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CANADA
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Original Communications.

ON DISEASE OF THE MASTOID CELLS.

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

Mastoid disease has attracted so much attention within the last few years, that I feel no small amount of diffidence in offering my own experience in a field of labor so thoroughly cultivated as this has been. Indeed I should decline to take up the time of the Association with this subject, but for the fact that I believe most of the work recently done with a view to increasing our knowledge concerning the morbid conditions so commonly met with in the mastoid region has not yet found its way into general medical literature, and is therefore hardly accessible to the profession. I purpose giving a brief account of my own observations during the past eighteen months, derived from a total of about 550 cases of ear disease. I am not prepared to say whether the twenty cases of mastoid disease met with in this total represents the usual proportion as compared with other ear affections, but I must admit that if they do, mastoid disease is of far more frequent occurrence than I had ever supposed it to be. The first series of cases may be classed as external secondary inflammation of the mastoid.

Case I.—A pale, worn-looking woman, 39 years of age, suffering from purulent otitis media of four months duration, with large perforation of each drum-head. The ear disease came on

suddenly, after parturition. First seen June 29th. During the past month had suffered considerably from pain in the head and ears. For several days the pain has been intense. Ears discharging freely, moderate swelling, and extreme tenderness over each mastoid.

Three leeches were applied behind each ear, and the assiduous use of moist warmth enjoined. Quinine was given in 3-grain doses every six hours. Complete recovery ensued in a few days, and the discharge from the ears ceased after three weeks treatment.

CASES II., III. & IV.—Very similar to case I., except that only one ear was involved. Two of these had for a long time been affected with chronic purulent otitis media. The acute outbreak was attributed to having taken cold. In the other case, mastoid symptoms came on some two weeks after an attack of acute purulent inflammation of a previously healthy middle ear. The early use of leeches and moist heat promptly arrested the disease in all three.

CASE V.—Was rather more severe than the preceding four, a periosteal abscess having already formed when the patient presented herself at the Hospital. The history, if correctly given, makes the case somewhat remarkable. I am in doubt whether it should not be classed as *acute primary external mastoiditis;* if not, then I have never met with this variety of mastoid disease. The history was briefly as follows: The patient, a widow, æt. 32, in fair general health, was not aware of any ear disease until five days before she came to the Hospital. The first intimation of any such trouble was an attack of pain, with soreness behind the ear; in the latter situation, swelling soon occurred. The pain and swelling were moderate in degree; constitutional disturbance very slight. On the other hand, the amount of ear disease was quite inconspicuous; auditory canal somewhat hyperæmic; drum-head slightly injected and thickened at periphery; air entered tympanum by Poitzer's inflation, with a moist sound and with the immediate effect of improving hearing from 2/40 to 13/40. The integument behind the ear was of a dull red color and boggy; the swelling sufficient to quite obliterate the post-auricular sulcus. There was unmistakable

fluctuation over the mastoid. An incision evacuated a large quantity of healthy pus. The wound was kept open with lint and poultices applied. Two days later the wound was still discharging freely, and the case to all appearances doing extremely well. About ½″ above and behind the external meatus a small area of rough bone could be felt with a probe.

The patient did not present herself again, but probably made a satisfactory recovery.

CASE VI.—An otherwise healthy child, 3 years old. Acute purulent otitis of four days' duration; perforation of membrana tympani; copious otorrhœa; integament behind auricle and adjacent parts moderately swollen. Relieved with leeches and poultices. Severe pain with swelling returned three days later. A free incision to the bone was made; the bone appeared healthy. In the course of a week all inflammatory symptoms had subsided, the wound was nearly healed, and the ear discharging but slightly.

CASE VII.—A delicate male child, five years of age, quite recently recovered from measles, which had given rise to a free discharge from the left ear, with perforation of the drum-head and a swollen meatus. Seen for the first time in consultation with the family physician on 7th of April. Three days previously a swelling had appeared over the mastoid; the integument was red tense and shiny, and there was distinct fluctuation. A free incision gave vent to a large collection of pus; the wound was kept open with lint, and continued for a long time to discharge freely, as did also the ear. There is still a fistulous opening close behind the upper part of the attachment of auricle, from which several fragments of necrosed bone have been removed. The child has improved very much in general health, and does not appear to suffer any discomfort from the ear disease.

CASE VIII.—Brother of the preceding, æt. 2½. An exceeding puny child; ear disease identical, except that an incision was made twenty-four hours after the commencement of swelling behind the ear. The inflammation subsided rapidly, but the

wound is not yet entirely closed; there is probably a small focus of diseased bone.

CASE IX.—L. S., æt. 23, tall, fair, well developed, otherwise healthy young woman. Has had ear-ache on several occasions, but never any discharge from the ear until the present attack. The order of events was as follows: Severe pain in the ear for four days and nights, then otorrhœa and relief from the pain for ten days, then return of pain, deep in, and behind the ear, swelling and redness, with œdema of mastoid region; the swelling extends down the neck; hearing = 0/40, *i.e.*, watch not heard on contact; sharp febrile disturbance, free otorrhœa.

Active antiphlogistic treatment failed to arrest the malady; on the contrary, the symptoms became more grave and seemed to threaten cerebral complication.

Wild's incision was made. The tissues were found deeply infiltrated, but there was no pus.

Poultices were applied and changed frequently; recovery ensued slowly, and was further retarded by an attack of erysipelas of the head and face, which, however, fortunately avoided the wound. Six weeks later the drum was healed and of almost natural appearance; hearing excellent. In this case there was probably, at least, an intense and active congestion of the mastoid cells.

CASE X.—A man of vigorous constitution, but considerably reduced by a recent attack of typhoid fever.

Purulent otitis media set in during the early period of convalescence. This soon led to mastoid complication, which leeching and poulticing failed to subdue.

Performed Wild's incision a few days after the swelling over mastoid had made its appearance. The case went on well for about a week, and the wound was healing, but a return of the inflammatory process made it necessary to re-incise the part, cutting again quite freely to the bone. The effect of this procedure was all that could be desired. The mastoid difficulty now speedily subsided, though the ear continued to discharge until the case was lost sight of, two weeks after leaving the Hospital; there was then only a very small perforation near

the posterior edge of the membrane and only slight discharge; the hearing was steadily improving.

Deep seated, or internal secondary acute inflammation of the mastoid.

CASE XI.—W. T., æt. 4, a sickly infant, admitted into the Hospital in July, 1879.

Previous history not obtained. On admission, left ear discharging an abundance of fœtid pus, nearly complete paralysis of the left facial nerve; meatus narrow from swelling, granulations growing from its deeper parts. A probe detected necrosed bone in tympanum, which, however, was not loosened sufficiently to attempt its removal. The treatment consisted in thorough and frequent cleansing of the ear, with attention to the general health.

During the ensuing winter had two attacks of swelling behind and above the ear. The second only yielded after a free incision had evacuated a large quantity of pus.

Shortly afterwards some fragments of bone presented in the meatus, and were removed with fine forceps. One of these, about three lines in length, proved to be half of the margin of the fenestra ovalis. The otorrhœa continues, though not anything like so freely as before. There is a fistulous opening, above and behind the meatus, leading to the carious bone, for the removal of which some operative procedure will probably be necessary. The child is too young to test the hearing power, but there can be little doubt it is utterly destroyed. The other ear, though discharging occasionally, is not much impaired in function.

CASE XII.—A girl about 9 years of age, presenting the usual signs of mastoid periostitis after acute suppuration of the middle-ear, was relieved for a short time by an early incision. This procedure had to be repeated before a permanent cure was effected. There was no caries or necrosis, a circumstance doubtless due to timely and efficient surgical interference.

