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CANADA

MEDICAL & SURGICAL JOURNAL

OCTOBER, 1880.

Original Communications.

THE PREVENTIVE TREATMENT OF HEMICRANIA BY CANNABIS INDICA.

BY JAMES STEWART, M.D., BRUCEFIELD, ONT.

(Read before the Canada Medical Association, at Ottawa, September, 1880.)

During the last three years I have used Cannabis Indica in 15 cases of true Hemicrania, with the following results: In 3 cases a cure has resulted; in 6 cases, great relief, with a lengthening of the periods between the attacks; in 3 cases no appreciable effect followed; and in 2 cases the administration of this drug was decidedly injurious, the periodic attacks recurring with greater frequency and severity after its use. In one case half a grain daily was sufficient to bring about the full intoxicant effects, and the patient, a lady aged 35, was unable to continue it, even in the very moderate dose of a quarter-grain daily. The following is a brief history of the cases cured:—

CASE I.—Mrs. R., aged 48. Still menstruating, but irregular; has been troubled with sick headache for 20 years. Formerly the periodic attacks returned about once a month, but for a period of six weeks their recurrence has been weekly. She does not vomit, but feels sick and dizzy as the attacks pass off. She was ordered $\frac{1}{4}$ -grain doses of hemp twice a day, and during the following six weeks she had only one slight attack. The dose was then increased to half a grain twice a day, and continued at that rate for a further period of five months. It is now 18 months since she commenced the half-grain doses, and a

a year since she stopped taking it, and she has been free from her headaches since.

The second case was a typical hemicrania in a man 28 years of age, with a markedly *neurotic* family history. He has been troubled for 10 years, and during the last year the attacks recur about once a week, and are ushered in by giddiness and dimness of vision. He commenced taking the hemp in September, 1877, in half-grain doses three times a day, and continued it for a period of six months. He had only two attacks afterwards. It is now 18 months since he discontinued using the hemp, and during this time he has had no recurrence of his headaches.

The third case cured was in a married lady, aged 26, who was subject to unilateral periodic headaches for 10 years, recurring about every two weeks. She commenced with a grain of the hemp daily, and took it continuously in those doses for six months. She had only one attack after commencing treatment. Up to the present she has been free from her headaches for two years.

In the three cases just narrated, the patients have all been free from headache for a period of nearly two years in each case, and can therefore be called *cured*. In the first case, that of a lady 48 years of age, it might be considered that as hemicrania often disappears spontaneously at the menopause, the Indian hemp had very little to do with the cure: but she was free from her hemicrania some six months before the cessation of the catamenia.

In the six cases where great benefit was derived from the hemp in mitigating the severity and lengthening the intervals between the attacks, the drug in two of these cases has not as yet been taken for a sufficient length of time to decide whether these cases will be placed among the list of cures or those simply relieved. One of these cases is as follows:—

Mr. B., aged 54, says he has been subject to sick headache for four years. The pain starts suddenly in the region of the left supra-orbital foramen and extends upwards over the left parietal bone, and is attended by a subjective feeling of coldness and an objective feeling of heat. Palpitation of the heart sets

in as the headache reaches its acmé. The attacks, which last from 6 to 12 hours, are ushered in by giddiness and dimness of vision. In February of the present year he commenced taking half-grain doses of Indian hemp three times a day, since which time he has had only one slight attack. Prior to the administration of this drug they recurred almost weekly.

Another case of this group is in a young lady, aged 18, who has had sick headache as long as she can remember. The attacks of headache, which come on about once every two weeks, are ushered in by blindness, giddiness, and trembling of the lips. She commenced taking a grain of hemp daily in April last, and up to the present has had no further trouble.

The treatment of the remaining four cases of this class has not been so satisfactory as the two just narrated. Still, in all of them the benefit derived from the hemp has been marked.

The third group of cases comprises three where no effect, beneficial or otherwise, followed the use of the hemp. In one case at least of the above, the drug was not taken with that regularity which is necessary to success.

The fourth group is made up of two cases that were both undoubtedly made worse by the continuous use of the hemp.

The first case of this series was in a man, aged 23, who has been subject to sick headache for several years, but only during the hot weather. During the paroxysms, which recur as often as twice a week, the head feels very hot, and he says the pain is of a beating character. He was ordered half-grain doses of hemp three times a day, which he took for only a week. He said that he was compelled to discontinue it owing to its making his headache worse, the attacks recurring oftener and being of increased severity. He was rapidly and effectually relieved by 15 m. doses Fluid Ext. of Ergot three times a day. This was a case of the angio-paralytic variety of hemicrania described by Mollendorf. The vessel-dilatation being in all probability induced by the depressing effects of the heat on the vaso-motor centres, and as further strengthening this view, I might mention that the paroxysms set in in the early morning, when the vital powers were at their lowest, resembling in this respect a certain class of cases of heat apoplexy.

The second case aggravated by the use of the hemp occurred in a woman, aged 35. She has had typical attacks of hemicrania ever since her marriage, ten years ago. Latterly the paroxysms have been of a severe type, and are attended by flushing of the face, ringing of the ears, &c. In this case I was fortunate enough to get an ophthalmoscopic examination of the fundus during one of her severest paroxysms. I found the vessels, both arteries and veins, on the affected side considerably dilated. The contrast in this respect between the two eyes was marked, the vessels on the sound side being apparently normal. She was ordered half-grain doses of Indian hemp twice daily, but she had to discontinue its use after a trial of three weeks, owing to its aggravating her trouble. She is taking ergot at present, but with what result I have not learned.

Dr. Richard Greene was the first, I believe, to recommend *Cannabis Indica* in hemicrania. Dr. Seguin has also testified to its beneficial action. It has not, however, been used by the profession to any extent in alleviating what is universally recognized as a distressing and obstinate malady. Practitioners, as a rule, content themselves with simply ameliorating the severity of the paroxysms. That Indian hemp is capable (when given in continuous doses for a length of time) of curing hemicrania in a certain percentage of cases seems undoubted. "The study of the action of a remedy shows the nature of disease." This aphorism we have from Hippocrates, and daily experience shows the wisdom of it. The study of the action of Indian hemp shows in what cases it is likely to be of benefit; and further, it tends to throw light on the pathology of hemicrania. Indian hemp produces dilatation of the blood-vessels; further, this dilatation seems to be confined to the vessels mediated by the cervical ganglia. It is the almost universal experience of those who have taken this drug in full doses that the first symptoms are, a sense of fullness and heaviness in the head. A very common feeling is that of the brain boiling over and lifting the cranial arch like the lid of a tea-kettle. The face is flushed, the arms are heavy and hot, the legs cold and lifeless, and pupils contracted. These symptoms show that the hemp does not induce its dilating effects on the arterioles through a paralyzing

effect on the general vaso-motor centre, but that its influence is exerted through the cervical ganglia and their cranial prolongations, or through the medullary centre in the dorsal cord. I have performed a number of experiments on rabbits with the object of watching what (if any) effects were produced by the hemp on the circulation in the ear and fundus of the eye. A dose of two grains was in seven experiments invariably followed by a perceptible dilatation of the vessels of the ear, and vessels previously invisible came into view. Temperature also increased. The vessels of the fundus of the eye also presented undoubted signs of enlargement. Ten grains proved fatal in a rabbit weighing 3 lbs., and on *post-mortem* there was found marked hyperæmia of the brain, but especially of the meninges.

Seeing that hemp is a vascular dilator, it would be indicated in those cases of hemicrania where there is arterial spasm, and it is in all probability only in those class of cases where we may expect benefit from its use. In the opposite class of cases, where there is dilatation of vessels—the neuro-paralytic variety of hemicrania—it would be unrationally to order its administration. I have given a report of two cases of this nature where its administration did harm. From the well-known contractile effects of ergot on the arterioles, we would expect it to do good in this—the neuro-paralytic variety of hemicrania. Strychnia also would be indicated in this class of cases, for experiment has demonstrated that it has a marked effect in stimulating the vaso-motor sub-centres of the cord, as well as the general vaso-motor centre in the medulla. In fact it was through the physiological action of strychnine that the existence of vaso-motor centres in the cord was demonstrated.

Besides the two forms of hemicrania where the vaso-motor nerves play so prominent a part, there is undoubtedly a third class that are unaccompanied by any vaso-motor change. Unfortunately we are not able in every case to say what form of hemicrania we have to deal with, and have, in consequence, to work for a time at least in an empirical manner. I think the following will be found to be a good working rule in the majority of cases, viz., the cases of hemicrania that are relieved during

the paroxysms by Nitrite of Amyl are likely to be greatly benefited, if not entirely cured, by the continuous use of Indian hemp. The drug should be given continuously for a period of at least six months, and in doses of a $\frac{1}{4}$ to $\frac{3}{4}$ of a grain three times a day.

From an analysis of the cases reported, I think the following conclusions are warranted:—(1) Indian Hemp will cure a certain per centage of cases of hemicrania. (2) It is only of benefit in the class of cases which have vascular spasm as the fundamental condition of their initial stage.

CASE OF SUPPURATIVE DISEASE OF THE ANTRUM OF HIGHMORE, WITH DISLOCATION OF CARTILAGINOUS SEPTUM, OF TWELVE YEARS STANDING.

BY D. H. GOODWILLIE, M.D., OF NEW YORK CITY.

(Read before the Canada Medical Association, at Ottawa, September, 1890.)

Dr. D. M., of Ontario, Canada, consulted me in November, 1879, and gave the following history: In 1865, had pain in his 2nd left superior molar tooth, and an unsuccessful attempt was made to have it extracted. This probably resulted in rupturing the vessels of the dental pulp, as the doctor says the tooth was started from its socket and then pushed back again. Some time after, from intense pain and swelling of the face, a second attempt was made to extract the tooth. This was not entirely successful, as a root was left in the jaw. From this time the discharge began, and continued until I saw him, more than 12 years after.

He presented the following conditions: 1st and 2nd molars gone from the left superior jaw. Above the alveolus, at the position of 2nd molar, was a fistulous opening, made by a trephine some years ago into the antrum; in this opening he wore a hard rubber drain-tube, but as it was small in calibre, and too high up in order to drain the discharge from the antrum, it was of very little use. It also excited granulations in the cavity. A gelatinous polypus was found in the left nostril, growing from the middle turbinated bone. This hung by a pedicle over an opening made by necrosis of the inferior turbinated bone and

the nasal wall of the antrum. From the blowing of the left nostril by closing the right with the thumb, to free it from the constant discharge, the lower end of the cartilaginous septum was dislocated and turned into the left nostril, preventing respiration, except when forced. In the pharynx, a muco-purulent track was to be seen on the left of the vertebral ridge, caused by the discharge passing down from the posterior nares. This caused a good deal of expectoration. This trouble continuing for so long a time, had somewhat affected his general health.

On the doctor's first visit in November, 1879, I only removed the polypus, as it was necessary for him to return immediately home to meet some professional engagement.

In April, 1880, he returned, and under an anæsthetic, I made first an operation on the dislocated nasal septum. An incision being made through the soft parts down to the end of the cartilage, I denuded and pushed back the soft parts, then amputated the protruding cartilage of the septum. The soft parts being brought together and held by small silk sutures, this healed by first intention, and in a week's time it would be difficult to tell where the incision had been made. The next part of the operation was the trephining through the alveolar process at the position of the 1st molar, directly into the bottom of the antrum, by means of a large bone-cutting drill driven by the surgical engine. This opening gave exit to discharge pent up in the cavity of the antrum. The last part of this operation was the removal, by means of the revolving bone-cutters, of the necrosed turbinated bone and the naso-antrum wall, through the anterior nares. This made an opening from the nose into the antrum extending from the floor of the inferior meatus to the middle turbinated bone, and antero-posteriorly about an inch. Through these openings the antrum was freely washed out with thymolized water, and medication applied, which consisted in blowing into the antrum the Iodoform Camphor Co. powder by means of the insufflator. There were present at this operation Drs. Farnham, Carry, Warden and Bucklin of New York, Marvin of Brooklyn, and Braden of Michigan.

I pass round wax models showing the case before and

after the operation. The doctor also kindly presents himself for your examination. You will see that the respiration through the occluded nostril is quite free. The opening from the mouth into the antrum is now closing up. A permanent opening will remain in the naso-antrum wall, where the necrosis was removed. The purulent discharge has ceased, and he is in robust health.

THE DISCARDED PRACTICE OF VENESECTION.

BY HAMNETT HILL, M.R.C.S.E., OTTAWA.

(Read before the Canada Medical Association, at Ottawa, September, 1880.)

GENTLEMEN,—My forte is, and has always been, "Surgery," nevertheless, the paper that I shall have the pleasure of introducing to your notice this day appertains rather to the department of Medicine, and will consist of a few remarks on "The discarded practice of Venesection, or Blood-letting" in the treatment of many of those diseases of which, in days gone by, it was considered by eminent authorities to have been the "sheet anchor."

Now, if I were inclined to seek a motto or text as a heading to this paper, I should select "*Tempora mutantur, et nos mutantur in illis.*" Yes, times are indeed changed, and when I look back some fifty years or more, and draw on my memory as to the great number of instances where I have assisted in the subordinate capacity of "basin-holder," or occupied the more dignified position of principal in the operation of venesection, I cannot help acknowledging that apparently a wonderful change has taken place in the practice of medicine and in the opinions of the medical profession generally—in fact, that the profession almost pleads guilty to the charge of "erroneous treatment" of those diseases in which the abstraction of blood was the rule and not the exception. But, gentlemen, I deny this inference *in toto*, and the immediate object of my remarks will be to vindicate the profession from this charge entirely, and I hope to prove to your satisfaction that the change consists in the *type of the disease* and certainly not in the treatment, as is so frequently advanced by the outside world; in other words, if the type of disease were

as formerly (I speak of 40 or 50 years ago), of the “sthenic” character, such as almost universally prevailed, at all events, in the British Isles at that period, the lancet and its accessories would most assuredly come into vogue once again. But we know that the type of most diseases, even of the young and robust, is of the very opposite character to that I have but just alluded to, and that the Asthenic type has now become the prevalent characteristic, calling, of course, for the very opposite treatment from the first onset of the disease, in which the even cautious use of the lancet would be almost certain death.

