewise by fluid secreted in the cavity of the tunica vaginalis, so that the child was suffering both from strangulated inguinal hernia and hydrocele. Constipation and vomiting had been existing for some time, the surface was cold, the face pale and drawn, and the patient evidently in a very precarious state.

The mother, having been told of the dangerous condition of her child, readily consented to the performance of the operation, and Mr. Erichsen proceeded as soon as the child was narcotized by chloroform. The integuments were divided over the neck of the tumour, and the several layers of cellular tissue and fasciæ having carefully been slit open, the sac was fairly exposed. The constriction was now found to be exerted by the external abdominal ring, and a few transverse fibres of the cremaster muscle ; a curved director was passed beneath these parts, the strangulating structures were divided by an incision directly upwards, and the protruded intestine returned with facility without the peritoneal sac having been opened. The edges of the wound were approximated with sutures, and the whole secured by a compress and a double-headed roller.

Three hours after the operation a copious liquid motion was passed, the child being perfectly quiet and composed. On the following day he

was in a very satisfactory state, and the wound looked very healthy. From this time the little patient progressed most favourably; he had no bad symptoms whatever, became cheerful, and improved much in appearance. The bowels were open daily, and the child left the hospital, the wound being quite cicatrized, eighteen days after admission.

It will be perceived that the taxis was not tried at all in this case when the symptoms were fully established; and that this cautious conduct has a marked and beneficial influence on the issue, is clearly seen by the success here obtained. We cannot help noticing, in reviewing this case, the baneful effects of the common spring truss in infants; nor can it be otherwise, for it is next to impossible that the pad should exactly compress the ring with infants at the breast. It is equally difficult to regulate the spring in such a manner as to prevent the truss from slipping, without using an amount of pressure which must of necessity be hurtful to the child. Nothing will answer in such cases but elastic belts, which yield without becoming displaced when the infant cries; the belt being supplied with an air-pad, as suggested by M. Bourjeaurd, which shall be gently lodged upon the ring, and be made softer or harder by means of the stop-cock, as occasion may require.

Mr. Erichsen has operated in private practice upon extremely young children with varied success; we shall just allude to two of the cases as we are anxious to accumulate facts bearing upon operations for strangulated hernia in infants.—*Lancet*.

Strangulated Congenital Hernia in a Child ten weeks old; Operation; Death. Under the care of Mr. ERICHSEN.

MR. ERICHSEN was requested by Mr. Tweed, on the 11th October, 1850, to see a child ten weeks old, who was suffering from strangulated hernia. The child had passed no flatus nor fæces for three days, and during the last two had been constantly vomiting thin, yellow matter. The ordinary domestic remedies having been tried in vain to open the bowels, Mr. Tweed was called in, who detected the hernia.

On examination, fæces were found in both tunicæ vaginales. On the right side, the canal and rings were occupied by a very tense inguinal hernia, which descended into the upper part of the scrotum above the hydrocele. Mr. Erichsen at once proceeded to operate upon this hernia, after having ineffectually tried the taxis a little time. The incision having been made in the usual direction, the structures, which were very thin, were carefully dissected, the tensely-stretched external abdominal ring divided on a director, and the sac opened, exposing a knuckle of cho-

colate-coloured intestine. The stricture, which appeared to be in the neck of the sac, was then divided upwards, and it was so excessively tight that Mr. Erichsen found some difficulty in getting his finger-nail underneath it. The intestine was then returned, and a few stitches having been put into the wound, a pad and bandage were applied.

When the sac was opened, the hernia being a congenital one, the spermatic cord and testis were of course exposed. These were deeply congested, the latter especially being of a dark purple colour, and looking like a sloe. A small quantity of calomel was given to the child every third hour, and chamomile fomentations were applied to the abdomen; but he died on the fourth day after the operation, without the bowels having acted.

On examination of the body, it was found that the portion of intestine that had been constricted was gangrenous, never having recovered itself so as to carry on peristaltic action. There were traces of general peritonitis.—*Lancet*.

Strangulated Congenital Hernia in a Child ten weeks old; Operation: Recovery. Under the care of Mr. ERICHSEN.

ON the 12th of January, 1851, Mr. Erichsen was requested by Mr. Greenhalgh to see a child nine weeks old, in whom an inguinal hernia had descended for the first time, on the preceding day, during an effort at vomiting. Since that time there had been constant sickness and constipation.

On examination a very tense congenital inguinal hernia was found in the right side, descending into the scrotum. There was no abdominal tenderness; the pulse being 118, and soft. The taxis was now gently tried in a warm bath, under the influence of chloroform but without success. Ice was then applied to the tumour for two hours, a couple of drops of laudanum given, and the taxis again but unsuccessfully tried under chloroform.

The operation was now performed by Mr. Erichsen in the usual way. On opening the sac, which was very thin, and contained but a small quantity of fluid, a long knuckle of dark maroon-coloured intestine was found lying in the tunica vaginalis. The stricture, which was in the neck of the sac, was now divided upwards and the gut returned. The testis and cord were dark and congested, as in the last case. Stitches having been put into the margins of the wound, and a pad and bandage applied, one drop of laudanum was administered every sixth hour. The child made a perfect recovery.—*Lancet*.

Strangulated Hernia in a Child ten weeks old ; Operation ; Recovery.

Under the care of Mr. LAWRENCE.

AMONG the numerous cases of strangulated hernia which are operated upon in our hospitals, there are now and then very young subjects affected either with congenital or accidental hernia. These patients are for the most part only a few months old ; and it is a fact worth remarking, that, as far as we have seen, children between five and ten years of age are very seldom brought into operating theatres for the relief of strangulated hernia, whilst the operations are pretty often required in mere infants. It will be seen by the following case that success may attend the use of the knife in patients only a few weeks old though apprehensions may no doubt be justly entertained with children of so tender an age, for it happens now and then that they very quickly sink after the operation. We recollect a case of the kind where the division of the stricture allowed a great portion of the small intestines to slip out of the abdomen through the ring, so much so that the greatest difficulty was experienced in returning the mass. The child in that case survived the operation but a very short time. We are glad to say that Mr. Lawrence's little patient has done very well, and we proceed to detail the case from the notes of Mr. Smith, Mr. Lawrence's house-surgeon.

Edward T——, an infant only ten weeks old, who, with the exception of a cough, has been healthy from its birth, was brought to the hospital on the 14th of November, 1851, with an oblique inguinal hernia on the right side, and was placed under the care of Mr. Lawrence.

The mother states that the child had been crying and coughing a good deal, two days before admission, and had continued to do so day and night. On removing the napkin on the following morning, she perceived the swelling of the right side of the scrotum ; the bowels had, however, been relieved the previous evening. The woman took the child to the parish surgeon, who tried for about three minutes to reduce the rupture ; but he could not succeed, and advised the mother to bathe the part with warm water, and then put on a poultice. The child was also given an opening powder, which produced no effect. The boy vomited a yellowish fluid several times during the following night, as also on the morning when he was brought to the hospital.

On examination, the parts were found swollen and tender ; the child appeared pale and anxious and continued to vomit a fluid deeply tinged with yellow. He was at once put into a warm bath, and after a lapse of some minutes an attempt was made to reduce the hernia. The Tumour was somewhat less swollen, but very painful ; and as the taxis did not produce the least effect upon it, the efforts at reduction were no persevered in for more than two or three minutes. The child was seen

at one o'clock P. M., by Mr. Lawrence, who advised an immediate operation, as the parts were very tense, and the previous attempts at reduction had failed.

The little patient was in such a precarious state, that it was not deemed advisable to administer chloroform. Mr. Lawrence rapidly divided the skin and subjacent tissues, and exposed the sac, which proved to be formed of the tunica vaginalis. A knuckle of intestine of a deep claret-colour was thus exposed, together with the testicle, which appeared congested, the epididymis being also of a dark slate-colour. A director was, with some little difficulty passed into the abdominal cavity, and the stricture divided; the intestine was returned, the wound closed with a couple of sutures, and the child put to bed.

He took the breast about an hour after the operation, but vomited the milk occasionally, which latter was, when rejected, slightly tinged with yellow. The bowels acted between four and five o'clock in the afternoon, (the child had been operated upon at one o'clock,) and again during the night. The patient slept at intervals, but was rather restless. On the next day, the parts were somewhat swollen and inflamed; the sutures were removed, and a poultice applied. The boy seemed uneasy during the day, and vomited the milk twice; the latter, however, was not tinged yellow as before. The bowels acted three times in the course of the day. On the third morning, the child was reported to have passed a quiet night; he looked better, and took the breast well; the sickness had quite stopped, and the bowels were freely open.

This patient went on favourably for the fourth and fifth day, but on the sixth he again became restless, and the bowels remained confined. Towards evening they were slightly relieved, and on the following morning a teaspoonful of castor-oil, was administered, which acted freely. From this time, the little patient never had an unfavourable symptom, and was discharged ten days after admission, with the wound just closed.