CASE XIII.—A child four years of age, of French-Canadian parentage. Was brought to the Hospital in a

shattered state of health after a severe attack of measles. Had acute muco-purulent catarrh of conjunctiva, rhino-pharyngitis, dacryo-cystitis and purulent otitis media.

After two weeks treatment appeared to be making satisfactory progress towards recovery, when suddenly symptoms of mastoid disease became manifested, An incision was advised, but declined by the parents. About a week later the child died at home of a brain disease, probably acute meningitis.

CASE XIV.—A servant girl, 30 years of age, caught a severe cold by getting wet in her berth whilst crossing the Atlantic. A short period of intense ear-ache was followed by a profuse discharge. The pain subsided for a time, but three weeks later returned again. When seen for the first time, I found a perforation in the lower posterior quadrant of the membrane, otorrhœa, some tenderness over mastoid and an ulcerative pharyngitis.

Leeches and poultices gave only temporary relief; pain in the head and swelling over mastoid continued to augment; patient obstinately refused any operative interference. The pharyngitis assumed a phagedœnic character and septic phenomena supervened; worn out with this and the constant pain, death ensued after a lingering illness of nine weeks duration. The relatives being as much afraid of the knife after death as she herself had been before, there was no opportunity of ascertaining the precise pathological conditions.

CASE XV.—J. L., æt. 23, French-Canadian, mill-hand; chronic purulent middle-ear disease since childhood. During the past ten years the discharge was only occasional and scanty. The hearing power was entirely destroyed. Came to Hospital June, 1879, on account of intense pain in the back of the head, which had persisted ever since an attack of ear-ache the previous autumn, brought on by working in the cold and wet. There was also great tenderness over and behind mastoid, but not a *trace of swelling*; scanty purulent discharge from the ear and nearly complete loss of the drum-head. The patient walked like a drunken man, and suffered excruciating pain from slight movement, such as driving in a cab; vomited occasionally without any apparent cause. A few days after admission an

ophthalmoscopic examination was made, and double optic neuritis discovered. Diagnosis—Abscess of cerebellum, secondary to ear disease. Died July 13th, twenty-five days after admission. A *post mortem* revealed an abscess one-half the size of a hen's egg, in left lateral lobe of cerebellum. Unfortunately, I was absent from Montreal when he died, and did not see the *post-mortem*. No minute examination of the bone was made, and therefore the connection between the abscess and the disease of the ear was not discovered, though there can be no reasonable doubt that the two conditions stood in the relation of cause and effect.

CASE XVI.—A robust man, æt. 45, came for advice, February 2nd, 1880, with the following history. Hard of hearing since childhood; this he attributes to the effects of scarlet fever. The left ear was the better one until about the first of January past, when he took a severe cold and with it had an attack of ear-ache. The pain subsided in a couple of days, after syringing the ear and applying poultices, but he continued to suffer from what he thought was neuralgia of the left side of head and face. For the past week he had suffered intensely from a deep-seated pain in the ear and neuralgia in the left temple. The pain coming on at 4 p.m., usually lasted till the following morning, with such severity as to render sleep impossible except when under the influence of morphia.

Noted when first seen—The right ear is now the better one; hearing 2/40; membrane has a silvery lustre, but is rather fallen in; left ear, hearing c/40; inner end of meatus reddened, so also is the periphery of drum-head as well as the manubrium; the membrane appears thickened and lustreless of a dull yellowish grey color and somewhat sunken; air enters both ears with a moist sound without improving hearing; tuning-fork on glabella loudest in left; a little tenderness at posterior border of left mastoid, but not a trace of swelling; evening temperature 100°, morning do. 99°; pulse 80 to 85, wanting in volume and rhythm. Diagnosis: Sub-acute catarrh of left tympanum with congestion of the mastoid cells.

After two weeks treatment the patient felt well enough to return to his business in the backwoods, several hundred miles

distant. He was free from pain, but the hearing had not improved, and there was still a slight elevation of temperature, a circumstance in itself of grave import. On the way home visited some relatives, and is reported to have taken cold again. On the fourth day after leaving Montreal was seized with a violent headache, and on the sixth day died comatose. There was no autopsy, but a comparison with the next case warrants the assumption that death resulted from acute meningitis.

CASE XVII.—A brief account of this case may be found in the CANADA MEDICAL AND SURGICAL JOURNAL for March, 1880, a synopsis of which is as follows:

J. W., laborer, æt. 35, was admitted into Hospital January 17, 1880. Delirious, paralysis of left side. One month ago ear-ache for a few hours, followed by discharge from the ear; resumed work the following day; discharge ceased in three or four days, and he felt well till nine days ago, when the ear-ache returned with extreme violence; two days before admission discharge from the ear recurred, but the pain kept on increasing and extended over the entire left side of head. He soon became delirious, and began to lose power in the left arm, there was no vomiting. On admission, free purulent discharge from the ear; mastoid region normal; constant talkative wandering delirium with intervals of half-stupidity; temperature 102°; pulse 96. Died comatose on the 19th, that is, the fourth day after the apparent onset of the head symptoms. The autopsy showed diffuse purulent meningitis, the origin of which was clearly traceable to the diseased ear. The anatomical peculiarities of this the temporal bone (the specimen exhibited) explain why there was no external sign of mastoid disease, and it will be seen that the operation of opening the mastoid down to the seat of disease could not possibly have been performed without coming in contact with walls of the lateral sinus, which curves so far forwards that only a thin diaphanous lamella of bone exists between it and the posterior wall of the external auditory canal, the cancellous bony structure in the vicinity of the posterior wall of the tympanum being thus completely sepa-

rated from the cellular structure in the more external portion of the mastoid.

CASE XVIII.—First seen July 17th, 1879. An exceedingly corpulent woman, 65 years of age; never had ear disease before the present attack. During the past three months suffered martyrdom, from *neuralgia* in the right ear and right side of head. About a month ago the right ear began to discharge, and has continued to do so up to the present time. For the past three weeks has been unable to sleep at all on account of the pain, which nothing seemed to relieve. I saw the patient in consultation with the family physician, and at his request took charge of the case. There was perforation of the drum in lower posterior quadrant of the tympanic membrane, considerable swelling of meatus, free otorrhœa, mastoid region slightly swollen and tender. Leeching and other remedial measures were actively employed, but afforded only transient benefit. The swelling over mastoid increased, and there was severe constitutional disturbance; several slight chills occurred. On the 27th, permission was with difficulty obtained to incise behind the ear; an immensely deep incision was necessary, but a large quantity of pus escaped; great relief ensued for about three days; the pain then recurred worse than ever, radiating all over the side and up to the top of the head; it could only be partly quieted by morphia. The patient refused to allow any further operation and she gradually lapsed into stupor. Whilst in this condition, as a sort of forlorn hope, the mastoid was opened in the usual way; after cutting through a thick layer of very dense bone, softer tissue was reached, and pus welled out freely from the aperture in the bone. The operation failed to give relief, and the patient died comatose 48 hours afterwards. The autopsy revealed general purulent meningitis, with thromboses and purulent lymph in the lateral and inferior petrosal sinuses.

I quite believe the same operation performed a few days earlier would in all probability have been the means of saving the patient.

CASE XIX.—A gentleman about 30 years of age, of good constitution and uniformly excellent health, came to see me

some two years previous to the acute outbreak of ear disease, on account of a slight purulent discharge from the left ear, attended with a feeling of distressing fullness and discomfort in the ear and in that side of the head. The origin of the disease would appear to have been a sharp attack of ear-ache some twelve for fourteen years previously, which laid him up for about two weeks. He seemed almost to have forgotten the circumstance, but on close questioning admitted the ear had never been quite right since, though it had not troubled him sufficiently to render advice necessary until quite recently.