Such very marked changes in types of disease must, of course, be of a very gradual nature ; it is very unlikely that they should occur suddenly, and it is in consequence of this slow and almost imperceptible change that they remain for a long time almost unnoticed. Still, so far back as 1833, do I distinctly recollect, whilst prosecuting my professional education at the London Hospital Medical School, that Dr. Thos. Davies, the then lecturer on the practice of medicine, laid down almost as an axiom : “Gentlemen, you need not expect that diseases, particularly of a febrile or inflammatory character, will continue to run a uniform course ; there *are types in diseases*, as in other things, and some of you may live to see important changes take place, necessitating important changes of treatment, although I may not.” I recollect as distinctly as if I heard them but yesterday, these truly prophetic words of this very talented physician, who has left some very valuable contributions to medical literature. I am a living witness of the truth of his remarks, and am too happy thus to record my humble tribute of respect to the memory of so talented a physician. Thus the approach of change was discerned afar off, as distinctly as a storm is foreseen by the rising of the clouds in the distant horizon.

It would be a very desirable thing to ascertain when or at what period this remarkable change began to be apparent, but I have a kind of theory (and every one has a right to a theory) that about the time of the appearance of the epidemic or Asiatic Cholera in Europe, say about 1831, that a gradual change might have been observable in some particular localities, though so

slight as to have escaped the immediate notice of nosologists ; in other words, my theory is that the poison of cholera was becoming ingrafted, as it were, on previous or co-existent diseases to a certain extent, and henceforward "Asthenic" diseases slowly, but surely, became and still continue the prevailing type, thus rendering the practice of venesection almost obsolete. This prevailing type may last for many years to come, until another cycle comes round, and the choleraic poison become worn out or effete, similarly as the potato disease or rot has disappeared from this very valuable tuber ; and there may be gentlemen here present (I mean the young) who may live to see another type set in of a sthenic character, in the treatment of which diseases the lancet and depletion generally will be once again called into active requisition.

Dr. Watson, in 1843, ten years after the prophetic words of Dr. Davies, writes thus in reference to epidemic or Asiatic cholera : "We have had slight sprinklings of cholera in and about London since 1832." This remark shews the continuing existence of the choleraic poison or influence to that time, and would tend to assist my theory. In 1863, 20 years after Dr. Watson's reference to cholera, I happened to be in Edinburgh, and made the acquaintance of the late Professor Bennett, to whom I was relating the history of a relative of his whom I had attended with apoplexy. I remarked that I had taken a small quantity of blood from the arm. His instantaneous observation was, "We never bleed in this country ; in fact, few practitioners own a lancet." I explained to him that such was the general practice in Canada, but that this was looked upon as an exceptional case, and that I had done it in deference to the opinion of another gentleman who had been called in consultation, rather than on my own own account, as I was not particularly in favor of it. However, as only about 4 ounces were taken, it was a matter of little moment ; and as the patient recovered from the immediate effects of the attack, we will suppose the treatment was correct.

This little episode will prove that the practice of venesection had been thoroughly tabooed in Scotland for many years, though for how long a period antecedently does not appear.

Cullen, whose work on Nosology was a class-book in my time, although long since exploded, divided continued fevers into two great classes: "Synocha," or pure inflammatory fever—sthenic, mind you, where the lancet could be advantageously used,—and "Synochus," or fever of the low or typhoid type, such as we frequently meet with in gastric fever, of a well-marked asthenic type, in which the use of the lancet would be almost certain death.

Allow me to ask this question: How many in this numerous and intelligent assemblage have ever seen a case of "Synocha," or pure inflammatory fever? The answer is, probably, not one, with the exception of myself. And why is it? The answer is very obvious, and yet perfectly conclusive. The sthenic type has gone out—entirely out of fashion, if I may be allowed the expression—and has been succeeded by the asthenic type; the change, I am inclined to think, began to be observed some time after 1832, the period of the advent of the cholera into the greater part of Europe and the American continent, and which has very gradually, but surely, given the marked type of "Asthenism" to the diseases of to-day.

In 1833-34 cases of inflammatory fever, or what Cullen called "Synocha," were common in the eastern part of London, England, the locality in which is situated the London Hospital previously referred to. The disease was very much confined to the male sex, of ages varying from 20 to 50. The symptoms were of a violent type, commencing with a well-marked rigor, succeeded by great heat of skin—(the thermometer not being in use at the time of which I write, I am unable to give its indication with mathematical accuracy)—violent pain in head, principally in supra-orbital region, severe pain also in lumbar region and large joints, very quick and full pulse (120 to 130), injected conjunctivæ, heavily furred tongue, elongated in shape, reddened at sides and extreme apex, scanty urine, loaded with urates, perfect anorexia and constipated bowels, slight delirium at night, gradually increasing to actual violence day and night, so that patient could not be kept in bed without restraint. If these cases terminated unsuccessfully, after many days existence of most of

the before mentioned symptoms (say from 12 to 30 days perhaps), they would gradually assume the typhoid type, the violent delirium would change to the low muttering character, thence coma would supervene, petechiæ on the skin, sordes on the teeth and gums, the tongue would become dry and cracked, perfect insensibility, and finally death.

Now, gentlemen, I have endeavored to draw a very fair picture of a disease never seen in this year of grace 1880, though common enough some forty-five or fifty years ago, and which was invariably treated on the depleting and antiphlogistic plan, namely, by venesection, often to a large amount, or repeated at a short interval, varying, of course, with the age and vigor of the patient; and with this treatment, of which bleeding was a most important factor, a very large proportion convalesced,—hence the practice followed in those days must be acknowledged to have been satisfactory. These cases were admitted usually after the febrile symptoms were fully developed, having frequently received medical treatment at a dispensary for a day or so previously. If after admission the symptoms remained of a general character, and not urgent, the treatment continued was simple and expectant; but if any local complications arose, they were met accordingly,—the “sheet anchor” being invariably the adoption of blood-letting, a practice endorsed by all medical authorities, from Sydenham and Cullen downwards to Mason Good, Watson and others. In fact, nearly two hundred years ago Sydenham recommended the same practice, the advocacy of which I am supporting up to the time when the marked change began to be observable after the year 1833-34. He writes “that an emetic, followed by a gentle laxative, bland diet and repeated doses of antimony, with perfect rest and quietude, will produce a cure in slight cases of inflammatory fever; but in severe cases, it is necessary to open a vein and take away as much blood as will make an impression upon the disease, without even reference to quantity.” He also adds “that some practitioners are often prevented from using the lancet because there is no fixed pain, but they may rest assured that in inflammatory fevers some external organ is suffering, although it may not exactly appear to

their inexperienced eyes." So much for the practice of venesection in the treatment of inflammatory fever up to forty years ago perhaps.

Now let us take another acute disease—Pneumonia, for instance—and turn to the authors quoted above. Sydenham refers in emphatic language to the efficiency of bleeding; also Cullen, Macintosh, Mason Good, Watson and others. Mason Good says "the bleeding should be prompt and copious, and, moreover, repeated twelve hours afterwards, if necessary."

I might enlarge on this subject *ad infinitum*, but I think enough has been advanced in favor of the practice of those days, and also enough to show that the type of disease has undergone a very radical change during the last 40 or 45 years, necessitating an entire change of treatment, and that it is actually the disease that has changed rather than the treatment. Of all remedial agents up to that time, general blood-letting was certainly the most powerful; yet its employment required at all times some consideration and judgment. If this remedy was neglected when its use was indicated, the disease was not unfrequently allowed to make dangerous progress; on the other hand, if it was resorted to inadvertently or inappropriately, a dangerous state of debility or exhaustion might be induced, hence the necessity for discrimination.

The diseases which appear to have required venesection were chiefly of the inflammatory type and some forms of fever. The lesions of the serous membranes or shut cavities, and of the substance of organs, necessitated it more commonly than inflammations of the mucous membranes; thus Arachnitis, Pleuritis, Peritonitis, Pneumonitis, Hepatitis, &c., required venesection far more than Bronchitis or Dysentery.

I am perfectly willing to allow that the practice of the abstraction of blood by venesection at the present period of the world's history has almost become obsolete in consequence of the changes I have alluded to, but yet there are forms of acute disease, in the treatment of which I think bleeding is yet wholly permissible, and has received, and still continues to receive, the sanction of many eminent practitioners and writers, such as

Locock, Ramsbotham and others. I allude particularly to the treatment of Puerperal Convulsions and of Iritis—a more frightful or formidable a disease than the former it is impossible to describe, the phenomena of which may occur either *ante-* or *post-partum*. In the former case, besides blood-letting, which some may call in question, there can hardly be two opinions as to the propriety of relieving the uterus of its contents as speedily as possible, either by turning or the early use of the forceps if practicable; should the convulsive symptoms supervene *post-partum*, and there should have been very much hæmorrhage, one would hardly counsel any further abstraction, because great loss of blood has been known to produce puerperal convulsions, consequently discrimination and prudence are very necessary in these cases. In the treatment of the latter class, the lancet, of course, must be laid aside entirely, and we must substitute stimuli, opiates and nourishment frequently administered between the convulsive attacks, if any favorable interval occur. Speaking practically on this subject, I might add that the few cases of puerperal convulsions that have come under my notice in private practice, for we never have had an obstetric institution in our city up to the present, have been invariably treated with the lancet, and with marked good effect, to which I have added the adoption of the “Humid Cautery” to the back of the neck and upper part of the spine. I accomplish this by means of a pair of woollen socks, rolled up as they generally come from the lavatories, dipped into boiling water and immediately applied to the parts named; by this means you produce instant vesication, and if counter irritation can do any good, here you have a most effectual and ready way of producing it, without the loss of time which must elapse in vesicating in the ordinary way. Whilst on this topic, I cannot help thinking that the hypodermic injection of Chloral Hydrate would be a most important auxiliary in the treatment of these cases, as it has been found to be in epileptiform diseases and in the eclampsia of children.

In conclusion, I think few will dispute the efficacy of venesection in Iritis; the practice is regarded with much favor with all the authorities with which I am acquainted. Samuel Cooper,

Beer, Lawrence, Mackenzie and Jones speak most highly of its employment, and I am not aware that any later authorities have condemned the practice.

And now, gentlemen, with these remarks I bring my humble efforts to a close, thanking you very much for the attention which you have given me. The old adage, "*Quot homines, tot sententiae*," comes vividly before me; and as there are no doubt many opinions that coincide with the general tenor of my essay, and yet others who dissent therefrom, I trust that some friendly discussion on its merits will ensue. I neither defy, still less do I challenge, criticism; and any remarks will be received by me in the same kindly spirit in which I know they will be made.

OBSTETRICS OF THE HAMILTON CITY HOSPITAL FOR TWO YEARS.

By T. W. MILLS, M.A., M.D., late Resident Physician.

The total number of births during a period of 26 months past was 66. Summary of presentations: Head, 58; Breech, 4; Feet, 3; Face, 1.

There were two cases of twin births and three of premature births (abortions), and one monster. In the cases of double births, in each instance there was a footling presentation; but in one case the first-born was a head presentation, in the other a footling. Only one of the children continued to live.

Among the children *prematurely* born, one, apparently of only six months, lived about three days. There was one case of *Spina-Bifida*; the child lived a few days.

Of the *breech* cases, 3 were born alive; the fourth case was still-born, due to pressure on the cord—efforts at resuscitation were unavailing.

A tumor in the case of the *face* presentation, partly of the nature of a bruise, remained over the right cheek and brow for 8 to 10 days.

Of the footlings, two were born alive and one perished from retention of the head and pressure on the cord.

The monster belonged to the *Anencephalous* class; it showed no signs of life; the quantity of *Liquor Amnii* in this case

was immense, and the labor very prolonged; mother's health rather poor.

The short forceps was used in one case, and the long forceps in another case only. Turning and the use of anæsthetics were not called into requisition in any case.

COMPLICATIONS, ETC.

There were in all 7 cases of *post-partum hæmorrhage*. This occurred in *primiparæ* in 4 cases. Ergot was given before delivery in 4 out of the 7 cases; in the remainder, after delivery only. In most of the cases Ergot was given both prior and subsequent to the birth of the child. There were no cases of *ante-partum hæmorrhage*. One of the above cases was further complicated by albuminuria, and exhibited maniacal tendencies during labor. Almost all the cases of *post-partum hæmorrhage* could be traced to *inertia* of the uterus after expulsion of the placenta. The management of the third stage of labor in all cases has been in accordance with the directions laid down by Playfair.

The following conclusions are based upon the facts in connection with the 66 cases from the notes of which this abstract is drawn:—

I.—ERGOT OF RYE.

1. When the *os uteri* was fairly dilated, and labor pains had really commenced, the Fluid Ext. of Ergot of Rye has not failed to render the uterine contractions more frequent and more powerful. 2. When the stomach was irritable, especially if there was vomiting, Ergot had comparatively little effect, probably not being absorbed, or but imperfectly. 3. Ergot given after the expulsion of the child has frequently failed to produce uterine contractions. 4. If the contractions produced by Ergot were so frequent and vigorous as to be almost intermitting for a period of from 40 to 60 minutes, *post-partum hæmorrhage* from *inertia* of the uterus sometimes resulted. 5. There was one case of imprisoned placenta from extreme contraction of the uterus in which Ergot was given before delivery.

II.—RUPTURES OF THE PERINEUM.

1. There have been only two cases of rupture of the perineum,

reaching down to, or to one side of, the anus; no case extending through the rectum. 2. All the ruptures that have occurred in *multiparæ*, were of a trifling character, requiring no treatment. 3. The perineum has been ruptured as frequently by the passage of the shoulders as by the head, if not more so. 4. A rupture caused by the head has been deepened by the passage of the shoulders; much has depended on the management in this latter case. 5. Directing the patient to let out the breath and cease to bear down just as the head and shoulders were passing has been more effectual in saving the perineum than any form of support rendered by the accoucheur. 6. A case of rupture to one side of the anus, treated by binding the knees together and confining the bowels by opium, healed in 8 days. 7. Less serious lacerations have healed without any special treatment. 8. The speediest result has followed in cases of moderate rupture when a single suture or two of carbolized catgut of moderate strength was put through the perineum immediately after the placenta was expelled, and the knees of the patient kept together for a couple of days. In such cases the suture has come away and the rent been found healed in 3 to 5 days.