A feature worthy of remark in the preceding case is the caution with which the taxis was employed. It is very likely that the issue would not have been so favourable, had efforts at reduction been long persevered in. In fact, it is sometimes hardly fair to lay failures at the door of the operator, when cases are sent to him in which dangerous inflammation has already been excited by rough handling. Early operations are especially called for in very young subjects, and in illustration of this position we beg to refer to the following cases.—*Lancet*.

EXCISION OF THE HEAD OF THE HUMERUS.—PROF : SYME.

Janet Stoops, aged 60. We yesterday ascertained the truth in regard to this case, and did what I trust will prove sufficient for the

patient's complete relief. You recollect that at our last meeting I expressed my doubts as to the precise seat and nature of the disease. It was plain, from the sinuses leading to the joint, the copious discharge, and the long duration of the symptoms—viz, for five years—that there was some morbid derangement in the extremity of one or both of the bones composing the articulation. But whether this was an exfoliation, such as you witnessed in another case the same day, or caries; and whether this condition, if really existing, was limited to one, or extended to both bones, were questions which neither the history of the case nor the most careful exploration of the sinuses seemed sufficient to determine. With the exception of the lower jaw, the humerus is more prone to exfoliation of its articulating extremity than any other bone in the body, the softer cancellated portion being usually absorbed, and merely the dense part left, so that a very scanty representative of the original bulk remains. Some of you may recollect a case of this kind that occurred last winter, in which the exfoliation removed very much resembled in size and form an old-fashioned watch-glass. Another result of inflammation affecting this bone, occasionally met with, is partial absorption of the head of the bone, with caries of the remainder, which is then hollowed out into a cavity, the external surface being sound and the internal diseased. Such was the state of matters in a woman on whom I operated twenty-six years ago. She had suffered for six years, and been dismissed as incurable from this hospital; subsequently came under the care of Mr. Liston, who proposed nothing for her relief, and finally submitted to an experiment which I proposed. This was to cut into the joint, and ascertain the true state of matters, which proving to be an excavated state of the head of the humerus, was easily removed by excision of this part, so that the patient gradually regained her strength, and lived in good health, with the nearly perfect use of her arm, for ten years afterwards. But there is still another form of disease, and unhappily more frequent than either of the others, in which the field for surgical interference is less satisfactory. This is caries of both the articulating surfaces, in which case I regret to say there is no mode of affording effectual relief, except amputation of the arm at the shoulder-joint, followed by free removal of the diseased portion of the scapula. In such circumstances I have repeatedly performed excision of the articulation, but always with an ultimately unsatisfactory result; while in cases of the most unfavourable character, the more severe measure has no less uniformly proved successful. In the case which you witnessed yesterday, being uncertain as to the precise seat and nature of the disease, I made an incision directly downwards from the acromion, sufficient to admit my finger into the joint, and allow the extraction of any

exfoliated portion of extension in the event of a more serious operation being found requisite. Having found and removed two exfoliations from the head of the humerus, I ascertained that the remaining portion of it was excavated into a cavity, while the glenoid surface of the scapula was quite sound, and therefore extended the incision downwards and backwards to one of the sinuses, which opened at the posterior margin of the axilla, guided a knife round the head of the bone, thrust it through the wound, by carrying the arm forwards across the duct, and sawed it off. The patient has been quite easy since, and will, I trust, make a good recovery. She went to sleep under the chloroform, fully prepared to part with her arm, and was not a little pleased to find, upon awaking, that she still retained it.—*Monthly Journal.*

CLUBFOOT—VARUS.—PROF : SYME.

This child, seven months old, has been brought from the country, or rather a distant town, on account of congenital deformity of the right foot. You see that the toes are turned inward, while the heel is drawn up, so that the little patient, if able to stand or walk, would rest upon the outer edge of the metatarsus. I now divide the tendo Achillis by subcutaneous incision, and the heel is at once set free; but the inversion is still obstinate, and I therefore in the same way divide the tendon of the tibialis anticus. Immediately upon which the foot admits of being straightened, and kept in this position by means of a simple splint. This will be allowed to remain for two days, when what remains requisite for complete recovery may be trusted to a leather boot, with firm sole and sides, laced in front. Such is the simple process by which the worst forms of clubfoot are now easily remedied; and there is no triumph of modern surgery more creditable to the advance of our art than the control thus acquired over one of the most unseemly inconvenient, and previously unmanageable deformities to which the human body is subject. The author of a surgical work lately published in London (Mr. Bishop,) and which, from the opinions of the medical press, seems to be much admired in that part of the world, has endeavoured to show that the force transmitted through the tendo-Achillis tends to cause eversion of the foot, or that form of clubfoot named *valgus*, and after a demonstration to this effect, proceeds to say:—"Hence it is obvious, that if in talipes varus the tendo-Achillis is cut, it must increase the mischief." Now, the case which you have just witnessed will enable you to appreciate the incredible absurdity of this statement, so opposed to common sense and inconsistent with daily experience.

Fortunately for you, Edinburgh does not possess any orthopædic institutions, or fistula infirmaries, or cancer hospitals, so that the whole field of surgical practice is placed under your observation, instead of being divided into sections, and committed to the charge of specialists whose claims to confidence in their peculiar department seldom amount to more than their admitted obscurity in regard to the whole subject. You are thus able to judge from what you see, and will I trust never permit the mis-representations of sophistry to mislead you from the true path of experience.—*Monthly Journal*.

WOUND OF THE RADIAL ARTERY.—PROF : SYME.

May 17th. J. S., aged 40, from Kinross-shire, states that while pruning a gooseberry bush he accidentally thrust the knife into his left forearm, at the lower part of its upper third. Blood gushed out, he said, as when a pig is stuck ; but was partially checked by the pressure of his thumb on the wound, and afterwards more effectually restrained by a medical man, who stitched together the edges of the orifice, and applied a bandage. Still the bleeding repeatedly recurred, so as to require the further protection of a tight band applied above the elbow ; and on the following day induced him, with the advice of his attendant, to come here for some more effectual relief. Having removed the bandage, I found a pulsating tumour at the seat of injury, which was laid freely open by dividing the stitches and extending the incision through the integuments. The clotted and fluid blood being sponged out, while pressure was made above the elbow, I dilated the opening through the fascia and muscles, so as to expose the injured vessel, which proved to be the radial artery, passed a double ligature under it, and tied one of the threads on either side of the aperture in its coats. The patient has suffered no inconvenience, and is not likely to do so. You thus see the advantage of adhering to the important principle of practice so powerfully advocated by Mr. John Bell, which was to tie arteries that required to be tied for hæmorrhage by exposing them at the seat of injury. The general rule is, that arterial hæmorrhage should always, pressure, if possible, be arrested by local means directly acting on the wound. If the artery concerned be at or below the wrist, or at or below the ankle, if properly employed, will always prove sufficient ; but if the vessel injured be of a larger size, a ligature on each side of its aperture is the proper measure for security. If in this case which you have seen, I had tied the brachial trunk, hæmorrhage would have still been maintained through the free anastomosis of its branches in the forearm ; and if pressure had

then been applied, the impoverished limb would have readily passed into a state of mortification. Many arms, and not a few lives, have fallen victims to this error of practice.

EXCISION OF THE SUPERIOR MAXILLARY BONE. By Prof: SYME.

I PLACE this patient before you, in the first place, to show how little deformity may result from removal of the whole upper jaw-bone. When the extent to which it enters in forming the mouth, the nose, and the orbit, is taken into account, a very serious effect of this kind might be expected. But you see that, although little more than two weeks have elapsed since the operation was performed, the countenance is hardly at all disfigured, and the articulation is distinctly intelligible. In the second place, I wish you to remark that the process of removal was accomplished by means of one simple incision through the cheek, from the malar projection to the angle of the mouth. Since I performed this operation in 1829, for the first time in Great Britain, and placed the first case of its execution on the records of surgery, various modes of incision, more or less complicated, and even zig-zagging in four or five different directions, have been proposed. But as access to the parts concerned could not be required in any case more freely than in the one you have witnessed, and as the simple incision has proved amply sufficient for the purpose. I trust you will not hesitate to discard any prejudice that may have been acquired in favour of such needless and hurtful complications; for the more simply the integuments are divided, the more perfectly may they be reunited. And in the third place, I now beg to call your attention to the perfect adhesion which has been established in the case before you. The wound has healed literally without a drop of matter, and was apparently as sound three days after its infliction as at present. From its situation, if any perceptible trace were left, it would be covered in a male by the whisker, and in a female by the string of her cap. But even at this early stage it would require close inspection to detect the line of incision. Now this perfection of reunion has an important bearing on the principles of practice concerned in the treatment of wounds desired to heal by the first intention. For if the condition which afforded such a favourable result could be insured upon other occasions, there would be no risk of the disappointments that so frequently occur; and although this unfortunately cannot be accomplished to the full extent, the knowledge of what is really required may lead a far way to success. It has long been a well-known fact in surgery, that penetrating wounds of the cheek adhere more readily than most other solutions of continuity to which the

body is exposed ; and various attempts have been made to account for this, on the ground of alleged peculiarities in the texture concerned, notwithstanding the obvious objection to such a view of the matter, that wounds of the cheek which *do not penetrate its whole thickness*, are no less difficult to heal by the first intention than those that occur elsewhere. The true explanation is, that a wound which penetrates into the mouth has two orifices—one external and the other internal ; so that, while one is accurately closed, the other may remain open, for the discharge of blood that would otherwise accumulate in the cavity between the surfaces of the wound, so as to separate them and prevent their union. The grand essential for primary adhesion is, that the respective surfaces should be in accurate contact ; and unless they are not only so situated, in the first instance, but also protected from subsequent separation through the retention of blood or other influences, their union is impossible, however conducive to this result the circumstances may be in other respects. In every wound, then, that you wish to unite by the first intention, you should employ every precaution to prevent the raw surfaces from being displaced, in regard to their respective positions ; in the first place, by fitting them accurately to each other ; hence the advantage of simple incisions ; and, secondly, by so dressing them as to prevent the accumulation of blood. Having long laboured to establish this principle of treatment, I regret to see that a backward tendency has been in recent times manifested by the preposterous proposal of sealing up the wounds by collodion or other impermeable coverings.