I found a moderate quantity of extremely fœtid pus and epithelial debris in the auditory canals, the walls of which when cleansed were seen to be thickened, smooth and red, but without a trace of ulceration or granulations. The drum-head was similarly affected, outline of malleus barely distinguishable; hearing $= \frac{1}{40}$; tuning-fork or glabella loudest in left ear. Inflated by Peitzer's method air entered the tympanum, but less abruptly than on the other side. Cleansing auditory canal always made the ear feel better for a time and slightly improved the hearing. The discharge resisted all treatment, and he finally contented himself with simply cleansing the ear out more or less frequently with warm water. A year and half later he came to me to see if any relief could be obtained from a harassing pain in the ear and side of the head, which for more than six weeks had tormented him day and night, but always worse at night than during the day. I found the ear in much the same condition as it had previously been, only the auditory canal was rather more red, swollen and sensitive; the swelling was greatest along the posterior walls, the mastoid normal. I made several incisions in the walls of the canal and encouraged the bleeding with warm water. The following night he slept well and was free from pain. During the second night the pain returned, and the next day I found him suffering intensely from pain in the ear and up the side of the head; there was also a good deal of febrile disturbance. Leeches and fomentations were of no avail, but half a grain of morphia secured a good night's sleep. The following day there was

nausea and vomiting, and no improvement in the other symptoms. On the fifth day, reckoning from the time when the first scarification of the canal was done, had a chill, and the symptoms were now so urgent that although there was no external evidence of mastoid disease, it was decided to cut down on the part, with a view to subsequently making an aperture in the bone. The little operation was performed under chloroform. Had a sharp rigor after the anæsthetic, and experienced no benefit from the incision.

On the seventh day had a third chill, and the symptoms were a combination of septicæmia and cerebral disturbacne. There was slight aphasia and great irritability. Now, for the first time, came some tenderness over the posterior border of mastoid. The wound was enlarged somewhat, and an aperture made with drill and scoop in the usual situation. After going through fully half an inch of very dense bone, extremely fœtid pus was reached, and flowed out in considerable quantity. It came from the immediate vicinity of the lateral sinus. The operation did not afford the relief that might have been expected, except to the pain; all the other threatening symptoms continued. On several occasions further portions of the mastoid were removed, until it was evident that a large part of the sigmoid portion of the lateral sinus was exposed and in a sloughy condition; sloughs were even removed from the sinus. A large abscess formed in the neck, and by pressure could be partially emptied through the sinus. Although at times the patient seemed to be doing well, the general tenor of the case was too evidently towards a fatal result, and on the thirty-fifth day he died comatose.

The *post mortem* showed complete obliteration of the left lateral and inferior petrosal sinuses, and a large abscess in the under part of the left middle cerebral lobe, between which and the inner extremity of the lateral sinus a direct connection existed.

Case XX.—A temperate and healthy man; had never suffered from ear disease until the present attack, which came on immediately after surf-bathing, at Long Branch, the water having been forced into his ears whilst going through a breaker. Aug.

20th, or six days later, he came to Montreal, and I found him the subject of an acute catarrhal otitis media without perforation of the drum. He improved under treatment, and returned to his home some ten days later. October 2nd, returned again on account of intense pain in the ear and temple. The drum-head was intact, but thick and red, there was swelling over mastoid and for a short distance down the neck. I incised the drum and performed Wild's incision. For two days the ear discharged freely and he felt quite comfortable, but during the night of the 4th of October violent pain returned in the form of an occipito-frontal neuralgia. He continued to grow steadily worse, and on the 11th it was decided to open the mastoid. This was done with drill and gouge, a large aperture one-half an inch deep and about the same in width was made; having reached soft bone, but no pus, it was deemed advisable to desist from further excavation and await results. The wound was filled with boracic lint and a poultice applied. There was but little improvement in the patient's condition for 36 hours, but at the end of this time he began visibly to improve, and in the course of a few weeks was quite well. At the present date the hearing is very good, the drum-head almost normal, and the seat of wound in mastoid only marked by a small scar.

To properly analyze these twenty cases would necessitate going much more completely into their details than my time will allow or your patience permit. I will therefore sum up my impressions in a few brief statements.

First. Acute secondary external inflammation of the mastoid is, when promptly and efficiently treated, not at all a dangerous disease. An incision should not be delayed more than twenty-four hours, if leeches, aconite and moist heat fail to arrest its progress. An early incision is especially indicated in young children, on account of their peculiar liability to necrosis or carious disease of the bone, and its extension inwards.

Second. It is not always possible to distinguish between acute external and acute internal inflammation of the mastoid, but the latter probably exists in any case of obvious mastoid inflammation if there has been a considerable period of severe

pain of a neuralgic character before the external signs of the disease have made their appearance.

Third. Some of the worst and most hopeless cases of mastoiditis do not show any positive external sign of their presence. It is just in these cases that an early diagnosis of pus in the bone is most desirable and yet most difficult. The presence of persistent and severe one-sided pain in the head, with co-existent ear disease of a catarrhal or purulent character, is very suspicious of deep-seated mastoid disease; a persistent slight elevation of temperature increases the probability of pent-up pus being present. Possibly the use of the surface thermometer over the mastoid would aid in the diagnosis.

Fourth. When once we are satisfied that pus has formed in the mastoid, it is our duty to open the bone without delay.

Fifth. The operation is not by any means always so easy as it is often represented, nor is it devoid of danger. Often a very thick layer of firm bone requires to be cut through, and sometimes the most skilful operator will necessarily come in contact with the lateral sinus.

In future operations, when the outer table of bone is firm and unyielding, it is my intention to use the dentist's drill (dental and surgical engine), as I feel confident it will do the work of opening the bone with far greater ease, precision, rapidity, neatness and safety, than any of the instruments usually employed for this purpose.

CASE OF PYOPNEUMOTHORAX SUBPHRENICUS (LEYDEN.)

By WM. GARDNER, M.D.

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

[Read before the Medico-Chirurgical Society of Montreal.]

J. S., æt. 28, dark complexion, medium stature, slimly built, delicate-looking, sent for me for intense pain in the right iliac region. He gave a history of delicate general health, defective appetite, habitual constipation, and frequent attacks of pain in the region already referred to, the right iliac, with more than

usually troublesome constipation and general malaise. These attacks frequently lasted for four or five days, and confined him to bed, but he was not in the habit of seeking medical advice for them, and this was the first time that I had seen him. The pain was intense, caused him to groan, and was referred principally to the right groin, but radiated upwards and backwards to the right loin and downwards to the scrotum, but there was no retraction of the testicle. There was no tympanites, no tumor, as of fæcal impaction, to be felt; the bowels had been moved a short time previously, there was no vomiting, and no elevation of temperature. The pain was with difficulty relieved by hypodermic use of Battley's sedative solution of opium. These symptoms within a few hours developed into those of perityphlitis and then of general peritonitis: general abdominal pain and tenderness, marked tympanites and elevation of temperature. The patient was now leeched and had applications of turpentine epithems and poultices to the abdomen, the hypodermic use of opium being continued. Within forty-eight hours from the time when I was first called to him, the symptoms became aggravated to such an extent that Drs. Fenwick and Buller, who saw him in consultation, agreed with me that he could not survive more than ten or twelve hours. The pain and tenderness had indeed subsided to a large extent, but the pulse was very feeble and rapid, approaching 150 per minute, the eyes sunken, the general surface cold and bathed in a profuse clammy sweat; in short, a condition of collapse. After remaining in this condition for twenty-four hours, he gradually rallied, all the general symptoms becoming more favorable, and the pain, general tenderness of the abdomen and tympanites disappearing. There remained, however, persistent tenderness in the right iliac and lumbar regions. A feeling of fullness, not very marked, developed itself, but at no time was there to be felt anything that could be called a tumor or any fluctuation. The general condition improved correspondingly, the temperature fell, the patient was able to take some food, and the bowels moved spontaneously. Within a few days a stitch-like pain, with slight cough, developed in the right side of the chest in front, involving