It is highly probable that in *primiparæ* a much larger number of ruptures of the perineum would be diagnosed if they were carefully looked for.

A history of the septic complications that have arisen in our ward, situated as it is, exposed to all the injurious effluvia, &c., of the entire hospital, would be interesting, but too lengthy for this paper.

REPORT ON OBSTETRICS.

By WM. GARDNER, M.D.,

Prof. Medical Jurisprudence and Hygiene, McGill University; Attending Physician University Dispensary for Diseases of Women, &c.

(Read before the Canada Medical Association, at Ottawa, September, 1880.)

In no department of medicine has there been so much activity within the last few years as in that of Gynecology. In this respect the last year differs in no wise from its predecessors. In all lands earnest, active, original workers have been busy, and

have given forth the results of their labors to the profession in the form of papers in journals, monographs, and systematic treatises on Midwifery and Diseases of Women. Amid the enormous quantity of reading matter thus given to the profession, while there is much that gives evidence of originality and value, there is, it is to be feared, also much inflicted on us which is comparatively worthless. Much is thus written by men of ample leisure, and therefore scant experience, the object being to bring reputation to the writers; while on the other hand we hear too little from the busy practical men, whose experience, if published, would be of great value to the profession.

There is much need, as was so ably asserted by Dr. T. G. Thomas in his presidential address before the last meeting of the American Gynecological Society, of careful, conscientious reviewing, and of fearless, independent and honest criticism on the part of our medical journalists. Much that is now written would be doomed to merited oblivion, and the wheat thus sifted from the chaff would be the better preserved. The necessity of this will be apparent when we reflect for a moment on the fact that hundreds of medical readers of journals throughout the country are wont to accept as gospel the dicta of the reviewers in guiding them to the choice of the books or papers they shall read.

As representing the committee of our Association appointed to report on the progress of Obstetrics and Gynecology, I would first remind you of the principal books and papers which have appeared within the year since we last met.

Playfair's Midwifery has reached a third American edition in the able editorial hands of Dr. R. P. Harris, of Philadelphia.

A third American edition of *Leishman's Midwifery*, edited by Dr. Parry, of Philadelphia, has also appeared.

Dr. Matthews Duncan, late of Edinburgh, but now of St. Bartholomew's Hospital Medical School, London, has published a volume of *Clinical Lectures on Obstetrical and Gynecological subjects*, strongly marked by the sturdy originality so characteristic of their author.

Professor Simpson, of Edinburgh, bids fair to maintain the great gynecological reputation of his late celebrated relative and

predecessor in the Chair of Midwifery and Diseases of Women and Children of that University. A volume recently issued by him, entitled *Contributions to Obstetrics and Gynecology*, contains many things that are interesting and instructive.

A new edition of the classical work of Dr. Charles West on Diseases of Women, edited by Dr. Matthews Duncan. This book, from the well-known character of its teaching, may have a salutary influence in checking the perhaps too strongly operative tendencies of modern gynecologists.

New editions of the valuable and original *Principles and Practice of Gynecology* of Dr. Emmet of New York, and *Lessons in Gynecology* of Dr. Goodell of Philadelphia, have been called for within a few months after the appearance of the first editions, thus testifying to the great reputation of their eminent authors.

A new edition of Mr. Lawson Tait's book on Diseases of Women has appeared as one of the monthly parts of Wood's Library of standard medical authors for 1879.

A new edition of Savage's Plates of the Anatomy of the Female Sexual Organs has appeared as one of the parts of the Wood's Library for the present year.

Certain of the parts of Billroth's most valuable *Handbuch der Frauenkrankheiten*.

Winckel's beautiful and instructive photographs of Pathological appearances of the Female Sexual Organs, continue to appear in parts at intervals.

The second edition of Gallard's *Leçons Cliniques sur les Maladies des Femmes*, a most valuable treatise.

A new English edition of *Martin's Atlas of Obstetrics and Gynecology*, edited and translated by Dr. Fancourt Barnes, of London.

The Obstetrical Societies of London, Edinburgh and New York have each issued their annual volumes of *Transactions*, containing much of interest and value.

The Gynecological Society of America have issued the fourth volume of their *Transactions*; as usual, a handsome volume so worthy in the beauty of its exterior of the sex to which it is devoted; somewhat smaller, it is true, than some of its predeces-

sors, but giving no less evidence of the valuable work which is being done by this young but most energetic Society. Among the articles and papers which it contains may be especially mentioned the able address of Dr. Thomas, the President; the papers on Intra-Uterine Medication by Drs. J. P. White and R. Battey, of which I shall have more to say hereafter; the papers on Puerperal Septicæmia, by Drs. Jenks and Chadwick; the paper on Prolapse of the Ovaries, by Dr. Paul F. Mundé, of New York, the most exhaustive and able article on the subject in the English language; Clinical Notes on the Elongations of the Cervix Uteri, by Dr. Goodell, of Philadelphia; a case of Extra-Uterine Pregnancy successfully treated by Electricity, by Dr. J. C. Reeve; a Contribution to the Pathology of the Cicatrices of Pregnancy, by Dr. S. C. Busey; the Justo-Minor Pelvis, by Prof. Lusk of New York; Mismanaged Labor the cause of much of the Gynecological Practice of the present day, by Dr. J. T. Johnson of Washington; and a number of others, amounting in all to twenty-two.

Obstetrical Diagnosis and Treatment by External Manipulation.—In the April number of the *American Quarterly Journal of Obstetrics* for the present year, Dr. Paul F. Mundé, of New York, concludes a series of most ably written and exhaustive articles on the above subject, which have for their object the description of a method which, although for many years taught in all German obstetrical clinics, is almost unknown, or at all events unpractised, by all but a few in our country or the United States. Some experience of this method during the last two years enables me to confirm most of what has been claimed for it, and to assert that by it, in the great majority of cases, we can diagnose the position of the child during the last month of pregnancy, and even during the early part of the first stage of labor, with greater certainty than by ordinary vaginal examination. Dr. Mundé's papers are the best on the subject in the English language. The recent work of Prof. Pinard, of Paris, is a most valuable contribution to the same subject.

Antiseptic Midwifery.—Professor Stadtfeldt, Director of the Copenhagen Lying-in Hospital, publishes in a recent number of

the *Centralblatt für Gynäcologie*, the later results of his systematic employment of antiseptics in obstetrics. In 1870, when this method was begun, the results as affecting the previously frightful mortality of the institution of which Prof. Stadtfeldt has charge were most encouraging. During the three terms of five years each preceding 1870 the mortality varied from 1 in 37 to 1 in 14, and in no previous period during the long existence of the hospital was it so low as this. During the first five years of antiseptic treatment the mortality was reduced to 1 in 87; during the last five years, 1875 to 1880, it was only 1 in 116 from puerperal fever. Prof. Stadtfeldt's methods are the following: systematic syringing of the vagina before labor, the use of carbolic steam spray during labor, and intra-uterine injections after labor. Prof. S. has seen no ill results from intra-uterine injections, although he has used them in hundreds of cases, especially where the hand or instruments had been introduced to the interior of the uterus, or where portions of membranes were retained. Prof. Stadtfeldt's statistics are not as yet, notwithstanding these favorable results, quite equal to the average of statistics of mortality of childbirth as calculated by Dr. M. Duncan, viz., 1 in 120 during first week of confinement. The mortality during eight years at the University Lying-in Hospital of Montreal was only 1 in 124½, as appears by the valuable report of Dr. McCallum, published in the twentieth volume of the London Obstetrical Transactions.

Basilysis.—In a paper read before the Edinburgh Obstetrical Society in the early part of the present year, Prof. Simpson proposed to revive a substitute for the ordinary operations of cranioclasm, or cephalotripsy, first proposed independently by Prof. Hubert of Louvain and M. Guyon of Paris, 15 years ago. The procedure in question has for its object the reduction of the base of the skull, undoubtedly the most important problem to be solved in every case of craniotomy. This was effected by a trephine of peculiar construction, which was made to receive portions of the sphenoid bone. Prof. Simpson reports a case in which he adopted this procedure, and delivered with the greatest ease a woman in whose case his assistant, Dr. Hart, had had very great

difficulty in delivering in a previous labor after the ordinary perforation. Prof. Simpson suggests a simpler form of instrument for breaking up the base of the skull by dilaceration, and proposes the term "Basilysis" as an appropriate generic name for operations whose object is to break up the base of the skull. The statistics of the operation, as performed by M. Guyon, are so much more favorable than those of ordinary cephalotripsy that they ought to command attention.

Early use of Forceps.—During the summer months of 1879 a most important discussion was held at the Obstetrical Society of London on the "Use of the Forceps and its alternatives in lingering labor." The subject was introduced in an able paper by Dr. Barnes of London, and the most eminent obstetricians of the United Kingdom took part in the discussion. The great majority advocated the earlier and more frequent use of the forceps under circumstances and in conditions of the parts in which the older obstetricians would not have dreamed of applying them. To speak more fully of this discussion does not belong here, as it occurred previous to our last meeting. At the last meeting of the American Gynecological Society, Dr. Isaac E. Taylor, of New York, read a paper in which he advocated the use of long, narrow-bladed forceps, $1\frac{1}{2}$ by 16 inches, of his own invention, when there is delay early in the first stage of natural labor, with the object of keeping the head of the child down on the cervix during the pains, and so aiding the natural forces, when, with "large shoulders of the child, the head is moveable in the cavity covered by the cervix, in cases of large prematurely ossified heads, large-bodied children, short cord, or cord several times around the neck, danger to the child from active or ineffectual labor, contracted pelvis, child in long axis of the uterus (circular trismus), and convulsions." In such cases Dr. Taylor would not hesitate to apply his forceps with the view of shortening the first stage, even if the os were no larger than $\frac{7}{8}$ inch in diameter. During the discussion which followed, it appeared that Dr. Taylor was alone in his advocacy of this practice, and that the Association was wisely unwilling that such a practice (however safe in the hands of an accomplished ac-

coucheur like Dr. Taylor) should go forth to the inexperienced endorsed and sanctioned by the many eminent names of its members.

Laparo-Elytrotomy.—The eighth of this brilliantly-conceived, beautifully scientific, and eminently conservative operation has been performed by Dr. Walter W. Gillette, of New York, since our last meeting. The child was dead and decomposed before the operation. The mother recovered. In 1820 Ritgen proposed and actually attempted an operation resembling Thomas's, but did not succeed, and was obliged to deliver by Cæsarean section. In 1823 Bandelocque the younger actually performed it unsuccessfully. In 1870 Dr. Thomas published his first case, with a communication on the subject. Of the seven other cases Dr. Thomas has performed 2, Dr. Skene of Brooklyn 3, Dr. Himes of Sheffield 1, and Dr. Edis of London 1. Four mothers have been saved, and six children born alive. The four cases fatal to the mother were considered hopeless before the operation was commenced. Dr. Gillette asks the question, Eliminating these four cases, as we properly should, can Cæsarean section make so favorable a showing? Does embryotomy, essentially sacrificial to the child, show an equal result, with its mortality of $33\frac{1}{3}$ per cent, to the mother. In considering the question of Cæsarean section by the old method, we must at least remember that peritonitis, metritis, and incarceration of intestines in the uterine incision, are avoided by the new operation. In view of the recent successes of the Porro operation in Continental Europe, we are reduced to the question of this operation *versus* Laparo-Elytrotomy. Eight cases in ten years is slow progress as compared with fifty now known cases of the Porro operation in four years. Perhaps, as suggested by Dr. Harris of Philadelphia, the greater anatomical skill demanded in the Thomas operation will limit it to our larger cities, the centres of surgical experience and skill.

Porro Operation.—That modification of the old Cæsarean operation, whereby the uterus and ovaries are removed after the child has been extracted, was devised by the celebrated Dr. Blundell, of Guy's Hospital, in 1828. Dr. B. had found by experiments on gravid rabbits that he saved a large proportion by

this operation, but lost nearly all his cases by the old operation. Dr. Blundell never performed the operation on the human female, though he did not lack opportunity. Dr. Horatio R. Storer, of Newport, R.I. (then of Boston), ten years ago, removed the uterus of a parturient woman three days in labor, child dead and putrid, in a case of tumor obstructing the passages. The woman died in 68 hours. On the 21st of May, 1876, Prof. Edoardo Porro of the University of Pavia, performed the operation for the first time in Continental Europe, where the old Cæsarean section had for 100 years been almost uniformly fatal. The woman recovered. Obviously the fact of recovery gave an impetus to the new operation. The second, by Inzani of Parma, was fatal; the third case, by Prof. Hegar, of Freiburg, fatal; the fourth, by Prof. Previtali, Italy, fatal; the fifth, by Spaeth, Professor of Theory and Practice of Midwifery in the University of Vienna. It was the first of a series of cases that were operated on by the medical staff of the great General Hospital of Vienna. It was the first non-fatal case of Cæsarean operation in a hundred years, not only in the obstetric practice of the hospital, but in the whole obstetric practice of the city. In a series of papers published in the *American Journal of the Med. Sciences*, Dr. Robert P. Harris, of Philadelphia, has collected the records, as far as possible, of all the Porro operations that have been performed. These amount, so far as known, to the surprisingly large number of fifty in four years. The fiftieth operation was performed by Dr. Isaac E. Taylor, of New York, on the 8th April of this present year, and ended in recovery from the operation, but death occurred 26 days afterwards from cardiac thrombosis, proceeding from phlegmasia dolens. The first of the series of fifty was, as has been stated, by Dr. Storer. The following is a list showing the countries where performed :

United States	2	operations.....	0	(1) woman recovered.
Italy	23	"	8	"
Austria	11	"	6	"
France.....	7	"	4	"
Germany	4	"	6	"
Belgium	2	"	1	"
Switzerland	1	"	1	"
	<hr/>		<hr/>	
Total	50	"	20	(21) "

Contrast these twenty cures in fifty cases with Prof. Chiara's (of Milan) figures, which show that of 62 operations, old style, all died but 3,—1 woman saved out of 21; whereas from the Porro operation, the proportion saved is 1 to 2 $\frac{1}{2}$, and this in Continental Europe, where deformities are so frequent. But if all the unfavorable cases, as shown by the records of 36 cases in the possession of Dr. Harris, be excluded, the recoveries amount to nearly 75 per cent. With reference to unfavorable conditions, previous ill-health and long labor had played most important parts in leading to fatal results. There were 37 children of the 36 patients—one case of twins; 33 were removed alive from 32 women. This large number of living children is due to the fact that in none of the cases had craniotomy been attempted. According to Dr. Harris' statistics, there occur in the United States annually an average of three Cæsarean sections. Of 112 cases of Cæsarean section in the United States, there were 48 recoveries, or 42.7 per cent, thus showing that the operation has been much more successful than in Europe. The advantages of the Porro operation over the classical Cæsarean section are, that a wound originally within the abdomen is treated virtually without the body, the cut-end of the cervix being brought out at the lower edge of the wound, where it can be treated to the best advantage, and, further, there is no gaping or bleeding uterine wound into which intestines may become incarcerated, no lochial discharge, no gaping uterine sinuses to absorb noxious matters and set up metritis and phlebitis, and no escape of fluids from the uterus to the abdominal cavity. The objection is that it unsexes the woman. This, in the cases where it is principally required, viz., pelvic deformity, cannot be considered an objection. So far as I know, no statistics of Cæsarean operations have been collected in our own Dominion; happily the necessity for such operations is exceedingly rare. When necessity for operative interference does arise, the question, it seems to me, will lie as between the Porro operation and Thomas's Laparo-Elytrotomy.