Disease of the Hip joint of several years' standing ; Death ; Examination of the joint. Under the care of Mr. KEATE.

MUCH difference of opinion still exists as to the propriety of removing the head of the femur in certain stages of hip disease ; we are, therefore, anxious to put upon record facts which may aid in the elucidation of the question. Post-mortem examinations, in cases where no operation has been performed, are certainly of some value ; with this view we adduce the following case, derived from the notes of Mr. Holmes, surgical registrar to the hospital.

Sarah W——, aged six years, was admitted April 21, 1852, under the care of Mr. Keate. This child had been ill, it appeared, for the last two years, her symptoms being referred to the left hip. She had been under treatment at another hospital, and had derived great temporary benefit from the means adopted. On examination, a large abscess was detected at the upper part of the left thigh ; the pelvis was much

twisted, and the left knee pointed across the opposite side ; any attempt to straighten it gave her pain, but she did not suffer much otherwise. Her manner was drowsy and listless.

Two days after admission a small opening was made into the abscess and a considerable quantity of pus evacuated ; the discharge continued and the deformity increased for the next fortnight ; and as she seemed to be getting weaker, she was given bark and ammonia, with good diet, and porter. It was proposed to put her on a double inclined plane, but the pain induced by the attempts to alter her position caused this to be deferred. On the 12th of May, twenty-one days after admission, it was noticed that her drowsiness was increasing, so much so that it was difficult to rouse her, and her strength appeared to be failing. In spite of an abundance of stimulants, she died May 16, twenty-five days after admission.

Post-mortem Examination.—The shortening was only *apparent*, for the measurement proved the length to be the same on both sides. In the brain, the lateral ventricles were much distended by serum ; the kidneys were healthy, and the diseased joint presented the following appearances :—Head and neck of the femur extensively carious, and articular cartilages almost gone ; the head of the bone was not dislocated, and the ligaments of the joint remained entire. The neck of the femur was extensively diseased, and two or three large portions of bone were lying loose upon the carious mass. The acetabulum was likewise in a carious state, especially towards its anterior and lower portions, about half the thickness of the bone being there eaten away. In other parts, remains of the cavity were still apparent. There was no trace of disease on the pelvic surface of the os inominatum ; the sinuses in the neighbourhood of the bone were much thickened, but no collection of matter remained.

Mr. William Adams, demonstrator of morbid anatomy at St. Thomas's Hospital, examined, a few days ago, the body of a little girl, about seven years of age, in the last stage of emaciation and marasmus from hip disease, which had lasted several years. The greater portion of the head of the bone was absorbed, the cartilage at the epiphysis, between the head and neck, becoming visible by a longitudinal section. The remains of the head were studded with irregular calcareous deposit, and the great trochanter was carious. The cotyloid cavity was quite disorganized, the bony plate forming its fundus quite destroyed, and pus extended into the pelvic cavity, from which it had been discharged by a fistulous aperture in front of the joint.

It may be surmised, from these two post-mortem examinations, that if the removal of the head of the bone be attempted at all, it must be

done early: for it would appear that the cotyloid cavity becomes, with time, involved in the mischief. It is, on the other hand, possible that the disorganizing process may be carried on simultaneously both in the head and acetabulum.—*Lancet*.

Dr. SANDERS also communicated the following

ON THE CONTENTS OF THE CYST, IN A CASE OF RANULA.

In the fluid contents of a ranula existing on the left side of the tongue, and evacuated by incision, the liquid was transparent or slightly opalescent, viscid, and tenacious, and forming a thick, curdy precipitation on the addition of nitric acid. Under the microscope (250 diam.), a large number of cells were seen in different stages of growth; the most numerous about 2.3 centimillimetres diam., granular, generally with one, sometimes two, nuclei. Some larger cells, of 4.5 centimillimetres, contained several, sometimes four or five, clear, shining nuclei, imbedded in granular matter in their interior. On dilute acetic acid being added, the nuclei became more distinct; and in the larger cells, the granular matter, with its imbedded nuclei, contracted into a mass, and separated from the cell wall, leaving it clear and projecting, like a watch-glass, at part of its circumference. A curious phenomenon was also noticed; several clear, spherical, celloid processes were developed at the circumference of many of the cells from which they appeared to proceed.

Mr. DRUMMOND mentioned in opposition to the assertion of Zimmerman, that the blood of the fœtus contained no fibrine, that he had recently found it to contain a considerable quantity of that substance.—*Edinburgh Monthly Journal*.

LARGE OVARIAN CYST; REMOVAL.—Mr. I. BROWN exhibited a large multilocular cyst, which he had lately removed from a young married woman at St. Mary's Hospital, by extirpation. A firm band of adhesion existed, about a quarter of an inch in width, attached to the middle lobe of the cyst anteriorly, and extending in the right hypogastric region, where it was firmly adherent to the parietal walls. This band was divided to enable the mass to be removed, and no blood appeared to flow; but the patient gradually sank on the third day after the operation, and a post-mortem examination discovered that the band of adhesion contained two bloodvessels, and from these had flown fourteen pounds of blood, which was surrounding the bowels and occupying the pelvic cavity, most of it in a fluid state, some of it in coagula. The ligature

around the pedicle was so firm and tightly applied, that it was impossible that any blood could escape from the vessels there. This cause of death was of great practical interest, and Mr. Brown stated that he was not aware of a similar case, and it was therefore of importance to be known by every surgeon who performed ovariectomy.

PRATICE OF MEDICINE AND PATHOLOGY.

[We plead guilty to the charge brought formally against us by our cotemporary, the *Boston Medical Journal*, of having omitted on two occasions, giving him credit for the articles we copied from his pages, but we can assure him he is quite wrong in supposing we did so for the purpose of making it appear that the articles in question were written expressly for this Journal. We had hoped that the number and variety of our original papers might have satisfied him that we are not driven to such barefaced shifts to fill our pages.—*Eds. Can. Med. Journal.*]

Prevention of Salivation. By GEORGE STEARNS, M. D.—I wish to communicate a fact to you that has recently fallen under my observation, which may be of some interest to the profession generally. All physicians are aware of the salivating effect of calomel, and of the inconvenience that arises from sore mouths and other irritating complaints that affect the patients. I have had several persons under my care to whom I have been obliged to administer calomel, which I have mixed with supercarbonate of soda, in the proportion of about twice the amount in weight of soda. To one patient in particular, whom I have attended, for about ten weeks, I have given three grains of calomel with six grains of soda daily for five weeks, besides administering it frequently during the rest of the time. As yet, he has not suffered at all from the salivating effect of the calomel, which has nevertheless been very beneficial to him. It is possible that these were all persons not susceptible to salivation? Or is the absence of salivation to be attributed to the supercarbonate of soda?—*Boston Med. Journal.*

ON THE IODIDE OF POTASSIUM IN SYPHILIS.

THE following remarks upon this subject are made by the Riviewer in the *British and Foreign Medico-Chirurgical Review*:—Dr. Williams was the real discoverer of this influence, perhaps the greatest therapeutical discovery of the age, after that of the anæsthetic effects of ether and chloroform. His paper was read at the College of Physicians in 1834, five years before Ricord began his experiments; and so far from giving it indiscriminately in all cases, he took the greatest pains to in-

investigate its real powers, and pointed out where it was efficacious and where useless; not with hesitation, but with all the open candour of his nature. In his "Elements of Medicine," while showing the marvellous certainty of its action in rupia and the hard periosteal node, he showed that its power was much less in roseola, purpura, and ecthyma, but still it was better than mercury; while in lichen, lepra, psoriasis, and iritis, he proved, with equal clearness, that mercury, either locally or generally, had far more beneficial influence than the iodide. He pointed out the curious fact, that while the action of the iodide on *hard* periosteal node was as certain and evident as that of quinine in ague, when once suppuration had commenced, sarsaparilla was the remedy, the iodide being useless. In soft node and prurigo, he showed the true power of sarsaparilla, and in syphilitic angina and rupia, the invariably good effects of combining local mercurial applications with the internal administration of the iodide. We witnessed many of his experiments, and for the last twelve years have been guided by his results, without having ever had cause to regret it; and after tolerably extensive opportunities of treating secondary symptoms, the only modification we have learnt to make in his practice, is the occasional use of the proto-iodide of mercury in lichen and in some of the affections of ligaments and synovial membranes. We almost always give the dose recommended by Dr. Williams, eight grains three times a day in water or camphor mixture; and when using the proto-iodide of mercury, begin with one grain daily in doses, increasing gradually to three or four grains in the day, made into pills with liquorice, or with catechu, if it acts on the bowels. Opium appears to destroy its power altogether. We never saw any good done by giving a mercurial course before the iodide, as many recommend, but often much harm. On this point, and on the relative powers of iodide of potassium and mercury in syphilis, we would refer to a work in which the investigation has been made in the true spirit of science by Dr. Hassing of Copenhagen.—*Dublin Med. Press.*

MIDWIFERY AND DISEASES OF WOMEN, &c.