the lateral and front parts up to the fourth rib. The was no dullness on percussion, no pleuritic friction sounds to be heard, but weak respiration sounds over the anterior and lateral parts of the right lung. This pain was easily controlled, but recurred several times. The hoped-for convalescence was slow in coming, the temperature occasionally rose, especially towards evening. There was no vomiting, but the tongue was red and smooth in centre, and furred at its edges. Slight diarrhœa was a frequent symptom. The patient remained very weak, being unable either to raise or turn himself in bed, from a lameness or general tenderness of the right side of the trunk. Gradually dullness on percussion developed in the base of the right chest, both back and front. Suddenly, about the end of the seventh week of his illness, and two weeks before he died, in the night, with sudden sharp pain in the right side, he began to cough up what was, from the description, probably pus, but was certainly soon replaced by what was shown me, a thin brownish fluid, having all the other characters of thin fæces. This continued to be ejected for some hours at short intervals, actual vomiting being occasionally excited by the ill taste and odor of the matters coughed up. When I saw him next day he was in a condition of semi-collapse, with a very frequent, weak, thready pulse, and cold, clammy sweats. On physical examination of the chest a remarkable change had taken place. The physical signs of air and fluid in the right thorax had developed themselves, in, however, a somewhat modified form. As the patient lay on his back, percussion of the right side gave forth from the third interspace downwards to the lower edges of the ribs in front and at the side a clear tympanitic note. Above the third interspace the note approached in character the ordinary healthy note. At the dependent part of the chest, as he lay on his back, the note was perfectly dull. By turning the patient on his left side, the limit of tympanitic note on percussion was altered. All the parts of the right chest now uppermost were tympanitic when percussed, showing the presence of air and a liquid. Nowhere, in any position, could the liver dullness be discovered; neither could the liver be felt by palp-

ation. On auscultation, weak, amphoric respiration was present from the third interspace downwards; on coughing, splashing sounds. Above third interspace the respiratory sounds approached in character the vesicular murmur of health. There was considerably diminished mobility of the right chest wall, which was quite sensitive to the pressure of the stethoscope. A normal condition of the intercostal spaces obtained.

During the last fortnight that he lived, the patient coughed up at intervals pus, and the thin, brown, stinking fluid above described. His general condition varied considerably, but was for the most part one of great debility, with frequent diarrhœa, the physical signs varying only in the character of the respiratory sound, which was not always amphoric, but occasionally distantly blowing in character.

On the morning of the day he died, my friend, Dr. Ross, saw him, and after examination agreed with me in the diagnosis I had made, viz., perityphlitic abscess communicating with the bowel, creeping up behind the peritoneum and perforating the diaphragm, and thus gaining access to the cavity of the chest and subsequently perforating the lung. His general condition was then more favorable than it had been on any day since the setting up of the pulmonary fistula. The same evening the cough and expectoration, which, indeed, was now rather a gulping up of the thin, fœtid fluid, returned, and in this paroxysm he died, exhausted and asphyxiated.

Autopsy, fifteen hours after death, performed by Dr. Richard McDonnell: Emaciation extreme; a bed sore over the sacrum; rigor mortis moderately well marked; chest and abdomen only examined. On opening the abdominal cavity the first thing noticed was the absence of the liver from its natural position. It was pushed upwards, backwards and inwards towards the spinal column, completely away from the right lateral and anterior chest wall, thus explaining the impossibility of either feeling or discovering it by percussion. To the outside and behind the cæcum an abscess cavity was discovered, having on its inner wall the appendix vermiformis containing a number of masses of inspissated, quite hard, fæcal matter. Two

or three openings existed between the cæcum and this cavity, one of them being large enough to admit the little finger. This cavity communicated by a narrow neck-like prolongation, extending upwards behind the peritoneum, with a very large cavity, probably as large as a child's head, bounded above by the diaphragm pushed up to the level of the third interspace; externally and anteriorly by the ribs, as far as their free edges; below and on the inner side by the right lobe of the liver, whose upper surface and free edge compressed, flattened, and rendered quite obtuse, formed part of the wall of the abscess cavity. The contents of this cavity were not pus, but a thin, brown-colored, stinking fluid containing flakes of curd of milk, and gas or air. The stomach was somewhat pushed over to the left. The transverse colon was somewhat displaced downwards. The right lung was much compressed, its lower lobe collapsed and closely adherent to the diaphragm; a series of perforations existed extending through the lung substance to the bronchi. There was no effusion in the right pleural cavity. The left lung was healthy; the heart healthy, a little displaced to the left.

The diagnosis was pyopneumothorax. At the autopsy gas and liquid were found in a region occupied anatomically in their normal condition by lung-tissue, but the containing sac was below the diaphragm.

So far as I know, the literature of sub-diaphragmatic abscess is as yet rather scanty. The most important article on the subject with which I am acquainted, and to which my attention was directed by my friend and colleague, Professor George Ross, of McGill University, is that by Prof. Leyden, of Berlin. This article, entitled, "On Pyopneumothorax subphrenicus and subphrenic abscesses," appears in the *Zeitschrift fur Klinische Medicin*, Band i., Heft ii. Prof. Leyden first discusses the symptoms and physical signs of sub-Phrenic Pyopneumothorax, then briefly refers to the few cases previously published.

The first is one observed at the Charité Hospital, Berlin, and published by Dr. Pfuhl, in the Berlin *Klinische Wochenschrift* for 1877. In this case, a young girl, who had symptoms

of right pleurisy, suddenly developed those of pyopneumothorax; paracentesis was performed, the liquid evacuated being exceedingly fœtid. Notwithstanding this unusual character of the evacuated fluid, Dr. Leyden, who saw the case, had no doubt of the correctness of the diagnosis previously made. The patient died fifteen minutes after the operation, although only 1,500 cubic centimetres were removed. At the autopsy, to his great surprise, the exudation was situated, not in the pleural cavity, but below the diaphragm, which was so strongly displaced upwards that the signs of true pyopneumothorax were closely simulated. The origin of the abscess in this case was a perforating ulcer in the duodenum. Pfuhl in this paper refers to two other cases, which were the only ones he could find recorded at that time, three years ago. One of these, by Wintrich, occurred at the Wurzburg Clinic, and was the case of a woman in whom the effusion took place on the left side, and originated in a perforating gastric ulcer. Here, also, a diagnosis of true pyopneumothorax was made. Termination, death.

The second case was that reported by Sturges. This occurred on the left side of the chest, and, as in the previous case, besides the displacement upwards of the diaphragm, there was also great displacement of the heart to the right side. This case ended in spontaneous recovery.

Dr. Bernheim publishes another case, in the *Revue Medicale de l'Est*, for the 15th December, 1878.

Dr. Sænger, of Leipzic, publishes an article in the *Archiv fur Heilkunde*, for 1878, based on three cases observed by him, ending fatally, and verified by autopsy. The first two cases resulted from injury—a fall and a blow, respectively. The third case resulted from perforation of an old gastric ulcer.