Puerperal Convulsions.—Dr. Clarke of Oswego, in an article in the *Am. Quar. Jour. of Obstet.* for July, 1880, on the treatment of Puerperal Convulsions by Morphia, advocates most strongly

the giving of much larger doses than have hitherto been considered safe. To use his own words—"A patient with puerperal convulsions, should have forthwith injected into her arm $1\frac{1}{2}$ grains of morphia by weight,"—and asserts that he has repeatedly practised this treatment with great success, that it is devoid of danger, that there is a peculiar tolerance of morphia in this disease. According to Dr. Clarke, not only is morphia indicated in the developed disease, but also as a preventive when the well-known premonitory symptoms which threaten its appearance are present, such as head-ache, mental dullness, ataxia, affections of vision, &c. Then opium ought to be given in from quantities varying from 1 to 3 grains per diem.

Placenta Prævia.—Prof. Nunn, of the Savannah Medical College, proposes a new method of checking the hæmorrhage in *Placenta Prævia*. This consists in introducing a speculum into the vagina, and by means of a swab applying the solution of perchloride, or sub-sulphate of iron, directly to the bleeding point. This is to be repeated as often as may be necessary for subsequent bleeding from separation of successive portions of *Placenta*, but always directly to the bleeding point. Dr. Nunn reports a case in which he resorted to this practice with the best results. He believes that the styptic applied in this way diffuses itself beyond the site of application, as on examination of the *placenta* after delivery the patch of stain from the iron was much larger in extent than that to which it was applied. Dr. Nunn claims that this is a much more rational method of treatment than styptic vaginal tampons, or styptic vaginal ejections, which, by corrugating the vagina may retard labor.

Puerperal Malarial Fever.—In the *Amer. Quar. Journal of Obstetrics* for April of this present year appears a paper by Dr. Fordyce Barker, of New York, with the above title, based on 17 cases of a form of puerperal fever occurring in his own practice and in that of other medical men in New York and its vicinity with whom he saw them in consultation. In these cases the onset of the attack occurred at periods subsequent to delivery, varying from 24 hours to 21 days. The attacks were rather remittent

than intermittent in their characters, and sometimes distinguishable at the outset with some difficulty from other puerperal affections. The disease, sometimes preceded by malaise, for a day or two, sets in with chills more or less severe, with a very high temperature, often one or two degrees higher than is found in the beginning of other puerperal diseases, and is followed by greater prostration. The occurrence of a remarkable remission the day after such a violent explosion of such striking symptoms may induce the inexperienced medical attendant to flatter himself that the attack is ephemeral, and as Dr. Barker remarks, that his treatment has been wise and successful when his delusions are removed one, two or three days after by a return of the symptoms. The treatment is the same as that of malarial fevers occurring under other circumstances. Dr. Barker has found Warburg's Tincture, when tolerated, to be much more effective and speedy in controlling the disease than quinine in the largest doses. Dr. Barker suggests that most probably the disease has been met with by most practitioners in malarial regions.

Intra-Uterine Injections in Septicæmia.—Papers of great interest and value were read by Dr. Jenks, of Chicago, and Dr. Chadwick, of Boston, on this subject, at the Baltimore meeting last year of the American Gynecological Association, the paper of Dr. Jenks being especially exhaustive and valuable. Each gentleman recorded a number of cases treated by this method, showing conclusively the advantages of the practice. Dr. Jenks uses both carbolic acid and potass. permanganate; Dr. Chadwick, potass. permanganate only, which has advantages in that it is so readily soluble, that it is not irritant in solutions of moderate strength, and that by the color of the returning liquid we know when the disinfectant has no longer any work to do. In substance, Dr. Jenks' conclusion are as follows: 1. In view of the widespread relations of septicæmia to other causes of puerperal disease and death, it is pre-eminent, and must be prevented by all means in our power. 2. The objections to intra-uterine injections in the non-puerperal condition do not apply to their use in puerperal septicæmia. 3. That the deaths attributed to intra-uterine injections have, in the great majority of cases, occurred

when they were used for other purposes than washing out the uterus with antiseptic fluid. 4. In order that intra-uterine injections shall be safe, they must be used with the following precautions: (*a*) Free dilatation of cervix to secure return flow; (*b*) prevent access of air; (*c*) inject slowly, use no force; (*d*) use the fluid of the temperature of the body; (*e*) do not inject powerful astringents, as they may produce narrowing of the os and cervix, and thereby, from contraction of womb, favor escape into tubes or sinues. The physician must always administer them himself, and with every precaution. Intra-uterine injections ought always to be used in all cases where (*a*) there is premature cessation of the lochia, with constitutional disturbance; (*b*) purulent or foetid uterine discharge; (*c*) if there be good reason to think that there is retention of fragments of placenta or membranes, or clots, &c. Intra-uterine injections should be used more generally than heretofore in the prophylaxis and treatment of puerperal disease, (*a*) because when carefully used they are not dangerous; (*b*) there are no modes of treatment so effectual in lowering the high temperature of septicæmia, or that accomplish better results in certain inflammatory conditions of the uterus peculiar to the puerperal state; (*c*) they are most useful in causing expulsion of clots, or fragments of placenta, &c., and aid in causing involution of the organ; (*d*) and have diminished, in a remarkable manner, the deaths which to all appearances were inevitable in septicæmia. During the discussion, Dr. Goodell said that he did not approve of intra-uterine injections to prevent septicæmia except in rare instances, because of the danger of conveyance of infection, seeing that they must be administered by the physician, whose fingers are thus soiled by infectious discharges; in the developed disease he thought them a reliable remedy. Dr. Howard, of Baltimore, uses in such cases intra-uterine injections and hydrobromate of quinine hypodermically; this salt of quinine does not lead to the formation of abscesses; uses Chamberlain's glass intra-uterine tube. Dr. Thomas believes firmly in their efficacy in septicæmia, if their use be early, thorough and cautious; had seen many cases in which they seemed to reduce the temperature from 107° to 101° and 102° ,

and life saved ; with the precautions laid down by Dr. Jenks, believes they are safe.

Post-Partum Hæmorrhage.—This common and most formidable accident of labor was the subject of a spirited discussion in the Obstetric section of the British Medical Association at the meeting at Cork, in 1879. The subject was introduced in a paper read by Dr. More Madden, of Dublin, in which he strongly recommended as preventive measures during labor when there was reason to expect hæmorrhage, rupture of membranes during the first stage ; stimulating enemata of strong infusion of ergot, hypodermic injections of ergotine in the second stage ; constant firm pressure on the fundus uteri from the time the child's head appears at the vulva until the completion of the third stage ; complete avoidance of the least traction on the cord. In actual hæmorrhage would not trust to hot water injections ; advocates the use of perchloride of iron by saturated sponge introduced into the uterus ; thinks the method by injection dangerous. Spoke of the necessity for stimulants in collapse, brandy by mouth, hypodermically, or per rectum. Ether hypodermically. Thought he had saved a case in the last extremity by hypodermic ether ; thought that its use would occasionally obviate the necessity for transfusion. Transfusion may be at any time necessary, but we still lack a method which gives better results than the ruder methods of Blundell and others 50 years ago. Dr. Walter, of Manchester, gave the results of treatment of eleven cases by injection of water at a temperature of from 110° to 120° . Concludes that it possesses advantages ; it is ready to hand, cleanly, not disagreeable to the patient, but it cannot be relied on to produce permanent contraction. He recommended using the thermometer to test the temperature of the water, as Dr. Max Runge had by his experiments shown that a temperature of 100° to 104° Fah. was that which seemed to be most useful in producing permanent contraction. Dr. Norman Kerr, London, had found hot water 105° to 110° very valuable in arresting post-partum hæmorrhage. Dr. Dill recommended cold douche to abdomen. Dr. J. Thompson, of Leamington, advocated continuous flapping of the abdomen with a towel dipped in cold

water. Had found it very effectual in keeping up contraction, and it did not wet the patient and the bed as in the case of the cold douche. Dr. Cordes, of Geneva, spoke highly of hypodermic ether, and hypodermic ergotine. Said that syncope might be avoided by postural (positional) treatment, and Esmarch bandages to the limbs, so as to retain as much blood as possible in the large blood vessels near the heart. Dr. Atthill, Dublin, said that ergot was unreliable except to anticipate hæmorrhage. Cold was perhaps the most effectual agent if used in proper cases at the proper time, while the patient is warm and reaction likely to follow. When reaction ceased to take place the hot water at 100° came in usefully. Did not claim that it would always supersede the use of iron perchloride injections, but that it often would. Perchloride of iron was needed in some cases, he had used it several times, and saved lives by it, but had known one case in which its use was followed by instantaneous death: was not prepared to say from what cause, possibly air in the veins. Dr. Malins, of Birmingham, had used perchloride of iron by means of the sponge—thought was safer than by injection. Mr. Pollard, of Torquay, England, has had excellent results in a good many cases from large doses of turpentine.

Mr. Schäfer's Report to the Obstetrical Society on Transfusion.

—Mr. Schäfer's first work was to ascertain, by microscopic examination, the effect on the blood of other fluids than the blood of an animal of the same species.

1. *A weak solution of common salt* (1oz. to the gallon of water).

—This is innocuous to the white corpuscles, but renders the red corpuscles crenate, and prevents to some extent the formation of rouleaux.

2. *Cow's Milk*.—Fresh milk has no immediate ill effects on human blood-corpuscles, but if it is at all sour, it kills the white corpuscles. Even if fresh, if the preparation has been kept for some hours, the same effect takes place, and reaction is speedily produced from commencing fermentation.

3. *Blood or Serum of other Animals*.—The admixture with human blood of the blood of many animals, especially the common domestic animals, exerts a most deleterious action on the

red blood corpuscles. They become decolorized and swollen, and the coloring matter is discharged into the serum. The white corpuscles die, as shown by the cessation of the amoeboid movements and distinct appearance of nuclei. The blood of the ox and sheep were found to have the most rapid action; that of the rabbit and guinea pig the least. This discharge of the coloring matter leads to bloody urine, ecchymoses, fibrillation and embolism.

Salt solution, although it has been shown to be innocuous, is nevertheless useless, as it is not so much deficiency of quantity from blood lost, but quality, diminution in the number of oxygen carriers, the red corpuscles. This accounts for the dyspnoea of these cases.

Effects of Milk Injection.—On rabbits, if not previously depleted, the injection into the vessels of even a very small quantity of ordinary fresh milk (not sour) had a most injurious effect. London milk almost invariably produced death in twenty-four hours. The red corpuscles were extensively destroyed, and bacteria were developed in large numbers. If the milk was boiled just previous to injection, the syringe scrupulously clean, and with precautions to exclude germs, milk could be injected in large quantities without ill effects. The same result occurred when the milk was allowed to spurt from the clean teat of the animal into a vessel superheated. In depleted animals, milk thus injected never produced any permanent good effects. For these reasons milk and other similar fluids must be rejected for transfusion, and we are reduced to the necessity of using the blood of some other animal of same species, or at least genus. In man, the blood to be transfused must always be human, and this may be either in the normal or defibrinated condition.

As to the best method, Mr. Schafer, after full consideration of all the methods that have been proposed, concludes that the simpler the form of apparatus the better; that the simplest and best form of apparatus is a short flexible tube, with glass canulas at each end, this tube being used to connect directly the vein of the giver to the vein of the receiver, or an artery of the giver to an artery of the patient; that the amount given is to be regulated

by the duration of flow. Ordinarily, 3 or 4 minutes is enough in the case of veins; from artery to artery, half a minute to one minute. As to the relative advantages of arterial and venous transfusion, the latter is much the easier operation; but in the case of a patient *in extremis* from loss of blood, centripital arterial transfusion may be expected to yield the best results—results which, as Mr. Schafer says, may be truly magical. “Even if the heart should have ceased to beat while the operation of inserting the tubes was being effected, I doubt if resuscitation might not result from the connection of the two arteries.” Blundell proposed this many years ago. Failing the possibility of direct connection of a blood vessel of the donor with that of the receiver, which is always more difficult than mediate transfusion, Mr. Schafer says the latter method may yet be tried, but it is more dangerous to patient, by means of an elastic pump or syringe. In this case the arm of the giver and the interior both of basin and instrument ought to be washed with carbonate of soda solution in hot water. The blood ought to be injected quickly, without defibrination, and with every precaution to prevent coagulation. Injection towards the heart, as recommended by Blundell, ought to be preferred in very urgent cases. If the injection is into a vein, a funnel, with rubber-tube and spring-clip attached, and with the canula for the vein attached to the end of the tube, is as simple and effectual an apparatus as can be devised.

During the discussion which followed the reading of the report, the President, Dr. Playfair, said he had always used defibrinated blood with good results.