Royal Medical and Chirurgical Society. An analysis of one hundred cases of cancerous disease of the uterus. By ROBERT LEE, M. D., F. R. S., &c.

THE conclusions to which the author arrived from this analysis were:—
 1st. That cancer may commence in any part of the mucous, muscular, or peritoneal coats of the uterus; but most frequently in the os and cervix. 2ndly. That the earliest symptoms of the disease, in a large

proportion of cases, were discharges of sanguineous, serous, or white-coloured fluid from the vagina, with sense of uneasiness or pain more or less acute within and around the pelvis. 3rdly. That cancerous disease of the uterus presented itself most frequently in the form of induration and ulceration of the os and cervix uteri and vagina, or ulceration without induration, or in the form of fungoid tumours, usually called cauliflower excrescences, growing from one of the lips or the whole os uteri, being often associated with encephaloid or colloid masses and true scirrhus of the remaining portions of the uterus and contiguous viscera. 4thly. That in no case could cancerous disease of the uterus be referred to inflammation; and that its fatal progress was never arrested by cauterizing the morbid structures through the speculum, nor by any other method of treatment.—*Dublin Med. Press.*

MATERIA MEDICA.

On Cod-Liver Oil. By Dr. F. F. WINCKLER.

THE constituents of genuine cod-liver oil, are, according to Dr. De Jongh's analysis:—

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| <i>Gaduin?</i> (a so-called organic substance) | } | Bilifulvin |
| Oleic acid | | Iodine, chlorine, and bromine |
| Margaric acid | | Phosphoric acid |
| Glycerine | | Sulphuric acid |
| Butyric acid | | Phosphorus |
| Acetic acid | | Lime |
| Fellinic acid | | Magnesia |
| Cholic acid | | Soda |
| Bilifellinic acid | | |

Hence, therefore, its composition would be quite analogous to that of the other fatty oils; but with the addition of small quantities of some of the constituent parts of the bile and also of iodine, bromine, and gaduin. But my own investigations have led me to regard cod-liver oil as an organic whole, of a peculiar chemical composition, differing from that of all other fatty oils hitherto employed as medicines. I prove this assertion by the following facts:

1. If genuine cod-liver oil from Berg (the light clear sort) be saponified with potash, and the thus obtained and purified soap be decomposed by tartaric acid, we obtain oleic and inorganic acid.
2. If a mixture, consisting of a solution of six parts of caustic potash, twenty-four parts of distilled water, and twenty-four parts of cod-liver

oil, be left for several days standing at the ordinary temperature and frequently shaken, then diluted with twenty-four parts of distilled water, and distilled, the distillate possesses the most intense odour of cod-liver oil, and contains a considerable quantity of a peculiar organic compound : oxide of propyle.

3. If nine parts of cod-liver oil be saponified in a porcelain vessel, by five parts of oxide of lead in the waterbath, and the required quantity of distilled water added, the cod-liver oil is decomposed into oleic acid, an inorganic acid, and a new acid—namely, *propylic acid*. The greatest portion of this acid, as well as of the oleic and inorganic acids combine, as it appears with the oxide of lead, to form a basic compound, Another, very probably, acid salt of lead, can be extracted from the plaster-mass by washing it with distilled water. Not a trace of the hydrated oxide of glyceryle is formed on this occasion. The mass smells very disagreeably of train oil and herring, and if exposed in very thin layers in the water-bath, to the influence of atmospheric air, it assumes a dark-brown colour after the water is evaporated, at the same time the disagreeable odour for the most part disappears.

This colourization is a consequence of the strong tendency of the propylates to become oxidized, and by this to become dark. If the solution of acid propylate of the oxide of lead be treated with sulphuretted hydrogen, and the sulphuret of lead be removed, we obtain a perfectly colourless solution, which has a strong acid reaction, becomes coloured by evaporation in the water-bath, loses the very disgusting odour of train oil, and at last leaves an intensely brown coloured residue. Exactly the same is the case with the watery solutions of the neutral propylates of baryta and ammonia. The perfectly neutral, colourless, but undecomposed solution of the ammoniacal salt smells of herrings, but that of the salt of lead smells like concentrated broth.

4. If a solution of cod-liver-oil-soap, prepared as stated in No. 3, be distilled in a suitable spacious distilling apparatus, with an addition of caustic lime and chloride of ammonium (in the proportion of six drachms hydrate of potash, three ounces of cod-liver oil, six ounces of water, six ounces of fresh burnt caustic lime, and one drachm of chloride of ammonium,) with the precaution that the mixture of lime and chloride of ammonium be added to the soapy mixture previously introduced into the retort, so that the lime mixture be perfectly impregnated by the latter, the generation of hydrate of lime takes place upon the application of a slight charcoal-fire, with a rather strong heat ; at the same time a colourless liquid, clear, like water, is distilled over, and this is a *concentrated aqueous solution of propylamine*, without free ammonia. The crystallized sulphate of propylamine is easily obtained

from this solution by saturating it with diluted sulphuric acid, and precipitating the resulting salt with spirit of wine.

This very simple experiment is sufficient to prove with certainty the proportion of the oxide of propyle in cod-liver oil; the propylamine possesses all the properties of that obtained from the brine of herrings or from ergot of rye.

Conclusion.—Cod-liver oil, when saponified with potash, yields oleic and margaric acids, and oxide of propyle; with oxide of lead it forms oleic and margaric acids and a pure highly oxidized matter from propyle; namely, *propylic acid*. In neither case of saponification is the *hydrated oxide of glyceryle* obtained: the *glyceryle* is replaced in cod-liver oil by *propyle*. The generation of *propylamine*, on the addition of ammonia, takes place only in cod-liver oil, and in no other official fatty oil, and its place in the *Materia Medica* cannot, therefore, be supplied by any other oil.

It is not my intention to draw, from these investigations, any conclusion as to the medicinal efficacy of cod-liver oil. I am not a physician; but when we reflect that the fat assimilated by the animal organism serves chiefly as a material for the process of respiration, the possibility of cod-liver oil undergoing during this process a decomposition similar to that which it undergoes by the influence of alkalies, is very plausible; and when we further consider that in such a decomposition, by the presence of the conditions requisite for the formation of ammonia, which, indeed, are never wanting in the animal organism, the formation of propylamine is highly probable, it is not surprising why cod-liver oil alone should prove so advantageous in many diseases, even exclusive of the slight proportion of iodine; and I think myself justified in concluding that the efficacy of this oil depends chiefly upon the peculiar chemical composition which I have discovered; as propylamine, according to my experiments, is to be found also in the normal urine and sweat.

The importance of the small quantity of iodine contained in the oil I shall endeavour to determine by subsequent experiments; for the present, I shall only observe that both the *oxide of propyle* and the *propylamine* are chemically very closely related to iodine, the first forming with it a compound (iodide of propyle,) similar to iodide of formyle (iodoform,) which becomes very easily decomposed.—*Buchner's Neues Repertorium fur Pharmacie and Phar. Jour.*—*Dublin Med. Press.*

On Edible Earths. By EHRENBERG.

VARIOUS kinds of edible earth were known in China in very ancient times, and it may be presumed, that many of them are mixed or pure

tripolitan fresh water bioliths—*i. e.* species of earths or stones, the elements of which consist chiefly of remnants of microscopic living beings. In the year 1839, Biot read before the Academy of Sciences in Paris a treatise, containing everything that was then known on this subject, to which his son, the oriental linguist, Biot, furnished translations from Chinese and Japanese works. From Schott in Berlin, Professor Ehrenberg obtained in addition the following information taken from Chinese sources. The first mention of edible earth dates from the year 744 after Christ, and is contained in the Chinese work Pen-tsoa-kang-mu, where it is called Schi-miän, Stonebread, or Mi-änschi, Breadstone; the article in the Japanese "Encyclopædia," which Biot has translated, is taken from this work. The Pen-tsoa says, according to Schott, that stones contain several substances which are edible, especially a yellow meal and a fatty liquid, which is contained in the white Yü (a stone,) and is, therefore, called the fat, marrow, or muilage of the white Yü. An earthy substance, prolonging life, and called Schi-nas, is found in the very smooth stone Hoa-shi, which is supposed to be Steatite, and may, perhaps, be decomposed Steatite. The Schi-miän is only used as a substitute for bread in times of scarcity, when it is miraculously found in different localities, as is believed. The imperial annals of the Chinese have always religiously noticed its appearance, but have never given any description of the substance. The Pen-tsoa quotes, under the emperor Hiuan-Tsung of the great dynasty Täng, in the third year T'ien-pao (744 after Christ) a spring in Wujin (now Liang-tschen-fu, in the province Kan-su,) which ejected stones, that could be prepared into bread, and were gathered and consumed by the poor. (Schott.)