Levison, of Copenhagen, publishes a case, quoted in Börner's *Deutscher Wochenschrift*, 1878, No. 3, s. 32. This patient, a man of 22, was admitted to hospital with symptoms of peritonitis from perforation. A few days later the physical signs of pyopneumothorax became apparent—tympanitic percussion sounds and amphoric phenomena on auscultation. A diagnosis of pyopneumothorax, in consequence of perforation of the

diaphragm, was made. Tapping of the chest in the seventh and eighth intercostal spaces was actually performed; much gas, but no liquid, was evacuated. Death occurred shortly afterwards, and at the autopsy an abscess-cavity of the kind under consideration, containing gas and liquid, was found below the diaphragm and communicating with the stomach. There was no communication with cavity of the pleura, which contained neither gas nor liquid effusion.

Professor Leyden then records the cases observed by himself, which amount to three. The first case was on the right side, terminating fatally, and originating, as shown by autopsy, in a perforating duodenal ulcer. The second case originated in a perforation of the common bile duct, and also terminated fatally. The third case, which was left-sided, seemed to take its origin in perforating gastric ulcer, but there were also communications with the transverse colon. This case also terminated fatally, but the communication of the abscess-cavity with the bowel shows a possible way in which recovery might take place by evacuation of the contents of the abscess. Such may have been the mode of cure in Sturges' case, which recovered.

As Professor Leyden remarks, the origin of these gas and pus containing cavities, the mechanism whereby they are formed is closely connected with the history of peritonitis from perforation, the great majority of the cases reported being actually connected with perforating gastric and duodenal ulcers. When perforation occurs, a part of the gaseous and fluid contents of the stomach or bowel escape into the abdominal cavity. These, principally in consequence of the rapidly developed tympanites, are pressed forcibly upwards and kept in the concavity of the diaphragm, and furnish the necessary conditions by the formation of adhesions for the development of abscess cavities of the kind here described, containing air and liquid. The situation of the abscess on the right or left side is determined by the site of the ulcer. Duodenal ulcers, and ulcers of the stomach near the pylorus, lead to abscesses of the right side. Gastric ulcers lying towards the left extremity of the stomach of similar formations on the left of the median line.

In the first of Sænger's cases, already alluded to, the origin was a traumatic perforation leading to the peritonitis. Professor Leyden alludes to the possibility of perforation of the appendix vermiformis, being followed by similar consequences in the shape of ulcers, but remarks that hitherto no example has been reported. I submit that the case I have just related furnishes the necessary instance. The origin of the gas contained in the abscess cavities under consideration is a point of considerable interest. That it must be derived from the lung or bowel in the case of communication of these viscera with the abscess cavity is evident. On the other hand, that the generation of gas from the putrifying fluid contents of the cavity does furnish a part must be admitted, as it certainly does in true pyopneumothorax. In my own case the supervention of tympanitic percussion note where previously the note was dull, immediately after the bronchial fistula was established, seems to prove that the origin of the gas was in the first instance from the external air through the lung.

The complete displacement of the right lobe of the liver from a position where it could be percussed or palpated, constitutes an interesting point of difference between my case and those reported by other observers. It was doubtless due to the origin of the abscess below and its peculiar course upwards behind the peritoneum.

The following, according to Prof. Leyden, are the points which, when available, will clearly establish the diagnosis between true pyopneumothorax and these gaseous and liquid accumulations beneath the diaphragm :—

1. The development of an illness following the subsidence of the phenomena of general peritonitis, as from perforation.

2. The formation of an exudation in the lower part of the chest, on either side, with symptoms of inflammation, pain, and fever, &c., but specially characterized by the absence of cough and expectoration.

3. Appearance of physical signs of pyopneumothorax in the lower part of the chest, tympanitic note down to the lower edges

of the ribs, dullness in dependent parts, absence of vesicular murmur and of vocal fremitus, presence of succussion sounds.

4. At the upper part of the chest, on the affected side, the lung can be discovered by the persistence of vesicular breath-sounds and vocal fremitus. The expansibility of the lung can be shown and its separation from the abscess cavity by the fact that deep inspiration will cause a downward extension of space of chest wall yielding normal percussion note and vesicular breathing.

5. The dull percussion sound which indicates the fluid exudation, changes it locality by altering the position of the patient, but this is true only of the lower part of the chest.

6. The signs of equally distributed pressure in the pleural cavity are absent or but slightly marked. The affected side of the thorax is scarcely increased in circumference; the intercostal furrows are not obliterated; the heart but slightly displaced to the opposite side. On the other hand, the liver is much displaced downwards in the case of those originating from gastric and duodenal ulcers. It can usually be felt in its new position.

7. In advanced stages, perforation through the lung, with sudden profuse expectoration of fluid of the characters described, will render the diagnosis certain.

CASE OF LOCALIZED EMPYEMA.

CARIES OF INTERNAL SURFACE OF RIBS—EXHAUSTION—DEATH AND AUTOPSY.

By THOMAS A. RODGER, M.D., Montreal.

J. C., aged 33 years, stoutly built, and of medium size, called upon me on the 16th of September, 1879, seeking advice concerning his lungs. On entering my office he seemed completely exhausted, countenance pale, almost waxy in appearance, and was suffering very much from severe dyspnœa.

On enquiry, I learned that during his boyhood he had always been of a delicate constitution; but up till the time of entering college, about fifteen years ago, nothing very definite had ever

attracted notice. During student life, however, he had severe attacks of renal colic, which were usually accompanied with retention of urine, and for the latter was catheterized on several occasions. About once a month he has had renal colic, for many years past, and nearly always passed fragments of calculus after these seizures.

Family history.—Father and mother are both alive, and in good health. No trace of any tubercular or malignant disease.

Early in the spring (May) of 1880, he contracted a pain in the left side, from having overheated himself in walking. This pain did not necessitate his giving up duty, but for the space of two or three weeks afterwards it was the source of considerable annoyance. Under the belief that it was rheumatic in character, he was advised to visit some mineral spring, and did so during the month of June. After having spent several days there, and also taken a few hot mineral baths, the pain in the side became very much intensified. He was removed home and placed under medical treatment. Does not remember having had a chill.

From what I could gather from the patient, I judged that his recent illness had consisted of an attack of pleuro-pneumonia, though he himself understood his ailment to have been an attack of bronchitis.

To-day, 16th September, found great local fullness immediately over the left breast, extending upward toward the clavicle, exceedingly firm to the touch, but not painful upon pressure; no œdema or cyanosis. Percussion gave dullness over the whole of the left side, with the exception of a small portion in the supra scapular region. Right side clear throughout. Auscultation, entire absence of breath sounds over the left front and side of the chest, and only a few bronchial râles heard posteriorly in the supra scapular region, above the spine of the scapula; absence of vocal fremitus. Right side, breathing highly exaggerated; heart, action is very rapid, impulse feeble, sounds normal, and no displacement; pulse 120; temperature 100°; urine, sp. gr. normal; no albumen. On measuring the chest, I find that the left half is fully two inches and a

half larger than the right. Very little cough at present, but had considerable cough during his late illness. Made a record of possibly pleuritic effusion, and ordered a mixture containing Tinct. Digitalis and Potass. Iodide, the front and side to be painted with Tinct. Iodine Co. B.P. Ordered also nutritious diet. At the end of a fortnight I found the patient's condition slightly improved, that is to say, he was suffering from less dyspnœa on exertion, and was able to go about the house with comparative ease and comfort. There is slightly diminished dullness in the infra-clavicular region, but no change posteriorly. Between the ninth and tenth ribs in the infra-scapular region complains of very considerable pain, which greatly increased upon pressure. Patient is still able to be up and going about, and is taking nourishment well.