Dr. Braxton Hicks had used a mixture of saline solutions with blood to prevent coagulation. He had used phosphate of soda solution, one to three of blood, and, as in defibrinated blood, the whole preparation could be made in the next room, which was a great convenience. In the case of defibrinated blood, it must be very difficult to exclude minute clots from the circulation. Dr. Aveling believed immediate venous transfusion with his apparatus to be the best method, and considered the objections to his apparatus to be groundless. He wished to

call the attention of the Fellows to auto-transfusion. By raising the legs and hips of the patient to an angle of forty-five degrees, enough blood might be made to flow towards the heart to preserve life. This method ought always to be practised before transfusion is resorted to, especially as it conduced to arresting uterine hæmorrhage.

Hospital Reports.

MEDICAL AND SURGICAL CASES OCCURRING IN THE PRACTICE OF THE
MONTREAL GENERAL HOSPITAL.

MEDICAL CASES UNDER CARE OF DR. OSLER.

CASE XI.—*Retro-Peritoneal Cancer.* (Reported by Mr. J. W. Ross.)

In children, the commonest forms of abdominal tumours are those which originate in the lymph glands along the aorta, in front of the spine, and those which grow from the kidney. In the majority of cases the diagnosis lies between these forms, both of which may attain large size, filling the entire abdomen, the tumours weighing many pounds. It is often difficult or impossible to distinguish between them, particularly when seen late, as in the case here reported; the kidney-tumour usually occupies one side more than the other, or there is a history of its having originated in one flank, and there are, as a rule, urinary changes.

Annie T., aged 11, was brought to the Hospital on April 3rd, 1880, by Dr. C. L. Cotton, of Cowansville, suffering with an abdominal tumour. History of phthisis on both sides; no members of the family have died of malignant growths.

Personal history.—Was always considered a healthy child. About May, 1879, the parents noticed that she was failing in health and losing flesh, but she did not complain of any special pain. It was not until January last that her abdomen was noticed to be enlarged and slightly pendulous; she also complained of pain in the sides and across the front of the belly. It was never very severe—enough to cause her to cry out or to feel sick, but came on worse at one time; could not say where the tumour began, but Dr. Stephens, under whose care she was in

the early part of the illness, says that it was centrally placed and distinctly lobulated, having three or four divisions.

Present condition.—Patient is moderately well developed, only slight wasting evident, but she says that she was quite stout; colour of face good. On inspection, abdomen is seen to be much enlarged, and the superficial veins are prominent. Enlargement is not quite symmetrical; on the left side there is slight bulging in hypochondriac region, while on the right side the greatest prominence is in the lower part of the flank. Measurement around abdomen $31\frac{3}{4}$ inches; both sides the same. On percussion, tympanitic note in both flanks; dulness over great part of belly, merging with that of the liver, but separable from that of the spleen. The colon could not be distinguished in front of the tumour. On palpation, the belly wall is firm, and beneath, over the greater part of its extent, can be felt coarse nodular masses, firm and elastic. The entire tumour, when grasped firmly between the hands, is slightly moveable, and gives the impression of being centrally placed. In the iliac region the fingers can be inserted beneath the mass. Nothing special observable in examination of the other organs. Urine was not examined, as she was taken away before passing any. Her appetite is very good. *Diagnosis*—Retro-Peritoneal Cancer.

On May 13th I had a letter from Dr. Cotton, giving an account of the autopsy. The peritoneum was pushed in front of the mass; a considerable quantity of blood-tinged serum in the belly. The transverse colon was closely imbedded in the tumour at its upper and anterior part. The mass closely adherent about the spine, and the hinder part of the belly was filled with it. All the lymphatic glands were enlarged, and there were secondary masses in the kidneys and liver. The tumour, on section, had the appearance of a "medullary cancer." The estimated weight was about 20 lbs. The portion of the tumour sent in by Dr. Cotton was made up chiefly of rounded cells about the size of colourless blood corpuscles, many of them in a state of fatty degeneration. There was very little stroma, and that principally about the blood-vessels.

Correspondence.

MONTREAL, September 30th, 1880.

To the Editor of THE CANADA MEDICAL & SURGICAL JOURNAL.

DEAR SIR,—Your issue of August contained a very clever letter anent the annual report of a certain hospital for diseases of women, which; I am sure, no one with any sense of the ridiculous could help appreciating. If I were a party to that valuable compilation, I should feel inclined to buy in all copies issued, and furnish a second edition revised and corrected.

Having said this much, I may perhaps be allowed to venture the assertion that "Scrutator," in his rôle of censor, has been rather hypercritical. There are very few reports of institutions that will bear minute criticism. Take for example the last medical report of the Montreal General Hospital. No one can say that it is not a fairly good account of the work done there during the year, but if "Scrutator" were to examine it I have no doubt he would soon point out that although, in the first part, a very brave attempt is made to employ the Latin language for the names of diseases, even into the manufacture of such fancy (and untranslatable) phrases as "Hypertrophia Labialis Uteri," "Abscess Varia." etc., the reporter has wisely refrained from grappling with a difficulty like "foreign body in thigh." His classical sensibilities having recovered from this first shock, "Scrutator" would doubtless be further electrified by the discovery that his favorite case (the genitive) had been cruelly tampered with, for lo! "Strictura Œsophagei," "Hæmorrhagia Meningei," "Fractura Coccygei," and (horresco referens) after correctly writing "Fract. Costarum et Radium et Uln,"—after safely running a very gauntlet of osteological genitives—the reportorial friend must needs spoil it all with "et humeris." "Scrutator" (and here I must confess I differ from him somewhat) deprecates the publication, in the list of diseases, of the number of females examined in an institution and found pregnant. It is a proposition where much may be said *pro* and *con*., and I do not pretend to argue it here; but will not "S." be astonished to learn that

the compiler of the M. G. H. report has had the assurance to commit, not the minor offence of *Ingravadatio*, or *Graviditas*, or *Encyesis*, but the unpardonable barbarism of reporting "Pregnancy"? There, too, is "*Hymen imperforata*" to be seen, but, *en passant*, it may be remarked that if *imperforata* is not the proper form of adjective with which to qualify *hymen*, it ought to be, for whoever heard of a masculine hymen? In the same way it may be urged that, after all, "Pregnancy" may have been simply one of the sequelæ of "*Hymen imperforata*," after the latter had been dealt with in the M. G. H. As for "Resection of Tibia et Fibula for non-union"—that liquid bilingual phrase—"S" has already been heard on the subject of employing two languages in the same breath, and I shall not presume to enlarge upon it, but apply, for a moment, the *modus scrutatoris* to "Scrutator" himself. I am really surprised that the classical "S" should talk of a modern chapel of ease as connected with an ancient temple! Possibly "S" meant the *porticus*. True, it was rather *exposed*, in some instances, for gynecological work, but who would not forgive an error of convenience in the desire to avoid so palpable an anachronism? Who is "S" anyway? Is he an editor? Else why this sudden change of base from the first person singular to the first person plural? Can it be that his epistle is an example of the editorial *nos* unconsciously asserting itself in spite of the temporary assumption of the correspondent's *ego*?

Now I admit that the foregoing may be all very trivial, but is it more so than to take advantage of such evidently clerical errors as "breach" and "antiversion." Finally, permit me to affirm the principle that, in criticism, it is far better to be generous and general than to be microscopic and particularize. "S." may think otherwise, but, seriously, would it not have been more in the spirit of our modern philosophy if he had resisted the temptation of picking to pieces a wretched report, and had protested against the reckless manner in which not only the orthography and syntax, but also the orthoepy of the dead languages, are daily violated by the members of our profession? There is, unfortunately, plenty of room for a communication on such a subject, and if "S." will write it, he will not have a more attentive reader than his unknown admirer,

S. MINOR.

Reviews and Notices of Books.

The Practitioner's Handbook of Treatment, or the Principles of Therapeutics.—By J. MILNER FOTHERGILL, M.D., M.R.C.P., London, Assistant Physician to the City of London Hospital for Diseases of the Chest, Victoria Park; Assistant Physician to the West London Hospital, &c. Second American from the second English edition, enlarged. Philadelphia: Henry C. Lea's Son & Co.

This useful book has reached a second edition, as we might have been sure it soon would, from the very practical and useful character it possesses. On the appearance of the first edition, it was with much pleasure and profit that we went over several of its chapters, and have found frequent occasion to refer to them since. The general opinion of the work can be gathered from the following words from one of its early reviewers: "The perusal of a systematic treatise on the principles of therapeutics will enable the student, all the more thoroughly and with advantage to himself, to study the works of Sidney Ringer and H. C. Wood. Such a treatise gives him the broad lines upon which he must proceed in his therapeutic efforts; the basis upon which he can rear a superstructure that will embrace minutæ, the importance of which may not be very comprehensible without such underlying basis. The practitioner can compare his own practice with the lines here laid down, and note the points of agreement." In this treatise the author states, "It is not essayed to give prominence to new remedies or new therapeutic measures, so much as to analyze and elucidate the *modus operandi* of the measures in common use. It is designed to furnish to the practitioner reasons for the faith that is in him; and is a work on medical tactics for the bedside rather than the examination table."

The additions in the present issue are the following: "When not to give Iron," "The functional disturbances of the Liver," "The means of acting on the Respiratory Nerve Centre," "The reflex consequences of Ovarian Irritation," and "Artificial Digestion."

A Treatise on Therapeutics, Illustrated.—By D. F. LINCOLN, M.D., from the French of A. Trousseau, Professor of Therapeutics in the Faculty of Medicine, of Paris, Physician to the Hotel Dieu, &c.; and H. PIDOUX, Member of the Academy of Medicine, Honorary Physician to the Hospitals, &c. Ninth edition, revised and enlarged with the assistance of CONSTANTINE PAUL, Professor Agrégé in the Faculty of Medicine of Paris, &c. Two volumes. New York: Wm. Wood and Co.

These two volumes form the latest addition to Wood's Library of Standard Medical Authors. In this work, medicines are classed under various heads, and their actions considered with reference to various conditions of disease. The divisions, as arranged, are as Re-constituents, Astringents, Alteratives, Irritants, Evacuants, Musculo-motor excitants or Excito-motors, and Narcotics. Trousseau was one of the eminent teachers who had a great respect for the instruments, *i.e.* the medicines, he made use of. He made a profound study of the *modus operandi* of various drugs, and when he prescribed one it was with the conviction that it would thereby produce a certain effect. No branch of medicine is of more importance to the practitioner, than that of therapeutics. We therefore commend to the notice of every one of them the present translation of one of the best books on the principles for treating disease which has ever been written. It forms one more to add to several good things which have already been presented to us in the "Library."

Contributions to Orthopædic Surgery, including observations on the Treatment of Chronic Inflammation of Hip, Knee and Ankle Joints, by a new and simple method of extension, the Physiological method, and Lectures on Club-foot.—By J. C. HUTCHISON, M.D., visiting surgeon to the Brooklyn (N.Y.) City Hospital, surgeon-in-chief to the Brooklyn Orthopædic Infirmary, &c. New York: G. P. Putnam's Sons.

The chief object of this little work is to put into more permanent form, and to extend the reading of, certain views of the author on joint treatment by extension. The paper in which this

matter was originally treated of appeared in the *American Journal of the Medical Sciences* for January, 1879. Dr. Hutchison condemns the principle on which nearly all the mechanical appliances variously recommended have been constructed. He believes that the objects to be sought for by the orthopædic surgeon are *extension* of the limb and at the same time *motion*. To obtain this, as, *e.g.*, in hip-joint disease, he causes the patient to wear on the sound leg an iron support beneath the sole of the boot of such a height that the toes of the lame leg never reach the ground. In this way, he contends, without other apparatus of any kind, sufficient extension is secured simply by the weight of the limb itself. He has found that by this device, and whilst the patients are allowed and encouraged to go about on crutches, pain is relieved, and any malposition of the limb is corrected. Another great advantage is, that during the whole time the immense advantages of out-door exercise can constantly be had. It is said to be applicable to "all forms of the disease, in all its stages, whether the first, second or third," with one exception, and that is, very early stages of acute cases, with marked synovitis and great pain on the slightest movement. A number of cases of *Morbus Coxarius* are detailed, and bear out thoroughly what is claimed for the method. Certainly, its simplicity must commend it to all surgeons, and if the author's observations are confirmed by others, it will do away entirely with the lengthy confinement in bed, the long splints and weights, or the Bauer's Breeches.

The lectures on club-foot comprise the author's personal experience in this interesting class of deformities, both in hospital and private practice. They include descriptions of the different varieties of Talipes, and the methods of treatment found most successful.

Transactions of the American Medical Association. Vol. XXX. Philadelphia: Printed for the Association.

A comparison between the official publications of the American and British Medical Associations is instructive, but by no means flattering to the former. Of course, it may be said, that

a weekly journal cannot be properly compared with an annual volume of transactions, but the British organ is in reality the transactions plus ever so much good reading matter. The one is a fresh, crisp, weekly issue, a power in the professional world, read by thousands; the other comes to hand after a prolonged gestation of 12 or 14 months, as a ponderous tome, full of valuable papers, it is true, but the value of which is much diminished by the unavoidable delay attending such publications and by the fact of the necessarily limited circulation. We sincerely hope that Dr. Sayre's Presidential address has, on this subject, rung the knell of the "Transactions," and that the volume in which it appears will be the last of the series, to be succeeded by a new series entitled "The American Medical Journal," being the organ of the American Medical Association, edited by ———, weekly. Wake up cousins! The present volume contains a varied assortment of articles; with the exception of two, all would have been better in the journals. Dr. H. F. Campbell's article on urinary calculus (100 pages), and Dr. Sayre's on "the superior value of the treatment of Pott's disease by suspension and Plaster of Paris bandages," (137 pages), have the character of monographs. Such essays are more suitable for "Transactions," and the Association does good work by enabling, in this way, authors to publish extensive observations, which would be too cumbersome for any Medical Journal. Of the same character is Dr. McLane Hamilton's prize Essay on "A consideration of certain forms of Primary and Local Secondary Degeneration of the Lateral Column of the Spinal Cord"—a very able contribution to this vexed question. In a paper, "Notes on the American Medical Association and the State Medical Societies," some interesting facts are given about the organization and extent of these societies in the different States. The general appearance of this volume is in keeping with preceding ones.

Books and Pamphlets Received.

Index-Catalogue of the Library of the Surgeon-General's Office, United States Army. Authors and Subjects. Vols. I. and II. Berlinski, Washington, Government Printing Office.

The Art of Prolonging Life. By Christopher W. Hufeland. Edited by Erasmus Wilson, M.D. From the last London edition. Philadelphia: Lindsay & Blakiston.