Under the emperor Hian-Tsung, of the same dynasty, in the ninth year of the period Yüen-ho (809 after Christ,) the stones became soft and turned into bread. (Biot.)

Under the emperor Tschin-Tsung, of the dynasty Sung, in the fifth year of the period Ta-tschong-Tsiang-fu (1012 after Christ) in the fourth month, there was a famine in Tsy-tschen (now Ki-tschen in Ping-yang-fu, in the province Schan-si,) when the mountains of Hiang-ning, a district of the third rank in the same part, produced a mineral fat (Stonefat) resembling a dough, of which cakes could be made. (Schott.)

Under Jin-Tsung, in the seventh year of the period Kia-yeu (1062) stone meal was found. (Biot.)

Under Tschin-Tsung, in the third year of the period Yuen-fong (1080) the stones turned into meal. All these kinds of stone-meal were collected and consumed by the poor. (Biot.)

Very recently, in the years 1831 to 1834, similar kinds of earth have been found in China, and were used as food during the great famine, as

has been reported by the Chinese missionary, Mathieu-Ly, who resides in the province Kiany-si. In the year 1834 he writes:—"Many of our Christians will surely die this year from starvation. The Almighty alone can aid them in such great distress. All harvests have been destroyed by the floods. For three years a large number of persons have lived upon the bark of an indigenous tree; others have eaten a light white earth which has been discovered in a mountain. It can only be obtained for silver, and not every one can, therefore, procure it. The people have first sold their wives, then their children, then their furniture, at last they have pulled down their houses and sold the wood. Many of them were, four years ago, wealthy men." The missionary Rameaux, also reported in 1834, from the province Hu-kuang, that many Chinese Christians have sent for him to administer to them the last sacrament, and foreseeing the hour when they were to die from starvation, actually died at that very time. The very dense population and industry which necessarily takes possession of everything, are, in cases of earthquakes and deluges, the cause of these circumstances in China.

The districts where stone-bread has been found are the northern province of Scham-si, the east provinces of Schan-tong and Kiang-nan, on the mouth of the Yellow river (Huang-hu,) the provinces Hu-kuang and Kiang-si, in the valley of the Blue river (Yantsekiang). It is very desirable to know the masses, localities, extent of occurrence of these earths, as well as their geognostic character. The analysis of the two kinds, which the author has obtained, renders it very probable that all similar substances belong to antediluvian deposits, some of which are very probably tripolitan, fresh water bioliths of infusoria, while others appear to be clay mixtures or real clays. (*Letten.*)

A White Edible Earth of 1834, from China.—The author obtained in the year 1841, by Humboldt, from Paris, a sample of the edible white earth, sent to Paris by the French missionary in China. One of the two pieces measured two inches in diameter, the other one inch. It has a white colour, similar to chalk, but is as light as *Kieselguhr* or Meerschaum, is somewhat fatty to the touch, not soiling the fingers, but very brittle. The pieces having been broken in those directions which were indicated by a previous crack, some of the internal surfaces had a rusty colour, but only superficially. Acids caused no effervescence. According to the analysis, this earth is merely silicate of alumina, the peculiar lightness of which is striking. If heated, it assumes a gray colour. In fifteen samples no organic mixture could be discovered by microscopic examination, which latter shows also no similarity between this substance and Meerschaum; there is also an entire absence of magnesia. This earth has much resemblance to lithomarge-

like Kaolin, but its lightness and the different form of the microscopic parts admit no identity between them. Irregular, mostly globular bodies of various sizes, with soft obtuse outlines, compose the whole mass. Perhaps it is a deposit of a precipitate from hot siliceous waters.

From the blackish mould left in the impressions of the smoothly scraped natural surface, it is obvious that the fossil has not been taken out from the midst of rocks, but was dug out from a black mould. Analyses have shown eighteen different microscopic forms, which are enumerated in the 294th analyses of the microgeological researches of the author.

B. Yellow Edible Earth from China.—In the year 1847 the author obtained from one of the great geological collections in London a small sample of this earth, which from a gray passes almost into a sulphur-yellow. It resembles a very fine clay, does not soil the fingers, but is brittle, and shapeable when moistened. Acids produce no effervescence, and when heated it becomes first black, then somewhat reddish. Its microscopic elements are a rather coarse, double refracting, mostly quartz sand, surrounded by a somewhat finer mould. Intermixed are isolated, small green and white crystals, mica, and Phytolitharia, with now and then traces of Polygastric shells and silicious casts of stone kernels of Polythalamia. In ten analytical examinations were found fourteen forms: one Polygaster, nine Phytolitharia, one Polythalamium, and three crystals. The substance is therefore, according to this, a loamy or clayey substance. All the Phytolitharia contained in it are in a corroded porous state, just as they occur in antediluvian tertiary layers. The presence of Polythalamia and in particular of *Textilaria globulosa* in a stratum, very likely of the interior continent, indicates chalk formations in the vicinity of the place, or at least in the aquatic district of the river. This appears to prove that the clay similar to the edible Tanah ambo in Java, which it very much resembles, is a tertiary fresh-water formation in the modern sense of geognosy, incumbent on chalk, or mixed with fragments of chalk. The forms occurring in it are:—

1. Polygastric: *Trachelomonas lævis*.
2. Phytolitharia: *Lithodontium Bursa*, *L. nasutum*, *L. rostratum*, *Lithosphæridium irregulare*, *Lythostylidium clavatum*, *L. læve*. *L. quadratum*. *L. rude*, *L. Trabecula*.
3. Polythalamia: *Textilaria globulosa*.
4. Inorganic forms: *green crystalline prisms, white crystalline prisms, plates of mica*.

The sum of the discovered species is eleven organic forms and three inorganic ones; among which are ten fresh-water formations and one marine formation, *Textilaria*.—*Pharm. Central Blatt* and *Phar. Jour.*

MEDICAL JURISPRUDENCE.

A Case of Poisoning with Oil of Tansy—Death at the end of three hours and a half—Quantity of the Drug taken about ℥j and ℥iij. By JOHN C. DALTON, Jr., M. D. (Read to the Boston Society for Medical Observation, June 2nd, 1851.)

E. S., a fine healthy-looking girl, about twenty-one years of age, died at the house of Mr. A., in Boston, on Wednesday, the 7th of May, 1851. She had been employed in Mr. A.'s family as a seamstress since some time in the previous winter, living in the house during the week, but going away on Saturdays to a cousin's in Pleasant street, and returning to Mr. A.'s on Monday morning. She had been for some months receiving the attentions of a young man who was reputed to be engaged to her. None of her friends, however, suspected anything to be wrong with her until Monday, May 5, when her cousin, with whom she had been spending Sunday as usual, perceived the odor of tansy in the room which she had occupied; whereupon it occurred to her that the girl might have become pregnant, and used the drug for the purpose of producing abortion.

On Tuesday, she was engaged in her ordinary employment, and dined heartily a little after five o'clock in the afternoon. She went up stairs to her room about half-past nine o'clock. The cook, who occupied a room above, went up with her and stopped in her room, conversing for some fifteen minutes. The girl's manner was perfectly natural and cheerful, as it had been throughout the day. About a quarter before ten o'clock the cook left her preparing for bed, and went up to her own room.

Nothing more was heard from her till about eleven, when Mr. and Mrs. A., who were sitting in the basement-room, heard a scream, which they supposed to come from one of the children. Mrs. A. went immediately up stairs, and on entering Miss S.'s room found her on the floor, by the side of the bed, insensible and in violent convulsions. She had evidently fallen out of bed, as she was undressed, and the bedclothes were disturbed, and had been partially dragged on the floor with her. Dr. Morrill was immediately sent for, and arrived in about ten minutes. He sent also for me, and I arrived at the house at half-past eleven o'clock.

The girl was then lying on her back by the side of her bed, and presented the following appearances: Total unconsciousness; cheeks flushed, of a bright, red colour; eyes open and very brilliant; pupils of equal size, widely dilated and immovable; sclerotics injected; skin warm, not remarkable as to moisture; respiration hurried, laboured, stertorous, and obstructed by an abundance of frothy mucus, which filled the air-passages, and was blown from between the lips in expiration; the breath

had a strong odour of tansy, as had been already observed by Dr. Morrill; pulse quite full, forcible, 128; at intervals of five to ten minutes the body was convulsed by strong spasms, in which the head was thrown back, the respiration suspended, the arms raised and kept rigidly extended, and the fingers contracted. After this state of rigidity had continued for about half a minute, it was usually succeeded by a tremulous motion, often sufficient to shake the room, together with very faint and imperfect attempts at inspiration. The whole interval from the commencement of the convulsion to the first full inspiration, varied from a minute to a minute and a-half. Occasionally, the tongue was wounded by the teeth, and the saliva slightly tinged with blood. Immediately after a convulsion the countenance was very pallid and livid, from the suspension of respiration, and the pulse exceedingly reduced in strength and frequency. The pulse and colour then gradually returned until the occurrence of the next spasm. It was very common, a few seconds after the termination of a convulsion, for the head to be drawn slowly backward, and the eyelids, at the same time, stretched wide open. In the intervals of the convulsions, the limbs were mostly relaxed, but the jaws remained clenched.