October 7th.—Found on the left side of the chest a red-looking spot appearing, about the size of a fifty cent piece, about an inch and a half below the nipple. Pressure on this part also causes considerable increased pain. Has slept very little during the night for the past week, but cannot attribute the want of sleep to any excessive suffering. Prescribed a draft containing Chloral Hydrat gr. x., with Pot. Bromide gr. xx.,—to be given at bedtime, and repeated every four hours during the night if if necessary. Has been troubled for the past few days with vomiting after meals, but not attended with any pain in the stomach. Ordered him lime water and milk.

October 15th.—During the past week nothing very marked has shown itself in the condition of the patient; has taken his food better and no longer any vomiting. Tried stimulants, (port wine) but was forced to suspend using such on account of causing increased action of the heart and great feeling of uneasiness in that neighborhood. So far in the case the patient has not shown any preference in regard to position in lying, though usually he is found by attendants on his left side.

November 5th.—To-day I find that the redness referred to in the infra-mammary region has increased in size, is slightly raised above the surrounding part, has a peculiar bluish red appearance, and an uncertain boggy feel to the touch, not that

characteristic fluctuation such as we find in an abscess. We have also had for the past few days œdema showing itself, both in the mammary and axillary regions.

November 9th.—Having decided upon passing an exploratory trocar within the chest, I asked my friend Dr. Ross to accompany me to see the patient to-day. Dr. Ross, after carefully examining the patient, agreed that it would be well to puncture, consequently we passed the needle belonging to the hypodermic syringe in the sixth interspace in the infra-mammary region, as close to the inflamed and red-looking spot as possible. We failed to get fluid of any kind at this point, consequently thrust the needle through the next interspace below, but more posteriorly, again failing to get fluid.

November 15th.—Another spot of redness has shown itself since my last note, this time in the fifth interspace close to the side of the sternum. Poultices of linseed meal have been constantly applied in this region for the past week or ten days. Dr. Ross visited the patient with me again to-day, when we determined upon using the aspirator. Choosing the spot between the ninth and tenth ribs, in the infra-scapular region, I thrust deeply a medium-sized perforated needle, or sharp-pointed canula belonging to Dieulafoy's Aspirator, and again we failed to get fluid. I may here remark that the needle, when within the chest, communicated to the touch a peculiar sensation, as though having entered a solid mass. Removed the needle at this point and again passed it at the interspace between the eighth and ninth ribs, in the infra-axilliary region, but with no better result; no fluid of any kind. Pulse to-day is 120; temperature 100°.

December 3rd.—Patient down stairs to-day, and apparently no worse. Pulse 118; temperature 99 4-5°.

December 19th.—Thin serous discharge has taken place to-day from the spot in the infra-mammary region, but no sign of any pus. The opening, or openings rather, for there are several, through which this discharge has come, are very small, and present rather a sieve-like appearance. The discharge, though scarcely perceptible to the eye when looking at the openings, must have been considerable, the napkin applied

being well saturated. Has had very little cough lately, scarcely any expectoration, and never anything more than what was frothy in character. Has had to increase the dose of the chloral hydrat lately, in order to get any sleep at all.

December 28th.—To-day we found another red spot, this time in the infra-axillary region, on a line with the ninth rib. Firm pressure along the interspace, between the ninth and tenth ribs, causes considerable pain.

January 6th, 1880.—Up to this date four of these bluish red spots have appeared; all are on a line with the eighth and ninth ribs, and all near to the sternum, except one, in the infra-axillary region. These spots have now assumed the appearance of fungoid or cauliflower excresences, and two of them are now of considerable size. Passed a silver probe through one of these openings, but failed to reach or detect any diseased bone. The local fullness has diminished very much since the discharge has appeared, but yet we have dullness in front on percussion, and no vesicular sound can be detected.

January 15th.—Patient lately has been losing very much flesh, and not so cheerful; still, he is able to be up and out of bed every day, and takes his food remarkably well. The want of sleep is his chief grievance, and of late the dose has had to be increased until now ʒ i. every four hours will only produce about two hours' sleep in 24 hours.

January 24th.—Pulse and temperature have scarcely varied at all during the past month, the temperature never at any time exceeding 100°, and the pulse not reaching higher than 120; still the same watery discharge oozing from the excrescences, and never at any time pus to be seen.

February.—During this month there has been slow but gradual retraction of the affected side, causing the patient, when standing, to appear slightly bent forward and leaning toward the left side. Again passed the probe several times of late directly inward to the depth of nearly two inches, and on either side of the opening literally to the extent of half of the probe. No diseased bone has yet been discovered. Thus far in the case there has been no œdema of the lower extremities;

nor has it been found that the patient, lying upon the right side, has caused œdema of that side, though œdema of the left side has existed now for some little time past. I have found that of late the patient inclines to rest more on the affected side, and states that he has more ease when in that position.

March 10th.—Retraction and deformities of the chest well marked, the shoulder and the nipple on the left side being depressed. The scapula projects very prominently from the posterior surface of the chest. The spine also has taken a slight curve, the convexity being towards the sound side; and the affected side, which previously in the early history of the case was 2 inches larger than the opposite side, has now become a distinct concavity. There is yet no displacement of the heart, and the sounds are normal. Examined the urine again for albumen, but found none. During this month Drs. Howard, Hingston and Ross saw the case in consultation.

Dr. Howard strongly advised that we should cut down (antiseptically) and expose the eighth, ninth or tenth ribs. If found to be diseased, have them removed. This operation was proposed to the patient, but unfortunately was not agreed to.

About the beginning of April I again passed the sharp-pointed canula of the aspirator, this time between the eighth and ninth ribs in the infra-scapular region, but likewise failed to get fluid. The patient, shortly after this time, decided to go into the country, where I saw him twice, but did not perceive any change in his condition. During September he had an attack of diarrhœa, and died from exhaustion.

Autopsy.—Body considerably wasted; sinuses exist in the lower external and left hypochrondriac regions, in the latter a considerable surface of the skin bare and roughened. Left side of the chest looks somewhat flattened in front and smaller than the right. On opening the thorax, left lung is retracted and closely adherent to chest wall, so that it was with difficulty removed. In the lower part of the mammary and infra-axillary regions the pleura was greatly thickened and of cartilaginous consistence. Several small pockets, containing a greyish white fluid, existed in the adhesions in these parts. The pleura at

the back part of the lung was only a little thickened; on the diaphragmatic surface it was dense and cartilaginous. Section of the lung from apex to base showed the lower lobe in state of collapse, greyish in color and surrounded in the greater part of its extent by the dense pleura. There was no extension of the fibrous induration to the lung. The upper lobe was slightly crepitant. The fifth, sixth and seventh ribs were necrosed in their inner surface at the part corresponding internally with the dense pleuritic membrane and externally with the sinuses, some of which, however, had burrowed beneath the skin before opening. There was nothing of special note in the other lung or the heart. The left kidney was large, the pelvis dilated, and several calculi were found in the calyces and one at the orifice of the ureter.

CASE OF LICHEN SCROFULOSUM IN A FEMALE.

By FRANCIS J. SHEPHERD, M.D., C.M., M.R.C.S., Eng.
Surgeon to the Out-Door Department of the Montreal General Hospital
Demonstrator of Anatomy, McGill University.