A Treatise on Common Forms of Functional Nervous Diseases. By L. Putzel, M.D. New York: Wm. Wood & Co.

A Practical Treatise on Tumors of the Mammary Gland, embracing their Histology, Pathology, Diagnosis and Treatment. By Samuel W. Gross, A.M., M.D. New York: D. Appleton & Co.

Extracts from British and Foreign Journals.

Unless otherwise stated the translations are made specially for this Journal.

Relations of Micro-Organisms to Disease.—At the recent Cambridge meeting of the British Medical Association, this question was discussed in the Pathological section. Prof. Lister made the opening remarks, from which we take the following, as containing some of the most important statements in his address:—

“It is well known that the bacillus anthracis is morphological with an organism frequently met with in infusion of hay, which may be termed hay-bacillus. Such being the case, it occurred to Dr. Buchner that they might be merely one and the same organism modified by circumstances. For my own part, I am quite prepared to hear of such modifying influence being exerted upon bacteria, having made the observation several years ago that, when the *bacterium lactis* had been cultivated for some time in unboiled urine, it proved but a feeble lactic ferment when introduced again into milk. Its power of producing the lactic fermentation had been impaired by residence in the new medium. In the case before us, indeed, the physiological difference between the two organisms seems, at first sight, so great, as to forbid the idea of anything other than a specific difference. The bacillus anthracis refuses to grow in hay-infusion in which the hay-bacillus thrives with the utmost luxuriance; and conversely, the hay-bacillus is utterly incapable of growing in the blood of a living animal, whether introduced in small or in large quantities. The hay-bacillus is remarkable for its power of resistance to high

temperatures, which is not the case with the bacillus anthracis. The latter is destroyed by a very slight acidity of the liquid of cultivation, or by any considerable degree of alkalinity, whereas the former survives under such conditions. Both will grow in diluted extract of meat, but their mode of growth differs greatly. The hay-bacillus multiplies rapidly, and forms a dry and wrinkled skin upon the surface, while the bacillus anthracis produces a delicate cloud at the bottom of the vessel, increasing slowly. Nothing daunted by these apparent essential differences, Dr. Buchner has labored with indomitable perseverance by means of experiments carried on in Professor Nageli's laboratory, to solve the double problem of changing the bacillus anthracis into hay-bacillus, and the converse. Having devised an ingenious apparatus by which a large reservoir of pure cultivating liquid was placed in communication with a cultivating vessel, so that any cultivation could be drawn off by simply turning a stop-cock, and further cultivating liquid supplied to the organisms remaining in the vessel by a mere inclination of the apparatus, Buchner proceeded to cultivate the isolated bacillus anthracis in extract of meat for several hundred successive generations. As an early result of these experiments, he found that the bacillus lost its power of producing disease in an animal inoculated with it. Up to this point he is confirmed by Dr. Greenfield, who has found that, when the bacillus anthracis is cultivated in aqueous humour, after about six generations it loses its infective property. Then as Buchner's experiments proceeded, the appearance of the growing organism was found to undergo gradual modification. Instead of the cloud at the bottom of the vessel, a scum began to make its appearance—at first greasy-looking and easily broken up—constituting, so far as appearances went, an intermediate form between the two organisms; and in course of time the scum became dryer and firmer, and at length the modified bacillus anthracis was found to be capable of growing in an acid hay infusion, and to present in every respect the characters of the hay-bacillus. The converse feat of changing the hay-bacillus into the bacillus anthracis proved very much more difficult. A

great number of ingenious devices were adopted by Buchner, who was, nevertheless, continually baffled, till at last he attained success in the following manner. Having obtained the blood of a healthy animal under antiseptic precautions, and defibrinated it also antiseptically, and having arranged his apparatus so that the pure defibrinated blood, which was to be the cultivating medium, should be kept in constant movement, so as to continually break up the scum, and also keep the red corpuscles in perpetual motion so as to convey oxygen to all parts of the liquid—in this way imitating, to a certain extent, the conditions of growth of the bacillus anthracis outside the animal body, within which the hay-bacillus could not be got by any means to develop—he proceeded to cultivate through numerous successive generations. A transitional form soon made its appearance; but the change advanced only to a limited degree, so that further progress by this method became hopeless. The modified form hitherto obtained failed entirely to grow when injected into the blood of an animal. On the contrary, it was in a short time completely eliminated from the system, just like the ordinary hay-bacillus. It had, however, been observed by Buchner that spores had never been formed by the bacillus growing in the defibrinated blood; and it occurred to him that, perhaps, if it were transferred to extract of meat, and induced to form spores there, the modified organism might yet grow in the blood of a living animal. The carrying out of this idea was crowned with success; and, both in the mouse and in the rabbit, Buchner succeeded by injecting various different quantities containing the organism in different animals. When large quantities were introduced, the animals died rapidly from the merely chemical toxic effects of the injected liquid; but, in some instances, after the period for these primary effects had passed, a fatal disease supervened—attended, as in anthrax, with great swelling of the spleen, the blood of which was found peopled as in that affection with newly formed bacilli; and the spleens affected in this way were found to communicate anthrax to healthy animals, just like those of animals which had died of ordinary splenic fever.

Supposing these results to be trustworthy, and the record of

them bears all the stamp of authenticity, I need scarcely point out to a meeting like the present their transcendent importance as bearing upon the origin of infective diseases, and their modifications as exhibited in epidemics.—*British Medical Journal*, Sept. 4, 1880.

Tumors of the Mammary Gland.—

THEIR DIAGNOSIS.—Dr. S. W. Gross (*N.Y. Med. Jour.*, June, 1880,) gives as the result of his studies the following: (1) A uniformly hard, perfectly movable, nodular, slowly growing tumor, particularly if it be situated at the upper and outer part of the gland of impubic subjects and of married women toward the twenty-third year, and be free from ulceration, alterations in the skin, veins, nipple and lymphatic glands, is a solid fibroma, and the diagnosis is strengthened by the presence of several growths in one or both breasts. (2) A hard, lobulated, peripheral tumor, or one which, after having remained stationary or progressed slowly for several years, suddenly and rapidly acquires a large volume, assumes an unequal consistence, being firm at some points and soft or fluctuating at others, occurring toward the thirty-sixth year, unaccompanied by lymphatic involvements, but attended, possibly, with discoloration of the skin, deformity of the nipple and limited superficial adhesions, and it may be with dilatation of the veins, discharge from the nipple and ulceration and fungous protrusion, is a cystic fibroma. (3) A firm, rapidly growing, peripheral tumor, appearing in prolific married females at about the thirty-seventh year, with, possibly, discoloration and adhesion of the skin and ulceration, but without deformity of or discharge from the nipple or enlargement of the glands, is a solid sarcoma. A tumor possessing these attributes and occurring toward the thirty-second year is probably a firm spindle-celled sarcoma, while one developing at about the forty-second year is more apt to be a firm round-celled sarcoma. (4) A lobulated tumor, particularly if it involves the greater part of the mamma, of quick growth from the commencement or progressing rapidly after having increased comparatively slowly for some time, of large size, of varying or unequal consistence,

occurring towards the thirty-third year in prolific married subjects, and attended with discoloration of the skin, ulceration, enlargement of the veins and, possibly, with discharge from the nipple and limited adhesions, or it may be with deformity of the nipple and glandular enlargement, is a cystic sarcoma. A very rapidly progressing tumor, of soft, apparently fluctuating consistence with stretched skin and enlarged veins, appearing in young girls before puberty and in young married women, is a medullary sarcoma, which may be solid, or cystic, and is, as a rule, composed of small spindle cells. (5) A solitary, rapidly and continuously growing, although not very bulky, rather firm, or possibly soft tumor, occurring at about the forty-fifth year, with limited discoloration of the skin, but not fixed to the chest, and attended, possibly, with deformity of the nipple, superficial adhesions, ulceration, dilatation of the veins and enlargement of the axillary glands, is a solid myxoma. (6) Cystic myxoma possesses the same consistence and growing attributes as the former variety, but it develops at the forty-eighth year and is liable to be attended with discoloration, adhesion and ulceration of the skin. The veins nipple and glands, however, are normal. (7) A hard, heavy, nodular, solitary, very slowly and equably increasing tumor, especially if it develops in the immediate vicinity of the nipple of a married woman, toward the thirty-fifth year and is accompanied by the adhesion and discoloration of the skin and ulceration, and, possibly, by deformity of the nipple and enlargement of the glands, but is free from fixation to the chest and dilatation of the veins, and is preceded by a discharge from the nipple, is a cystic adenoma. A solid adenoma cannot be distinguished from a solid fibroma. (8) A densely hard, inelastic, irregular, solitary, slowly growing tumor, occurring in prolific married females towards the forty-eighth year, inseparably connected with the mamma, accompanied by induration and enlargement of the associated lymphatic glands, retraction of the nipple, infiltration of and, possibly, nodules in the skin, ulceration and fixation to the chest and it may be by a discharge from the nipple, is a scirrhus carcinoma; and the diagnosis is strengthened if there be a history of heredity, if the tumor was

preceded by psoriasis or eczema of the nipple, or if developed from an induration left by puerperal mastitis. (9) A soft, lobulated, voluminous, solitary and rapidly increasing tumor, occurring in the same class of women at about the fiftieth year, and attended with infection of the glands and skin, retraction of the nipple, fixation to the chest and, possibly, extension to the opposite breast, but without discharge from the nipple or marked tendency to prominence of the veins or ulceration, is a medullary or encephaloid carcinoma. (10) A hard, very slowly growing, small, solitary tumor, occurring towards the forty-fifth year, with adhesion to the skin and it may be nodules in that structure, prominence of the veins, retraction of the nipple and enlargement of the glands, and, possibly, with invasion of the opposite breast, fixation to the chest, ulceration and discharge from the nipple, is a colloid carcinoma. (11) A densely hard, irregular and knotty, contracting and small, solitary tumor, occurring at about the forty-seventh year, and attended with retraction of the nipple, infection of the glands and skin, and, possibly, distinct tubers in the latter structure, ulceration and immobility on the chest, is an atrophying scirrhus. (12) A slowly increasing, solitary, nodular or slightly lobulated tumor, occurring after the menopause, covered by thinned and discolored skin, fluctuating and, probably, discharging by the nipple, but without enlargement of the veins or glands and without fixation to the chest, is an involution cyst. (13) A solitary, smooth, firm and elastic or, possibly, fluctuating tumor, occurring in the vicinity of the nipple, of slow growth and unattended with alterations in the veins, nipple, skin or glands, if it inflames, is an evolution cyst. (14) A solitary, slowly growing, not bulky, fluctuating or semi-solid tumor, occurring near the nipple of lactating women, and unattended with changes in the coverings of the mamma or in the glands, is a lacteal cyst. (15) A slowly growing, small, smooth, round, firm and elastic or fluctuating tumor, occurring between the ages of twenty and thirty years, seated at the upper and outer border of the breast, and not near the mammilla, with a disposition to ulceate, but without other changes in the skin, veins or glands, is an hydatid cyst.

Perfectly Bloodless Operation.—The “bloodless” method of operating, recommended some years ago by Esmarch, is opposed by many surgeons, on account of the general oozing which is apt to occur after removal of the elastic tube. Esmarch describes, in *Verhandl. d. Deutschen Gesellsch. f. Chirurg*, for April, 1880, the latest practical modification of his mode of procedure, by means of which such oozing may be completely prevented. In amputations, the operation is performed in the usual way, by the bloodless method; all vessels requiring ligature are then carefully sought out and tied, and the wound at once closed with catgut sutures; drainage tubes, capable of being absorbed, are introduced, and Neuber’s permanent compressing dressing applied. Then, and not till then, is the elastic tube removed from the limb. After the patient is placed in bed, he should keep the stump up in the vertical position for at least half an hour. (Neuber’s permanent dressing consists of an antiseptic cushion, four-cornered, made of carbolized gauze filled equally and smoothly with carbolized jute; this cushion is applied directly to the wound, and is kept firmly in place by an elastic bandage which overlaps the dressing). Of twelve amputations (nine of the leg) performed and treated in this way, secondary hemorrhage occurred in none; in most of them the first dressing was not removed for fourteen days, and on it was then found only a narrow, dry streak of blood, corresponding to the linear cicatrix. In resection the author advises that after all possible ends of vessels have been tied, the wound should be closed with the continuous glover’s suture, and that the limb should then be made fast to a splint and kept elevated for at least half an hour. In fifty-six resections managed in this way since 1878, neither secondary hemorrhage nor death had occurred. Since Easter, 1879, the author had also, in his operations for diseased bone, given up the practice of plugging up the cavity from which the sequestrum had been removed; instead of this he now carefully disinfects the cavity, introduces absorbable drainage tubes, closes the wound in the skin at once, and applies the permanent dressing; the last step in the proceeding is, as before, the removal of the

elastic tube. Twelve cases were treated in this fashion, and in none of them did secondary hemorrhage occur; in all of them the wound remained aseptic, and in several instances complete primary union took place. Esmarch also states that he has frequently adopted, and with similar results, the same method in various other operations on the extremities, such as the removal of tumors from these parts; in the neighbourhood of the shoulder and hip joints, however, it is a matter of much greater difficulty to carry out the above directions, and so to obtain a perfectly bloodless operation.—*Phil. Med. and Surg. Reporter.*

Infantile Constipation.—At a clinical lecture held at the College of Physicians and Surgeons, New York, Prof. Jacobi called attention to a form of infantile constipation not mentioned in the books. In this affection the color of the fæces is about normal, but they are deficient in moisture. They are dry and somewhat friable. The passages of young babies are never normally like this. There is evidently here a lack of moisture which may possibly arise from an insufficient secretion on the part of the intestinal glands. It may, however, arise from other causes, one of which is a peculiar anatomical condition occasionally existing in the bowels of the new-born or young infants. A few anatomists have recognized that the intestinal tract is different in the young from what it is in the old. The colon is very much larger and longer, in proportion, in the child than in the adult, and this peculiar condition often remains up to the age of five or six years. The child may have two or even three sigmoid flexures, or the real sigmoid flexure may not be found on the left side, but on the right. In the passages of the young, where the peristaltic action of the bowel is normal and the colon of the usual proportion, the fæces will not be dried out; but where the flexure is long, or there are two or three of them, the fæces will dry out. In the foetus and the new-born the secretions of the intestines are very copious. There is a great deal of mucus and epithelium, which may become very dry and compressed—to such an amount, indeed, as to constitute actual obstruction.