A vein was immediately opened in the right arm, and about Oij of blood taken away. After this, the pulse became much softer and the face lost its bright color. There was, however, no change in the condition of the pupils, nor return of consciousness, nor other improvement in the appearance of the patient. It being impossible to get anything down the throat, two injections of an ounce of wine of antimony, with about ℥ss of powdered ipecac., were thrown up the rectum at intervals of about half an hour, but produced no apparent effect.

On searching the room, a ℥ij phial was found in the pocket of the girl's dress, wrapped in a piece of paper, labelled "Oil of Tansy," and marked with the name and address of an apothecary in Pleasant street. The phial contained ℥v of oil of tansy of the ordinary purity. A mug was also found, from which she had apparently drunk the oil mixed with water, as it smelt very strongly of the drug, and still had a drop or two of it at the bottom.

The condition of the patient continued much the same for about an hour. The convulsions, however, gradually became less protracted, and the failure of the pulse after each attack, more complete, at the same time that it recovered strength less perfectly in the intervals. The countenance also became somewhat sunken and the temperature of the skin reduced. About 1 o'clock, six leeches were applied to the forehead and temples, and sinapisms put on the calves of the legs. The leech-bites bled freely.

Toward 2 o'clock the alteration for the worse became quite rapid. Pulse 124 and feeble; respiration 36, and attended with less muscular effort than at first: the left cornea was glazed, but the right continued brilliant; a little inward strabismus of the right eye, and the mouth and nose drawn a little to the right side. Occasionally, a slow, lateral, rolling motion of the eyeballs. At five minutes past two she had the last convulsion, which was much less violent than the earlier ones, and lasted only half a minute. There was no recovery of the pulse after this attack, and she died at a quarter-past two o'clock, A. M.

Autopsy ten hours after death.

Countenance natural; cadaveric rigidity very strong; only slight purplish discoloration of dependent parts; no ecchymoses anywhere; no effect had been produced by the sinapisms on the legs.

Head.—Scalp not injected; distinct, but not excessive dryness of arachnoid over hemispheres of brain; no effusion, congestion or other unnatural appearances anywhere about encephalon.

Chest.—Heart and pericardium natural; left ventricle firmly contracted; blood everywhere unusually fluid; interior of heart exhaled a distinct odor of tansy, as also cut surface of pectoral muscles.

No alteration of pleura; lungs rather shrunken, crepitated perfectly every-where, and were not at all engorged; air-passages not remarkable except for a little redness of posterior surface of epiglottis.

Abdomen.—Strong odour of tansy in peritoneal cavity; a few drachms of thin fluid in pelvis; peritoneum natural in appearance.

Œsophagus natural internally, except that epithelium was somewhat deficient in lower part.

The stomach contained about ℥xij of a semifluid, yellowish-gray substance, consisting of partially digested food, potato, cranberries, onions, &c., mixed with an abundance of small brownish-yellow, glistening oil globules, and exhaling an excessive odour of tansy; mucous membrane generally pale, not vascular in any part, but throughout nearly the whole of great pouch brownish and much thinned and softened, so that for a considerable space it is nearly or quite destroyed. There was an old, whitish, slightly puckered cicatrix of the mucous membrane on posterior wall of stomach, near small curvature. No other morbid appearance.

The lacteals of the mesentery were very distinct, and distended with milky chyle.

Small intestines were natural internally throughout. They contained, at their upper part, pasty masses of dusky-coloured chyme, mixed with oil of tansy.

Below, the contents were less abundant, and were unmixed with oil.

Large intestine contained yellowish feces, and small masses of a brownish powder, apparently ipecac. Mucous membrane natural.

Spleen rather shrunken, flabby, and deficient in blood. Other abdominal organs not remarkable except for slight paleness.

Urinary bladder contained $\frac{3}{4}$ to $\frac{3}{8}$ of urine.

The uterus was enlarged, so that its upper edge came two and three-quarter inches above level of symphysis pubis. It contained a well-formed female fœtus, about four months old.

There was not the least appearance anywhere of the fœtus or membranes having suffered any disturbance.

The left ovary, which hung down a little lower than the right, had near its external extremity a small conical prominence, where the fibrous coat was wanting, and its place occupied by peritoneum alone. There was a very slight appearance here of a cicatrix, visible only on close inspection. There was no unusual vascularity here, or at any other part of the ovary. Beneath this prominence the corpus luteum could be felt through the ovarian tissue, tolerably firm and well defined, and having the form of a sphere, compressed laterally, much like that of the crystalline lens. On dividing the ovary longitudinally through the prominence, the corpus luteum was exposed. It presented a nearly circular section, measuring seven-eighths of an inch in its long diameter, and three-fourths of an inch in its short. It consisted externally of a convoluted wall, of a dull-yellow colour, measuring at its deepest part a little over three-sixteenths of an inch in thickness. The space enclosed by the yellow wall was occupied by a colourless, reticulated, fibrinous coagulum, which possessed a few minute vessels. This central coagulum was much compressed laterally; so that, although it presented a cut surface of about half an inch in diameter, it had hardly more than one line in thickness. There was no cavity nor fluid anywhere.

Both ovaries were carefully divided in every direction, but only one other body was found having any resemblance to a corpus luteum, and that was so small and imperfect as to be hardly recognizable. There were many Graafian vesicles in the interior of each ovary, varying in diameter from three-sixteenths of an inch downward but none at all prominent on the surface. Both ovaries were quite healthy.

It was subsequently ascertained that the oil of tansy was obtained, at the shop of the apothecary whose label it bore, on the evening of Friday or Saturday preceding the girl's death. The apothecary's clerk, who recognized the bottle, testified at the inquest that he put up in it $\frac{3}{4}$ of oil of tansy, and delivered it to a girl about fourteen years old, who stated that the family that sent for it wished to take it into the country.

The patient, therefore, undoubtedly took ℥i and ℥iij of the drug. It seems probable that the violent action of the poison commenced at eleven o'clock, at the time the family heard the patient scream ; and if we allow fifteen minutes for the absorption of the oil after it was swallowed, it would give three hours and a half from the time of taking the drug till the patient's death. Fifteen minutes may seem rather a long time for the operation of a volatile oil to be delayed, but it is probably no more than should be allowed. In a case which recently came under the notice of Dr. Dalton, of Lowell, a girl took a quantity of oil of tansy just before dinner. She then went into the dining-room, sat some time at the table, ate with apparent relish, felt sick, left the table, went into the yard, vomited what she had eaten, and immediately fell down insensible and convulsed. She recovered, after remaining a long time unconscious. The only other recorded fatal case of poisoning with this oil that I am acquainted with also occurred in Boston, under the care of Dr. C. T. Hildreth, and was published in the *American Journal of Med. Sciences* for May, 1835. In that case the woman took ℥ss of the drug, and did not lose consciousness entirely till three-quarters of an hour afterward, although she was convulsed at intervals before that time. After unconsciousness became complete, she did not again recover it, and died rather less than two hours after taking the poison.

The present case is another instance of the extreme violence to which the system may be subjected even in the early months of pregnancy, without inducing abortion. Though all the muscles, both of the body and limbs, were for three hours and a quarter subjected to a succession of the most violent contractions, there was no sign of abortion, and after death the ovum was found in the uterus entirely undisturbed. In Dr. Hildreth's case, also, pregnancy existed but a few weeks advanced, and the drug was undoubtedly taken for the purpose of producing abortion, but nothing of the kind took place. The general symptoms in that case were similar to those described in the foregoing, the most remarkable difference being the more gradual loss of consciousness, and the more rapid death after a much smaller dose.—*Am. Jour. Med. Sciences.*

Canada Medical Journal.

MONTREAL: SEPTEMBER, 1852.

DR. LATIERIERE'S MEDICAL BILL.

We give below, the substance of this bill, but as we have promised to eschew all questions of a merely party character, we shall refrain from making any observations upon it. It will not meet the evils we spoke of in a former number, for it will bear upon one of our Colonial Universities only, whereas the graduates of the other two, being exempt from examination before the Provincial Board, will thus acquire a great advantage over those of McGill College, and we shall still have the same number of licensing bodies in Canada. The clause referring to military and naval surgeons, comes in very *mal à propos*, at this moment, when the Colleges of Surgeons of England, Ireland, and Scotland, are remonstrating with the Army Medical Board, for dispensing with a surgical diploma as a necessary qualification for admission into the service.