The following case, both on account of its rarity and interest, I think worthy of being placed on record:—

Sophie B., aged 22, unmarried, well nourished and healthy looking, came under my care on the 20th April, 1880, suffering from a skin eruption of the hands, which had lasted for three years. She had been treated by various physicians without any improvement, for as fast as the old spots disappeared new ones came out. On examination I saw that the eruption was confined to the hairy parts of the dorsal surfaces of the first phalanges and the hairy parts of the back of the hands, and consisted of a number of groups of minute papules of a brownish red colour. Each papule surrounded a hair follicle; the papules were quite dry and the patient said, never ran water. Rubbing the hand over the eruption it felt exactly like a nutmeg grater. She told me that occasionally it was very itchy, but as there were no excoriations or black crusts of dried blood I judged that this could not be a prominent symptom. The lymphatic glands of the neck and submaxillary region were much enlarged.

Lungs, on examination, were perfectly healthy. Recognizing the case as one of *Lichen Scrofulosum* I prescribed cod-liver oil in doses of a tablespoonful three times a day, and also directed her to keep the oil continually in contact with the skin by rubbing it in several times a day, and covering the hands with woollen gloves.

In two weeks she returned, the eruption was much in the same condition, but in addition to the papules, several bluish red tubercles, characteristic of the disease, were seen, about the size of split peas, and some large pustules which she told me had commenced as these bluish tubercles. There were also numbers of pigmented spots, the remains of old papules. I advised her to continue the same treatment, and explained to her that the cure, though tedious, was tolerably certain. I forgot to mention that in addition to the eruption on the hands a few papules had come out on the extensor surfaces of the legs, to which I directed her to apply cod-liver oil.

I saw her again on June 1st, at which time her condition was much improved. The eruption had entirely disappeared from the right hand, leaving spots of slight discoloration; on the left hand the eruption was fading, and no new papules were coming out, the only parts affected were the back of the first phalanx of the thumb and the back of the hand near the wrist. The enlarged lymphatic glands in the neck were much reduced in size.

On June 22nd the eruption had entirely disappeared both from the hands and legs, and there was no return when last seen early in November. The patient, by thus persevering in Hebra's cod-liver oil treatment for three months, had got rid of an eruption which had tormented her for over three years.

Remarks.—Hebra was the first to describe this form of Lichen which he always found associated with a scrofulous diathesis. In his work on Diseases of the Skin*, Hebra states that he had seen over fifty cases, all in males, between 15 and 25, and that this eruption occurs chiefly on the trunk, being rarely seen on the limbs. Now this case is remarkable from

*New Sydenham Society's Translation, vol. II., p. 54.

the eruption being confined to the limbs, and also from its occurring in a female. The only other case I ever saw of Lichen Scrofulosum in a female was under the care of Mr. Waren Tay at the Stamford Street Skin Hospital in London, and, strange to say, in this case also the eruption was principally on the backs of first phalanges and hands; it was associated, if I remember correctly, with general psoriasis. Having seen the above mentioned case, greatly facilitated my diagnosis in this one.

Hospital Reports.

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

MEDICAL CASES UNDER CARE OF DR. ROSS.

Case of Typhoid Fever complicated with Gonorrhœa—Ascites—Death—Autopsy showing pyœmic lungs.—Reported by Mr. E. H. HEYD.

J. W., æt. 36, a well-nourished, large man, with a history of previous good health, but a hard beer-drinker and a subject of syphilis, with also a very recent history of gonorrhœa, was admitted into hospital on 13th of November, suffering from a relapse. After ten days comparative comfort, following a very severe attack of typhoid fever, lasting about three weeks, in the earlier part of which the symptoms were more like those of malarial fever, violent chills occurring daily and accompanied with high fever for about eight or ten days, after which the disease presented the more definite typhoid symptoms, diarrhœa and iliac tenderness being especially marked. On his admission into hospital, patient was in a very weak and feeble condition; tongue dry, brown, cracked and coated with thick fur about the edges; pulse frequent (132), weak and compressible; breathing hurried (32) and somewhat labored; skin warm and moist; temperature 102°; abdomen considerably distended; superficial veins prominent; evidences of considerable amount of fluid in abdominal cavity; no iliac tenderness. A slightly blowing character in the breathing is found at inferior angle of right sca-

pula and some fine moist râles (with inspiration) at right base; slight friction is also heard a little below and external to right nipple. Heart sounds very feeble; no murmur; no increased dullness. Liver dullness normal; slight increase in splenic dullness. Urine high-colored—sp. gr. 1020; amount not diminished; copious deposit of phosphates; no albumen, sugar or bile. Considerable tendency toward diarrhœa, five or six stools per day, very free and loose, and characteristic of typhoid. On the 15th November there was considerable vomiting of a bilious-looking fluid; looseness of bowels still marked; coughed to-day for first time; no expectoration; slight œdema about the feet. 17*th*.—Free epistaxis during the night before; breathing is more labored; moist sounds heard at bases of both lungs, most marked on right side; greater distension of abdomen and limit of fluid dullness is considerably increased. Patient's condition from this time became rapidly worse, breathing being greatly distressed with tendency to orthopnœa; bases of both lungs showed complete dullness on percussion, and moist sounds were very distinct; distension of abdomen also increased, and œdema of feet extended to ankles and legs. Patient sank rapidly, and died on the 21st November.

Autopsy.—Heart, slight atheroma at beginning of aorta; foramen ovale not completely closed: otherwise normal. *Lungs —Left*, near surface of anterior third of upper lobe are six or eight patches of pyœmic-like infarctions, purulent fluid oozing from them; the lower half of lower lobe is solid, and on section the lung is red and scattered throughout with numerous pyœmic foci. *Right* lower half of upper lobe is solid and airless, and on section is dark red and airless and scattered over with spots of suppuration; pleura over these is injected and covered with a thin fibrinous membrane. *Abdomen* contains about three pints of serous fluid; nothing special about position of viscera; *spleen* slightly enlarged, pulp soft and dark brown; kidneys normal. Liver large, substance firm (not cirrhotic); portal vein free. Stomach and pancreas healthy. *Intestines*—Jejunum healthy; ileum, the Peyer's patches in lower 3 feet involved, there being 6 or 8 ulcers in this portion of the bowel; they are

not extensive, occupying only a portion of each patch, the rest of which is swollen and injected; close to the valve the ulcers are not larger than a 25 cent piece; no sloughs. In the cœcum there is extensive ulceration, there being 15 or 20 circular patches the size of a 10 cent piece; muscular coat is fully exposed. In the appendix vermiformis, mucosa at outer end is much swollen, and there is an ulcer the size of a five cent piece, at the base of which a slough is still adherent; there are also numerous ulcers in the ascending colon and a few in the transverse. The mesenteric glands are moderately swollen. No satisfactory explanation could be found for the occurrence of the ascites or of the pyœmic blocks in the lungs, no source of infection being found but the ulcers in ileum, cœcum and colon.

Dyspepsia of long standing—Vomiting at will being a peculiar feature—Hydruria.—Reported by Mr. Jas. Ross.