Dr. Jacobi stated that he has met with a number of cases in children, that could not be explained in any other way than by the supposition that there were two or three sigmoid flexures, one on top of the other, and impeding the free passage of the fæces. In the treatment of a case where such a state of things is suspected, the diet must be regulated so that there may be an abundance of water in the food. In the choice of food, oatmeal is to be given in preference to tapioca, rice, or even barley. Purgatives ought not to be given except in urgent cases. Injections are very useful, and cannot be dispensed with. Another cause of constipation like this may be that there is an insufficient physiological action of the muscular layer of the intestine. This may occur in feeble children. In another class of children this constipation does not appear until from six months to one year after birth, and then, from being perfectly regular, they become obstinately constipated. In this class the muscles of voluntary motion, as well as those of the intestine, become diminished in power; they are rachitic children.—*Med. and Surg. Reporter*, July 10, 1880.

A New Anti-Neuralgic: Menthol.—

Archibald D. MacDonald, in a paper communicated to the Medico-Chirurgical Society of Edinburgh, by Dr. Taylor, Jan. 8, 1880, and published in the *Edinburgh Medical Journal*, August, 1880, urges the claims of menthol as a new antiseptic and anti-neuralgic agent. Menthol is the stearoptine of peppermint oil, is a crystalline solid derived from the oil of peppermint by long keeping, or by being cooled to a low temperature. The American oil yields it at 0°C. Its chief source is the Chinese and Japanese oil. It is imported as Japanese camphor, in small white crystals, which have the peppermint odor, and resemble the sulphate of magnesia. In liquid or solid state it has a specific gravity less than that of water. It is rendered liquid and volatile at a temperature one or two degrees below that of the body. Some specimens, however, volatilize at a much lower temperature. It is very sparingly soluble in cold water. It liquifies slowly in water at 82°F., quickly at 120°F., but remains mostly

as a separate layer. It dissolves freely in alcohol, in ether, in the fixed and volatile oils and in glycerine. The author publishes a series of experiments proving that this agent, which is the homologue of thymol, is an antiseptic of considerable power, but says that in Great Britain it will probably not come into general use as an antiseptic; but in India, China and Japan, or even in America, where the objections of small supply and high price cannot apply, its use is more to be maintained. One point is strongly urged in its favor, its volatilization at and a little below the temperature of the body, and its consequent adaptability for penetrating into every nook and cranny of wounds which are already putrefactive, slaying the bacteria, and rendering these wounds perfectly aseptic.

As an anti-neuralgic, the author believes the menthol to be of great value. One-tenth to one-sixth of a grain of menthol steadies the contractions of an excited heart, and slows them to a comfortable speed, and at the same time produces slight cerebral drowsiness. Half a grain of the crystals produced vomiting from gastric irritation. The author does not advocate its internal use unless well diluted. He deals with menthol as a local anæsthetic. The application of oil of turpentine in facial neuralgia by the Chinese, was practised at a very early date. It has also been locally applied for gout, the relief in both affections being almost instantaneous. A priori, the author concludes the oil cures in virtue of the menthol which it contains. Reference is made to seven cases. In the first case, tri-facial neuralgia, the affected tract was painted with a mixture of menthol, one grain; oil of clove, ten minims; rectified spirit, fifty minims. This was done four times in successive attacks. Entire relief followed in from four to six minutes. First a feeling of coldness, and then some irritation from the application was experienced. This case may be regarded as typical; menthol is particularly advocated as a temporizing remedy until constitutional treatment may take effect. It may prove to be more effective as an application than aconite, veratria or atropia. Its use in toothache was followed by immediate relief. In neuralgia it has been noticed to render the paroxysms

less frequent and less severe. In sciatica, the author painted the track of the sciatic, popliteal and tibial nerves to the ankle-joint with a ten per cent. solution, and this gave the patient immediate relief.—*Chicago Med. Review.*

Case of Basic Cavity of the Lung

TREATED BY PARACENTESIS was reported to the Royal Medical and Chirurgical Society June 8th, by Dr R. Douglas Powell and Dr. R. W. Lyell. The case was that of a man aged forty-nine, of intemperate habits, who in December, 1878, had bronchitis, followed by pleuro-pneumonia and fetid expectoration. He improved after a time, but relapsed again in July. On admission there was consolidation of the lower lobe of the right lung, with excavation of its central portion, the cavity signs being centered about the level of the seventh dorsal spine in the line of the angle of the scapula. There was considerable hectic, with diarrhoea and anorexia. The breath and expectoration were extremely fetid, the latter being very abundant, amounting to a pint in twenty-four hours. The operation of paracentesis was performed September 11th.

A medium-sized aspiration-trocar was first thrust in at the eighth space mid-scapular line, and a free incision having been made through the tissues down to the intercostal membrane, the fine trocar was withdrawn and a full-sized hydrocele trocar inserted, which, after slightly enlarging the opening, was in its turn removed and a large drainage-tube introduced. Carbolized dressings were applied. A moderate quantity of secretion escaped from the wound (which gave rise to no serious bleeding), and the discharge subsequently from the tube, although free, was never abundant. The expectoration and cough, however, at once almost entirely ceased. The wound was dressed daily under the carbolic spray, with the view of disinfecting it and the cavity, and injections of Condry's solution were used. Patient died on October 31st, fifty days after the operation. . .

In their remarks upon the case the authors commented on the infrequency with which the base of the lung had been tapped, and pointed out that the immediate cessation of cough and

expectoration after operation in this case was a fact very encouraging to future interference with such cavities under more favorable circumstances, and also afforded a valuable hint respecting the importance of disinfecting lung-cavities. For it was clear from the small amount of the discharge, compared with the great previous quantity of expectoration, that the bulk of that expectoration had been yielded by the bronchi irritated by the acrid fluids and gases in their passage from the cavities. While advocating the puncture of chronic basic cavities in suitable cases, the authors deprecated interference with apex cavities, on the ground of its being rarely necessary or useful, and are averse, save in exceptional instances to making incisions into the acute basic abscesses of the lung. In the present case, however, the operation had undoubtedly been postponed too long, the patient having come under observation too late. The diagnosis of the case from empyema was touched upon, and the several steps of the operation discussed: the use of a large trocar in preference to the knife being advocated. In future cases, too, the authors would prefer to choose the center of the cavity rather than its lowest point for puncture, where it is situated in the posterior lobe of the lung.

Dr. Theodore Williams said that in every instance the nature of the case had to be considered. Thus the operation might be made useful in certain forms of bronchiectasis, but these could not easily be reached. The removal of the putrid fluid was all-important, as the other lung might be poisoned by the exhalations. In one case he tapped a limited empyema, thinking it a bronchiectasis. In most cases of phthisis the cavities, being in the upper part of the lung, drain themselves. He referred specially to a case where the president, Mr. Erichsen, had operated for him with very great advantage.

Mr. Erichsen said that in these cases the great thing was drainage, and that *antiseptics did little or no good*. The patient was really poisoned by his own secretions. He would make a free opening and get rid of the foul material. In the case referred to by Dr. Theodore Williams the whole house was infected, and the smell could be perceived to the very door,

yet when the collection of stuff was opened, the whole fetor rapidly disappeared. Care should always be exercised in the selection of a tube; they should be rigid, to obviate any risk of forming an acute angle. He had found a flat trocar with a vulcanite canula the best instrument to use, but if he had to do it again he would rather pass in a director, and then gradually tear with dressing-forceps than cut. Injection of fluid only seemed to irritate. In Dr. Williams' case an emphysema set in all over the body, and at each cough it could be seen to increase. This air, although intensely fetid, produced no bad effects on the body.

Treatment of Infantile Syphilis.—M. J. Simon, in a course of lectures upon the therapeutics of infancy, delivered at the Hospital for Sick Children in Paris, states that mercury is of real use in infantile syphilis. He advises that the following course of treatment should be rigorously carried out. The child must be rubbed morning and evening with Neopolitan ointment, the friction being made alternately in the axilla, groin, and popliteal space. Four times a day five drops of the Van Swieten's liquor should be administered in a little milk, the dose being increased if necessary to thirty or forty drops per diem. A wooden spoon or a porcelain cup should be employed to contain the liquor, since silver soon becomes covered with an amalgam which causes an alteration in the mercurial preparation. This treatment should be continued for some months, the quantity of mercury given being progressively raised and lowered. (*Le Progrès Médical*, July 3, 1880.)—*The Practitioner*.

Diagnosis of Cancer of the Stomach.—M. Leven pointed out, at a recent meeting of the Society of Biology, in Paris, the great difficulties which often present themselves in practice in making a differential diagnosis between cancer and simple dilatation of the stomach. In both cases there is vomiting, which is said to be uncontrollable; to stop this symptom, M. Leven recommends that solid food, to the amount of 150 grams, should be given to such patients only once a-day,

in order to avoid congestion of the mucous membrane. The rest of the food for the twenty-four hours should consist of a litre and a half of milk and eggs. If after eight days of this diet the sickness has ceased, it is certain there is no cancer of the stomach. (*Le Progrès Médical*, May 29, 1880.)—*Practitioner*.

High Temperature from Constipation.

—A patient in the Massachusetts General Hospital, while convalescing from a mammary abscess, suddenly developed one morning a temperature of 104.5° F. The abscess was rapidly healing, and the temperature during the preceding eight days had not risen above 99° F. The patient, however, had not had a movement from the bowels for four days. An enema of soap-suds was given, and in less than an hour after this had operated, the temperature fell to 100° F., and continued normal afterward. The patient made no complaint, nor was there any phenomenon of any sort to account for the high temperature, unless the constipation would do so. No remedy was used except the enema. —*Boston Med. and Surg. Journal*, Aug. 12, 1880.

Treatment of Gonorrhœal Ophthalmia.

—M. Dor, of Berne, remarks (*Lyon Médical*, March 7, 1880) that since Graham Brown published, in October, 1877, his *Researches on Diphtheria*, and came to the conclusion that benzoate of soda is a very powerful disinfectant, he has not hesitated to employ that salt in all cases of purulent ophthalmia in new-born children that have come under his care, as well as in a case of diphtheritic conjunctivitis. The benzoate of soda was, however, only employed as a disinfectant, tannin being also used as a curative agent. The following case of gonorrhœal ophthalmia was thus treated. A man, aged 20, suffering from gonorrhœa, was, when first seen by the author, suffering from purulent ophthalmia of both eyes, of four days' duration. M. Dor prescribed iced-water compresses, and a solution of benzoate of soda (1 in 20), and solutions of tannin (1 in 10, and 1 in 100) as eye lotions, to be used every ten minutes. The next day the eyes were less painful, and in five weeks were well, the cornea being intact.—*London Medical Record*, June 15, 1880.

Rötheln; Its Diagnosis —Dr. W. D. Hemming (*Edin. Med. Jour.*), as diagnostic points separating rötheln from measles and scarlatina, gives the following: (1) The temperature rarely rises above 101° to 102° . (2) The eruption generally appears at once all over the body. (3) Rötheln affords no protection against either measles or scarlatina, and *vice versa*. (4) Rötheln propagates itself and never gives rise to either measles or scarlatina. (5) The patches of eruption in rötheln are raised above the surrounding skin, especially towards the centre, where the color is deeper. (6) The desquamation is in fine branny scales and commences at the centre of an eruptive patch, gradually extending to the circumference. (7) The patches of eruption are larger and brighter in severe cases than in mild ones. (8) The tongue is more or less dirty at first, then becomes strawberry like, and finally smooth.

Tracheal Tubes Introduced by the Mouth.—Dr. Wm. MacEwan (*Brit. Med. Jour.*, July 31, 1880,) reports four cases in which he used tubes in this manner with great satisfaction. From them and a study of the writings of others, he concludes: (1) Tubes may be passed through the mouth into the trachea, not only in chronic, but also in acute affections, such as œdema glottidis. (2) They can be introduced without placing under anæsthetic. (3) The respirations can be perfectly carried on through them. (4) Deglutition can be carried on during the time the tube is in the trachea. (5) Though the patient at first suffers from a painful sensation, yet this passes off and the parts soon become tolerant of the presence of the tube. (6) The patient can sleep with the tube *in situ*. (7) The tubes in these cases at least are harmless. (8) The ultimate results are rapid, complete and satisfactory. (9) Such tubes may be introduced in operations on the face and mouth in order to prevent the blood from gaining access to the trachea, and for the purposes of administering the anæsthetic; and they answer this purpose admirably.

Apomorphia in Sunstroke.—Drs. Tomlinson and Murphy call attention to the value of the hydrochlorate of

apomorphia in the treatment of sunstroke. In three very severe cases the drug was administered as soon as possible after the admission of the patients to the hospital, 1-16 grain being sufficient to produce the desired emesis in two of the cases. The vomiting occurred in less than ten minutes after the injection; in no case was there any distressing nausea, but apparently an almost instantaneous evacuation of the contents of the stomach. The temperature was reduced, and the pupils became widely dilated, while sensation and movement returned within half an hour. The skin became slightly moist, and the patient regained consciousness by slow degrees. In each of the cases there was complete insensibility; eyes fixed, pupils contracted to the size of a pin's head, and insensible to light; pulse very full and rapid; breathing shallow, stertorous, and accompanied by moaning; temperature very high (109° in one case), and involuntary evacuation of the bowels.—*The Practitioner*, June, 1880.

Subcutaneous Injection of Ether in Sciatica.—Dr. Comegys recommends hypodermic injection of sulphuric ether for the treatment of sciatica (*L'Union Medicale*, August 5th). He cites two cases, one in detail, which he has cured by this plan. Three drops of ether are injected at intervals of twelve hours. The injection need not be a deep one; and, though it causes a momentary sharp pain, it does not bring on any consecutive unpleasant effects. Dr. Comegys is inclined to think that the same injection might be successful in the case of tic douloureux, for which Dr. Merino recommends hypodermic injection of ergotine.