We perceive that our Upper Canada cotemporary advocates but *one* licensing board for that Province. Why does he not go further, and recommend but one for both Provinces:—The members could meet once every half year, alternately at Montreal and Toronto, as at present the Governors of the College of Physicians and Surgeons meet alternately at Quebec and Montreal. With only one licensing board, we would have *uniformity of medical education*, which can never be maintained with five licensing bodies, for students will flock to that Institution whose curriculum is most easy of completion, and whose terms are most moderate, and hence we shall have a rivalry between our Universities, to furnish the lowest and cheapest modicum of medical instruction, and that institution will become most popular, whose fees are lowest, and whose examinations are most lenient; and a system of touting will be practised all over the country by the agents of these bodies. All this can be obviated by the plan we proposed.

BILL.

An Act to Amend the Law relative to the practice of Physic, Surgery and Midwifery, in Lower Canada.

WHEREAS it is inexpedient that any person should obtain a license to practise Phy-

sic, Surgery or Midwifery in Lower Canada, without undergoing an examination before the Provincial Medical Board: Be it therefore enacted, &c.

That the seventh section of the Act passed in the Session held in the tenth and eleventh Year of Her Majesty's reign, and intituled, "*An Act to incorporate the members of the Medical Profession in Lower Canada, and to regulate the study and practice of Physic and Surgery therein,*" shall be and is hereby repealed.

And be it enacted, That for and notwithstanding any thing in the said Act, or in the Act amending the same, passed in the twelfth year of Her Majesty's reign, and intituled, "*An Act to amend the Act to incorporate the Medical Profession in Lower Canada, and to regulate the study and practice of Physic and Surgery therein,*" no person shall, after the passing of this Act, receive a license from the Provincial Medical Board to practise Physic, Surgery or Midwifery in Lower Canada, unless he shall have undergone an Examination before the said Board and obtained a certificate of qualification from the said Board; Provided always, that nothing in this Act shall apply to females practising Midwifery in Lower Canada under the provisions of the Act first above cited; Provided also, that any person who shall have served in Her Majesty's Army or Navy, being on half pay, and producing his diploma or his Commission in the service as such, to the Provincial Medical Board, may obtain a Licence to practise Physic and Surgery without being bound to undergo an Examination.

Aromatic fluid extract of Senna.—We have received from Dr Hall, Lecturer on Materia Medica McGill College, a sample of the above fluid extract, prepared in accordance with a process of his own, by which the resinous matter, bitter extractive and volatile oil, principles, upon which the griping qualities, and nauseous taste and odour of the drug depend, are almost wholly removed, the extract presenting a preparation, superior far to the fluid extracts ordinarily in use, while the judicious combination with aromatics considerably improves the flavour, and renders the medicine an exceedingly palatable one. Dr. Hall has informed us of the principle concerned in its manufacture, and we conceive him perfectly correct in its application. We have tried it in several cases, and have found it answer our best expectations, being mild in operation, and devoid of all unpleasant taste, and effects. It is reduced to such spissitude that one fluid drachm represents the ordinary infusion from one drachm of the leaves. Its strength is therefore determinate, which is also an improvement upon the ordinary extracts now employed. We understand that Dr. Hall will shortly order its preparation on a large scale, and place it in the hands of the Profession, as a substitute for the common and nauseous senna tea, so much used as a domestic remedy.

Low Fees—Breaches of the Medical Tariff.

DEAR MR. EDITOR,

It must be fresh in your memory, that about seven years ago, a tariff of fees was agreed to, and signed by nearly all the practitioners

of this city, who thus pledged themselves to the adoption of its rates. These fees were such as had been charged in this city by all respectable physicians for the last 50 years. The public grumbled of course when they were published, although it had uncomplainingly submitted to them, for that long, or even a longer period of time. Hence the folly of having disturbed such blissful ignorance. With that, however, I do not intend to meddle, but it seems to me an extraordinary circumstance that medical men, who therein emphatically pledged themselves to each other, should have subsequently deviated from their plain and honest course of action, and have attended, even cases of midwifery, for fees less far than have been charged by a veterinary surgeon for the delivery of a mare or a cow, those fees usually being from 10s. to 20s. This analogy was forcibly brought to my mind the other day, when a patient of mine of old standing, came to advise me of his wife's early accouchement, and wished to know my fee for attendance. It was a 2nd class case, the fee for which was placed at £3, but aware of the pecuniary difficulties of the party alluded to, I offered my services for £2. He then told me that Dr. ———, who enjoys a large practice in the Quebec Suburbs, had attended his partner's wife for £1, including subsequent visits. He urged the acceptance of that fee, which I respectfully declined, expressing to him the sincere desire which I felt not to be ranked exactly on the same level with the veterinary surgeon or the midwife. I furthermore informed him that I was not responsible for the value which Dr. ——— placed upon his professional skill, but that if such was really his fee, ordinarily exacted under such circumstances, he probably estimated his services at their intrinsic value. This reminds me of another circumstance connected with the same party :

Last winter I was requested by the mother of a lady, whom I had twice attended, to state the fee which I ordinarily expected in first class cases, I mentioned the sum of £5. On demanding her reason for this enquiry, I ascertained that the question had been put at the request of the wife of a gentleman connected with one of the military departments in this city, who had been on a previous occasion attended by this same practitioner, his charge having been £1. The gentleman was fully able to pay the fee of £5, and most unquestionably would have been charged by Mr. Mason, V. S., 20s. for the delivery of his mare or cow. I need not say that this lady has again selected Dr. ———, whose chief recommendation seems to consist in the *lowness* of his charges. I am informed that the same practitioner does not scruple to accept of 10s. or even less, and that he has done so on more than one occasion.

I avoid, Mr. Editor, the party's names, but they are at your service if you wish them. My only motive in writing, is to expose a violated pledge, and denounce a practice derogatory to the dignity of our pro-

fession. God knows, we have quacks enough both in and out of it, and men professionally dishonorable in more ways than one. An unlicensed practitioner in the Quebec Suburbs, who has been notoriously practising there for several years past, and once, as I am informed, came fearfully near the Coroner's clutches for his treatment of a case of "*purpular convulsion*," actually places his services on the same level with those of Dr. ———, and charges the same fees. No, sir, when on all sides, even for years past, such active steps are taken to advance our science as a dignified profession, all such practises run counter to the general scheme, and while *we* are striving to raise it, others are practically degrading it to the level of the quack, or the ignorant midwife, or to that of the veterinary surgeon, who is more unpretending, and far less mischievous because limited in his sphere of action to the lower animals.

IATROS.

Montreal, 23rd August, 1852.

His Excellency the Governor General has been pleased to grant a License to Thomas Beatty, of Toronto, Gentlemen, and to James Carroll, of Norwichville, Gentleman, to practise Physic, Surgery and Midwifery in that part of the Province called Upper Canada.—*Quebec Gazette*, 1852.

NEWS FOR THE DOCTORS.—The Royal College of Physicians has received a new charter, by which its designation is changed from that of "Royal College of Physicians of London," to that of "England;" and its "licentiates," no longer so termed, but "members." All medical practitioners will be eligible to be admitted to its membership who possess the degree of "M.D." from any university in the United Kingdom, or have received license to practice from the Universities of Oxford, Cambridge, Dublin, or Edinburgh.

LAW AND LITERATURE IN FRANCE.—The tender care of the interests of authors, which the French tribunals take pleasure in displaying, has been again exemplified this week. A physician was employed to write an article on "*Medecine*," for an encyclopædia now in course of publication. The editor modified some portions of the article, and cut out others; and then declined to pay for more "copy" than was actually used. The physician brought an action, and the court laid down that an editor has no right whatever to alter or abridge an article without the author's consent. It accordingly condemned him to cut out the article from the copies of the encyclopædia still unsold, and to replace it by the one originally written, to print sufficient copies of the latter to send to all the subscribers of the work, and to pay the author the full value.—*Athenæum*.

FRENCH MEASURES AND WEIGHTS.

As it is our intention to publish, from time to time, interesting articles selected from the French Medical Journals, we have great pleasure in acceding to the request of one of our esteemed confrères, in inserting the following Tables, extracted from the last edition of *Malgaigne's Surgery*. From it, the Practitioner in this Country will be enabled to appreciate the quantities of the different remedies mentioned in the French Prescriptions.