Iodine in Typhoid Fever.—Prof. Roberts Bartholow recommends Tr. iodi. gtt. v., well diluted with water, in the treatment of typhoid fever. Under this—one of the German so-called specific plans of treatment—he says, “with proper diet and nursing, the mortality is much diminished.” The same writer, for the diarrhoea of that disease, prefers the following: ℞ Liq. Potass. Arsenit. gtt. ii., Tr. Opii gtt. iv., repeated often as required.

CANADA

Medical and Surgical Journal.

MONTREAL, OCTOBER, 1880.

PROSECUTING QUACKS.

At the late triennial meeting of the profession of this Province, the principle charge laid at the door of the outgoing Board by those advocating a radical change in its *personnel* was, that they had done nothing to carry out the intentions of the Act with reference to the prosecution of quacks. There may have been some reason for this complaint, but, on the other hand, the late President explained some of the causes which had led to the inaction complained of, and it must be admitted that the obstacles in the way really did appear till now very difficult to overcome. Be that as it may, it is quite certain that the profession look, and we hope with confidence, to the present Board under its energetic president for better things. There is a provision in our existing law for the appointment of a prosecutor for the purpose of indicting any one who shall be found to have contravened the said law. At the first meeting of the new Board held at Quebec on the 29th inst., we read that such an official has actually been appointed and may be expected to enter at once upon his duties. He will not have far to seek in order to find quacks and irregulars, and it is to be hoped that he will not waste his energies at first upon the smaller fry, but will boldly attack those notorious individuals who, in the cities, with brazen-faced impudence, flaunt themselves before the public. Their names can readily be obtained and no doubt, on inquiry, ample evidence can be secured to convict them of being law-breakers. With the majority of these cases there ought to be no difficulty at all, for they are unregistered, and therefore, from that very fact alone, are de-

erving of the punishment inflicted for this misdemeanor by the law. Some cases, however, unfortunately, may not be so easily reached, but nevertheless deserve the attention of the public prosecutor. We refer to certain individuals who have, by some means, succeeded in having themselves placed upon the register of the Province and, since that time, have carried on nefarious, unprofessional and highly reprehensible practices. One case of the kind has recently excited considerable attention in this city, and we may mention some of the circumstances connected with it as an example of the class referred to. A man registers before the Ontario Board in 1875, without collegiate or other degrees whatsoever. He resides in a western city, advertising himself freely by circulars scattered throughout the country. Later on he appears before the Quebec Board and registers with the degrees of M.A., M.D., LL.D! By a very remarkable coincidence, the name of the person here referred to appears amongst those recently published as purchasers of bogus diplomas from the notorious Buchanan of Philadelphia. This person has been preying upon the community by resorting to the distribution of filthy handbills and circulars calculated to frighten youths into believing themselves the subject of spermatorrhoea, &c., and when a victim presents himself, the "Dr." secures all the ready cash available and sometimes takes a note for a further sum. Now, the Ontario Medical Act has a clause to the effect that, if registration have been secured by any fraudulent representation or device, then the Registrar, having laid the matter before the council, shall have power peremptorily to withdraw such registration. We find no such provision in the law of this Province, but we think it very advisable that, on the first opportunity, an amendment to the same effect should be introduced. There should be some means by which a name, placed upon the register by false representations, could be erased. The above case in all probability does not stand alone, and there, at any rate, there is good reason for believing that a most unscrupulous person has been allowed to place upon the Register of this Province the highest academical degrees which had been manufactured to order at Buchanan's mill.

We do hope to see active steps taken at once to rid the country of the incubus of quackery and charlatanism with which we have been heavily weighted. The regular practitioners throughout the country are entitled to this protection, and the opening of a vigorous campaign against these insidious and disgraceful parasites will entitle the new Board to the respect and gratitude of the entire profession.

THE SMALL-POX HOSPITAL.

At last there has come a time in Montreal when small-pox has almost entirely died out, so much so that recently not a single patient has been in the Civic Hospital. We are to be congratulated on the fact, and there can be but little doubt that much of the credit of this improved state of affairs is due to the better method in which vaccination has been carried out, and, above all, to the very much better supply of lymph which has been at the command of the public vaccinators. But, though we must all hope that the City may continue to enjoy immunity from this horrid plague which too long has devastated it and taken away its good name, yet we would warn the Board of Health against entertaining a false sense of security. It is quite well known that the history of the disease here and elsewhere shows that considerable periods during which it was completely driven out, have been followed by others when it re-appeared with its former activity. The true means of preventing this, of course, is thorough vaccination. But, with our absence of birth-registrations and of compulsory vaccination, it is quite certain that, after a time, there must be again found a certain number of susceptible individuals, and therefore from any importation small-pox might again prevail. It is, therefore, a matter of absolute necessity for the City to have *constantly* some place ready for the reception of the earliest cases which might occur. These remarks are suggested from the fact that at recent meetings of the Board of Health it has been seriously mooted to do away with the present Civic Hospital—break up the establishment, and destroy the wooden building. When asked by a member what was to be done if the disease broke

out again, the answer was that an arrangement would be made with the Montreal General and other hospitals for the reception of such patients. Now, we thought that matter had been settled long ago. It took a long fight, a deal of talking, and, worse than all, the sacrifice of many lives before the City Fathers could be induced to provide an isolated place for these contagious cases. We protest most strenuously against any attempt to stultify us in the eyes of the whole community by re-committing an act of folly shown to have been followed by the most disastrous consequences. Economy is the only reason urged for shutting up the Civic Hospital. But this is not a case in which the saving of a few hundred dollars would be a wise, or indeed a justifiable, economy. We might just as well say, if a fire had not occurred for twelve months, let us sell the Babcocks and steamers. Because this kind of Hospital should answer the same purpose as the Babcock engine at the fire, for does it not furnish the means of isolating at once *the earliest* cases, and thus perhaps happily stamping out the disease before it has gained headway? We hope that the Aldermen will show themselves fully alive to the importance of this question, and will not listen to any proposition tending to endanger the future health and fair name of the city they represent.

COLLEGE OF PHYSICIANS AND SURGEONS, PROVINCE OF QUEBEC.

—The semi-annual meeting of the College of Physicians and Surgeons, Province of Quebec, was held in Quebec on Wednesday, 29th ult. There were present the following governors: Drs. Howard, David, Craik, Rodger, Gibson, Robillard, Lanctot, Larue, Boivin, Lafontaine, Gervais, Austin, Perreault, Ladouceur, Rottot, Brosseau, Gingras, Lemieux, Simard, Rinfret, De St. George, Trudel, Worthington, Larue (Thos.), Parke, Laberge, Marsden, Belleau, Sewell, Rinfret (L. F.), Ross and Lachapelle.

The following gentlemen have successfully passed the matriculation examination and been admitted to the study of the profession:—John Elder, Starr, Carron, Valin, George Matte, Honore Gauthier, James Foy, Theophile Pare, G. Paradis, Alfred Richard, Devillers, Arthur David, Alfred Mousette, Arthur Delisle, O. Berthiaume, H. Leduc, Mignault, Napoleon Black-

burn, H. Brosseau, W. Fournier, Leblanc and Picard. Sixteen were rejected.

The following gentlemen duly received their license to practise : C. Mayrand, M.D., Laval ; J. F. Fandry, M.D., Laval ; P. S. W. A. Gauvreau, M.D., Laval ; A. Paradis, M.D., Laval ; W. A. Verge, M.D., Laval ; G. Dedard, M.D., Laval ; J. M. Beau-soleil, M.D., Victoria ; O. Clouthier, M.D., Laval ; G. Prevost, M.D., Laval ; G. Fournier, M.D., E. Laforge, M.D., Charles LaRocque, M.D., L. Mignault, M.D., and A. Meikle, M.D., Victoria. Donald A. Livingstone, who has been in practice for 35 years, received his license without examination, in accordance with the act of incorporation.

Mr. C. E. Lamirande, of Montreal, was appointed to take legal proceedings against charlatans and unlicensed practitioners throughout the Province of Quebec. It was also moved that this officer be intrusted to take legal proceedings against unregistered practitioners forthwith, and also that the registrar be instructed to place the names of those members twelve months in arrears for their annual contribution in the hands of the prosecuting officer. A new tariff for practitioners, both in town and country, was adopted, and will be shortly submitted to the Lieutenant-Governor in council for his sanction. The following examining committee was appointed for the next semi-annual meeting : Anatomy, Dr. Lemieux ; Surgery, Dr. Hingston ; Medical Jurisprudence, Dr. Gervais ; Physiology, Dr. Lachapelle ; Practice of Medicine, Dr. Austin ; Materia Medica, Dr. Rousseau ; Midwifery, Dr. Trudel ; Botany and Hygienics, Dr. Lanctot ; Chemistry, Dr. Rodger.

OPENING OF SCHOOLS.—At McGill University the introductory lecture was delivered by Prof. Osler, on the 2nd Oct. As this session is specially marked by the inauguration of the new Physiological Laboratory of the Faculty, the selection of the Professor of Institutes for the performance of this duty was specially appropriate. The address was given at 8 o'clock in the evening instead of in the morning as has been hitherto customary. A number of representatives from Bishop's, Laval and Victoria Universities were present together with the members of the

Faculties of Arts and Science of McGill, and other invited guests. A very large class of students, about 160, were present, although a number had not yet arrived. The speaker, who was heard with marked attention, dwelt chiefly upon the necessary connection between physiology and pathology and the great opportunities still lying before every earnest student for doing something to help in the elucidation of many of the vexed questions of the day. He congratulated the Faculty upon the possession of a magnificent laboratory now filled with all the apparatus necessary for the demonstration of the important facts of Physiology. At the conclusion, the dean invited the visitors to inspect the laboratory where also the new apparatus was to be seen. Refreshments were served in the library, and a very pleasant opening came to a conclusion.

—The opening address at the Laval University of this city was delivered on the evening of Tuesday, 5th inst. in the Cabinet de Lecture Paroissial, by the Rev. Mr. Beaudet. All the members of the the medical faculty were present as well as representatives from the Faculties of Theology and Law. Mr. Lacoste, Q.C. also addressed the meeting on the legal subject and the *séance* was concluded by some remarks from Monseigneur Fabre.

—The introductory at the Medical Faculty of Bishop's College was delivered on the morning of the 4th inst. by Prof. Armstrong.

TYPHOID IN MILK.—Some months ago considerable interest was felt here on this subject owing to a series of cases in which there was the strongest reason for suspecting this method of contagion. Again we hear of the same thing. The fact becoming known that several persons amongst the customers of one milkman were suffering from this disease, led to further enquiries by medical men amongst those they were attending with fever, with the result of finding still others who have had milk from the same source. We have since learnt that a member of the milkman's family has been ill with typhoid fever at the home-stead whence the milk is brought. We are by no means satisfied that our sanitary authorities are keeping sufficient watch

over the milk supply of the city, and should be glad to hear of more stringent regulations coming into force.

DEFICIENT LATINITY.—A correspondent follows up a recent communication by some criticisms upon the Report of the General Hospital. Perhaps the remarks made by both writers may have a salutary effect upon the future published statements of our medical charities, “S. minor” believes that, with more shrewdness than his neighbours, he has made a discovery—viz., that the communication of “Scrutator” was written by the Editor. The Editor is sorry to inform him that his find is a *mare’s nest*, and begs to say that any remarks he has to make to his readers are to be found in their customary department, and nowhere else.

Medical Items.

PERSONAL.—Dr. J. B. Lawford (McGill) has been appointed Assistant House-Physician to St. Thomas’ Hospital, London.

A DISTINCTION OF INFANTICIDES.—The law in Schwetz, Switzerland, as just adopted by the local legislature, very singularly makes a distinction between legitimate and illegitimate children. The crime of infanticide will be punished with death only when the victim is a child born in wedlock.

AN EPIDEMIC OF PERNICIOUS ANÆMIA, which has recently been observed among the miners of the St. Gothard tunnel, is attributed, by Dr. Perroncito, to the presence of certain parasites in the intestines. Three different kinds of worms have been found in the dejections. One of these, an anchylostoma, is called *Dochimus duodenalis*: the others are varieties of *anguillula*.

NON-RESTRAINT IN THE TREATMENT OF THE INSANE.—Dr. Rutherford, of the Parochial Asylum, at Woodilee, Scotland, states in his recent annual report that, mainly through fully occupying the patients, and thereby counteracting the tendency to manifestation of their insane ideas, it has been found practicable to carry out the open-door system of treatment. All the doors of the asylum open with ordinary handles, and only the chief attendants are in possession of a key. Dr. R. believes

that by the diminution of apparent restrictions upon liberty, greater quietness and contentment are secured, which have the effect of promoting recovery.

THE MORALITY OF MEDICINE.—The criminal statistics of Brooklyn for the past year show 25,906 arrests were made by the police. One was a clergyman, one an editor, eight were artists, six actors, two custom-house officers, *forty-seven lawyers* (Jerusalem !), and eleven undertakers ; but not a physician was there in the lot.—*Ex.*

PSYCHOLOGISTS BEWARE !—The *Union Medicale* reports that Dr. Legrand du Saull, one of the celebrated alienist physicians of Paris, was recently prosecuted for defamation, he having related, at a meeting of the Societe Medico-Psychologique, the case of a person who, according to his view, was insane—his account of the case appearing in the journal of the Society. When this person was liberated from the asylum in which he had been detained, he immediately brought an action against the narrator of his case. Dr. Legrand made no reply to this strange accusation, but the tribunal in its judgment, exonerated him from all penalty, inasmuch as the report of a learned society—published without any intention to do harm, and purely with a scientific object—does not fall within the application of the law.—*Med. Press.*

ANCHYLOSIS OF THE NECK—FORCIBLE EXTENSION—DEATH.
—An extraordinary procedure is related in the *New York Hospital Gazette*. A patient affected with ankylosis of the cervical vertebræ fell into the hands of a homeopath. The deformity was so great that the patient's head touched his chest. The physician accepted the patient's diagnosis of "rheumatism," concluded that the trouble was in the muscles, and advised an operation for the removal of the deformity. On the day appointed the patient was etherised, and his body and shoulders bound to the table by bandages. Additional bandages having been applied to the head, traction was made on these with all the strength that two men could exert, until the neck was straightened. During the pulling, sudden cracking noises were heard twice, but this caused no alarm to the surgeons (?) present, who continued their efforts, and finally succeeded in taking a human life by breaking the man's neck. The patient died on the table.