MEASURES OF LENGTH.*

| New Measures. | Approximate Value. | Exact Value. | | |
|------------------------|-------------------------|--------------|---------|--------|
| | | Feet. | Inches. | Lines. |
| 1 Millimètre. | 1 Half-Line. | 0 | 0 | 0.443 |
| 1 Centimètre. | 4½ Lines. | 0 | 0 | 4.433 |
| 1 Décimètre. | 3 Inches 8 Lines. | 0 | 3 | 8.330 |
| 1 Mètre. | 3 Feet 1 Inch. | 3 | 0 | 11.296 |
| Old Measures. | Approximate Value. | Exact value. | | |
| 1 Line. | 2 Millimètres. | 2 Millim. | 256 | |
| 1 Inch. | 3 Centimètres. | 27 | 072 | |
| 1 Foot. | 32 Centimètres. | 324 | 864 | |
| 1 Ell (<i>aune</i>). | 1 Mètre 18 Centimètres. | 1188 | | |
| The English Inch. | 2½ Centimètres. | 25 Millim. | 399 | |
| The English Foot. | 30 Centimètres. | 304 | 794 | |
| The Yard. (3 Feet.) | 91 Centimètres. | 914 | 383 | |

MEASURES OF WEIGHT.

| New Measures. | Approximate Value. | Exact Value. | | | |
|----------------|--------------------|--------------|---------|-------|-------|
| | | lbs. | oz. | gros. | grs. |
| 1 Centigramme. | ½ Grain. | 0 | 0 | 0 | 0.19 |
| 1 Décigramme. | 2 Grains. | 0 | 0 | 0 | 1.88 |
| 1 Gramme. | 20 Grains. | 0 | 0 | 0 | 18.82 |
| 10 Grammes. | 2½ Gros. | 0 | 0 | 2 | 44.28 |
| 100 Grammes. | 3 Ounces 2 Gros. | 0 | 3 | 2 | 10.80 |
| 1 Kilogramme. | 2 Pounds. | 2 | 0 | 5 | 35.15 |
| Old Measures. | Approximate Value. | Exact Value. | | | |
| 1 Grain. | 5 entigrammes | 0 | Grammes | 033 | |
| 1 Gros. | 4 rammes. | 3 | 82 | | |
| 1 Ounce. | 30 Grammes. | 80 | 59 | | |
| 1 Pound. | 500 Grammes. | 489 | 50 | | |

* The following table shows the exact relation between the new French and the English Measures of Length and Weight.

| Measures of Length. | |
|---|---|
| Mètre, the 1-10,000,000th part of the arc of the Meridian from the pole to the equator. | { 39.370788 inches. 3 280899 feet. 1.093633 yard. |
| Décimètre, 1-10th of a mètre | { 3.937079 inches. |
| centimètre, 1-100th of a mètre. | { 0.393708 inch. |
| millimètre, 1000th of a mètre. | { 0.03937 inch. |
| Measures of Weight. | |
| Kilogramme, weight of one cubic decimètre of water of the temperature of 39° 12' Fahr. | { 2.6803 lb. troy. 2.2055 lb. avoirdupois |
| Gramme, 1-1000th part of a kilogramme. | { 1.5438 grains troy. 0.9719 scruples. |
| Décigramme, 1-10,000th of a kilogramme | { 0.032 ounce troy. |
| Centigramme, 1-100,000th | { 1.5438 grain troy. 0.1543 grain troy. |

SUBSCRIPTIONS HAVE BEEN RECEIVED FROM

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| Mr. R. Stephens, " | |

COLLEGE OF PHYSICIANS AND SURGEONS OF LOWER CANADA.

THE SEMI-ANNUAL MEETING of the BOARD OF GOVERNORS of the COLLEGE OF PHYSICIANS and SURGEONS, for the purpose of EXAMINATION, will be held at the Town Hall, St. Louis Street, in the City of Quebec, on TUESDAY, the 12th day of October next, at TEN o'clock A. M.

Candidates are required to deposit their Credentials with either of the Secretaries, at least ten days before the meeting, and to fill up a Schedule of their education—forms for which can be obtained on application to the Secretaries; and they are also required to deposit, at the same times, the amount of Fees which would become due in the event of successful examination.

A. H. DAVID, M. D.
P. M. BARDY, M. D.
Secretaries.
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Quebec, September, 1852

COLLEGE OF PHYSICIANS AND SURGEONS OF THE UNIVERSITY OF THE STATE OF NEW YORK.

The Forty-Sixth Session of the College will be commenced on Monday, 11th of October, 1852, and continued until March 10, 1853, (commencement day.)

ALEXANDER H. STEVENS, M.D., L.L.D., President of the College and Emeritus Professor of Clinical Surgery.

JOSEPH M. SMITH, M.D., Professor of the Theory and Practice of Medicine and Clinical Medicine.

JOHN TORREY, M.D., L.L.D., Professor of Botany and Chemistry.

ROBERT WATTS, M.D., Professor of Anatomy.

WILLARD PARKER, M.D., Professor of the Principles and Practice of Surgery.

CHANDLER R. GILMAN, M.D., Professor of Obstetrics and the Diseases of Women and Children.

ALONZO CLARE, M.D., Professor of Physiology and Pathology (including Microscopy.)

ELISHA BARTLET, M.D., Professor of Materia Medica and Medical Jurisprudence.

CHARLES E. ISAACS, M.D., Demonstrator of Anatomy.

FEES.—Matriculation Fee, \$5; Fees for the full Course of Lectures, \$105; Demonstrator's Ticket, \$5; Graduation Fee, \$25; Board, average \$8 per week.

Clinical Instruction is given at the New York Hospital daily, by the Medical Officers, (Professor Smith being one of them,) fee \$8 per annum; at the Bellevue Hospital twice a week, without fee, (Professor Parker and Clark belonging to the Medical Staff,) at the Eye Infirmary, without fee; and upwards of 1000 patients are annually exhibited to the class in the College Clinique. Obstetrical cases and subjects for dissection are abundantly furnished through the respective department.

The Annual Commencement is held at the close of the Session; there is also a Semi-annual Examination on the second Tuesday of September. The pre-requisites for Graduation are—21 years of age, three years of Study, including two full Courses of Lectures, the last of which must have been attended in this College, and the presentation of a Thesis on some subject connected with Medical Science.

In addition to the regular Course, and not interfering with it, a Course of Lectures will be commenced on Monday, 27th September, and continued until the 10th October.

This Course will be free.

R. WATTS, M.D., Secretary to the Faculty.

College of Physicians and Surgeons, }
67 Crosby street, New York. }

ST. PATRICK'S HOSPITAL, MONTREAL.

THE Clinical Courses of Lectures at this Hospital will commence on WEDNESDAY, the 3rd of November next.

Clinical Surgery,.....DR. MACDONNELL.
Clinical Medicine,.....DR. DAVID.
Clinical Ophthalmic and Aural Surgery....DR. H. HOWARD.

Students requiring six months of either Clinical Surgery or Clinical Medicine to complete their Curriculum, can obtain them by attending these courses, as they are of six months duration.

A. H. DAVID, M. D.
 Secretary

ST. LAWRENCE SCHOOL OF MEDICINE OF MONTREAL.

INCORPORATED BY ACT OF THE PROVINCIAL PARLIAMENT.

THE ensuing Winter Course of Lectures at this School will commence on TUESDAY, the 2nd of NOVEMBER next, and will be continued uninterruptedly (with the exception of the Christmas Vacation,) till the last week in April, forming a Session of six months.

Midwifery and the Diseases of Women and Children.....F. C. T. ARNOLDI, M. D., 9 o'clock A. M.

Institutes of Medicine (Physiology, Pathology and Therapeutics).....G. D. GIBB, M. D. 10 A. M.

Materia Medica and Pharmacy.....G. E. FENWICK, M. D., 11 o'clock A. M.

Anatomy (Descriptive and Surgical).....T. W. JONES, M. D. 2 " P. M.

Theory and Practice of Medicine.....A. H. DAVID, M. D., 3 " P. M.

Theory and Practice of Surgery.....R. L. MACDONNELL M. D. 4 " P. M.

Ophthalmic and Aural Surgery.....H. HOWARD, M. R. C. S. L. 5 " P. M.

Chemistry.....R. P. HOWARD, M. D., 7 " P. M.

Clinical Surgery.... } At the Montreal General Hospital by Dr. Arnoldi.
 } At St. Patrick's Hospital by Dr. MacDonnell.

Clinical Medicine.. } At the Montreal General Hospital by Dr. R. P. Howard.
 } At St. Patrick's Hospital by Dr. David.

Clinical Ophthalmic and Aural Surgery.. } At St. Patrick's Hospital by Dr. H. Howard.

Five Lectures are delivered weekly throughout the Session on each branch (excepting Clinical Medicine, Clinical Surgery, and Ophthalmic and Aural Surgery, each of which will be a three months course), in conformity with the Rules of the College of Physicians and Surgeons of Lower Canada, they will be illustrated by numerous preparations—a large collection of *Plates, Drawings, Models and Casts*, and the recent discoveries in Physiology and Pathology will be practically taught by means of Achromatic Microscopes by the Lecturers on these branches.

Special care will be devoted to the cultivation of Anatomy, and every facility will be afforded the pupils by dissections and demonstrations, and the services of a highly competent Demonstrator have been secured, who will be in constant attendance to superintend and instruct the pupils, and the rooms which are lighted with gas, will be open from 6 A. M., till 11 P. M., daily.

Ample opportunities for midwifery practice will be afforded to the senior students in that branch, under the immediate superintendence of the Lecturers.

Students attending the Lectures on Ophthalmic and Aural Surgery will have the privilege of witnessing the practice of the Montreal Eye and Ear Institution during the whole Session.

The certificates of this School being recognised by all the principal Universities and Colleges in Great Britain and the United States, it will be to the advantage of students intending to complete their Professional Education in either of those countries, to attend this School.

A. H. DAVID, M. D.,
 Secretary.

Montreal, September, 1852.