N. C., a rather poorly nourished young woman, aged 28, unmarried, of fair complexion and of a rather nervous disposition, was admitted into hospital on 14th September last. Her family history is good, with the exception of having had one brother who died at age of 30, and who had been subject to attacks of an epileptic character. The patient herself, although never very strong, yet enjoyed tolerably good health up to six years ago. Menstruation commenced at sixteen years of age, and was continued regularly up to age of twenty-two, since which time she has been very irregular, the flow returning at varying intervals of two, three, and four months, generally scanty in amount, but not attended with any uneasiness; at twenty-two years of age she began to suffer from constipation, loss of appetite, feeling of languor and weakness and occasional attacks of vomiting; this condition continued increasing during the following two years, and then she began to suffer from severe burning sensation in the stomach with sour eructations. Antacids were freely made use of, but with only temporary benefit. The so-called acidity of her stomach becoming increased to such an extent, and so much less relieved by the

remedies, she acquired the habit of *washing out* her stomach with large quantities of water. Her *modus operandi* is as follows: About two hours after taking food (which is retained without any difficulty), she begins to suffer from a burning sensation in the stomach, which she says is due to acidity, and which is accompanied by a strong desire to drink: she swallows about a pint of water, and after allowing it to remain a few moments in her stomach, places her hand over that organ, and leaning her body forward, vomits it up without any apparent effort. This performance is repeated until one, two, three, and even five or six gallons of water have been disposed of. She says she has been in the habit of doing this daily during the last three years, and that on several occasions she has vomited large quantities of blood, sometimes as much as a quart at a time. During the patient's stay in hospital frequent opportunities have been had for seeing the process by which she relieves her acidity. The vomited matters are semi-transparent, watery, and somewhat greenish yellow in color, and containing particles of partly digested food. No sarcinæ or torulæ found on microscopic examination; reaction is slightly acid, and the amount varying with that of the water consumed. The urine is clear, transparent and colorless, of low specific gravity, acid in reaction, and containing neither albumen nor sugar; it varies in amount, and with the vomited matters, corresponds nearly to the amount of water drank. From calculations made during eighteen days, it was found that the average daily amount of fluids taken was 255 fluid ounces; the average amount vomited was 146 ounces, and of urine voided 95 ounces, the specific gravity of the latter averaging 1006. On two or three occasions the patient vomited several ounces of a bright, bloody-looking fluid, which under the microscope shewed an abundance of red blood corpuscles, and which coagulated on standing; this was controlled by the administration of gallic acid.

Nothing abnormal is to be found on examination of abdominal organs, and lungs and heart are apparently in normal condition. Patient says that she has lost considerable flesh during the last six years, but no marked emaciation is apparent,

and beyond slight tendency towards a constipated state of the bowels and the annoyance caused by her frequent ablutions, her general condition is good. She remained some weeks in Hospital, but without material benefit from treatment.

Correspondence.

To the Editor of THE CANADA MEDICAL AND SURGICAL JOURNAL.

DEAR SIR,—Having lately seen the eulogistic reports of the Grand Jury on the Longue Pointe Lunatic Asylum, and having read your editorials on its management, I thought the following account of a visit I paid the Asylum two years ago, in company with another medical man, might prove interesting. It was a very hot day in July, and the thermometer registered not far from 100° F. in the shade. On entering the establishment we met Dr. Henry Howard, who kindly offered to show us through the building The first ward we visited was one on the ground floor, to the right of the main entrance. This ward had a very low ceiling and contained about forty male lunatics, although in our opinion there was only cubic space for about ten or twelve individuals. The atmosphere in consequence, on such a hot day, was anything but pleasant. The beds were arranged on each side in little partitioned spaces, each space containing two beds so closely placed that it was with difficulty a person could pass between them. There was a narrow passage down the centre of the room which constituted day-room, recreation room, and exercise ground; the patients of all kinds, violent, quiet, and morose, were lumped together. The violent, to remind them of their condition and of the prison-like character of the establishment, had anklets on their legs, connected together by heavy chains; this put one in mind of the good old times when convicts were sent to Botany Bay. The clanking of chains pleasantly varied the other discordant noises, which were chiefly vocal, and forced us to the conclusion that some of these individuals were dangerous criminals, such as murderers, &c., but, on enquiry, we were surprised to learn that they were merely ordinary lunatics.

From this ward we were glad to escape and went to others,

where a similar, if not worse, state of affairs existed. In one female ward we noticed a poor creature who sat in a chair, with her legs bound tightly to the lower bars by very narrow straps, and with her arms hanging straight down, fastened by cords to bolts in the floor; this poor girl literally could neither stir hand nor foot. Besides all this she was covered with flies, which, of course, she could not brush off, and this, remember, when the thermometer was nearly 100° in the shade. On asking what horrible crime this girl had committed, we were astonished to hear that she was thus cruelly treated to prevent her tearing her clothes, and so entailing the cost of a new suit. Another method commonly made use of in this semi-religious prison to prevent the destruction of valuable clothing, was to put them in straight waistcoats, of which many were observed. Indeed the number of these straight waistcoats I saw in use in this Asylum during this one visit exceeded the total number I have seen in the many lunatic asylums I have visited in this country and abroad. We were also surprised to learn that there was not a single padded room in the Asylum. No doubt it was too expensive a thing for the sisters to build, when the simplicity, durability and cheapness of manacles, chains and straight waistcoats were considered; besides these methods of restraint lessen the number of attendants and thus reduce the expenditure. On asking Dr. Howard why he allowed such cruelties to be practised on lunatics, he answered that he had no power to prevent it, that his only powers extended to the medicinal treatment; that the moral and physical part of the treatment the nuns considered beyond his province, and that they would not allow him to interfere. Would any one believe it that in this they were supported by our intelligent Provincial Government at Quebec, who evidently thought that the sisters were endowed with a heaven-born genius for treating the insane.

At the time I speak of no medical man resided in the Asylum, but Dr. Howard visited it every day as Government physician. Since then, as you are aware, a medical man who happened to be in the neighbourhood has been employed and paid by the nuns, and whose only knowledge of insanity has been obtained

from his employers by some sort of osmotic action, I suppose. The sisters were very polite, and drew our attention to the wonderful way in which the nun in charge of the idiot children (of whom there were great numbers) managed them, but here also we noticed that the space was very limited for the number of occupants of the ward, and that the beds were much too close together. With regard to cleanliness, next to economy, everything was subordinated to it; the kitchen arrangements were good, and here cleanliness even to excess, was not out of place, but I really do think that other virtues besides mere cleanliness are needed in the treatment of the insane.

I venture to say that this Lower Canada of ours is the only country in the civilized world where the lunatics of the community are farmed out to a society of persons at so much a head, and where the insane are treated on no system but that of restraint, and without the aid of a skilled alienist. Oh! that a French-Canadian Pinel would arise and persuade his fellow-countrymen to adopt a more humane system of treatment under skilled physicians. Dr. Howard is now the Government inspecting officer and has nothing to do with the treatment: he merely reports to Government the condition of affairs. I should like to ask why his reports are never published and submitted to public inspection; is it that the Government is afraid to print an honest report of the condition of affairs? If not, then why withhold them? Why do we not follow the example of Ontario and become the owners of our lunatic Asylums? Why do we not adopt a system of treatment more in accordance with the humanity of the 19th century, and cease to practise the cruelties common one hundred years ago in Europe? I pause for a reply.

I may say in conclusion that what we saw in our visit seemed to be of every day occurrence and little thought of. The building is built on no particular plan, and is not at all fitted for a lunatic asylum; it seems to have been erected more for convenience of the nuns and for the restraint of patients at the least cost, than for their comfort and cure.

I enclose my card and am, sir, yours very truly, MEDICUS.

P. S.—Since my visit to the Asylum two years ago, two new

wings have been built, so that now I believe there is much less overcrowding than formerly, but from all I can learn the same rigorous and cruel measures of restraint are in force.

M.

Reviews and Notices of Books.

A Treatise on the Diseases of the Eye.—By J. Soelberg Wells, F.R.C.S., M.D., Edin. Professor of Ophthalmology in King's College, London; Ophthalmic Surgeon to King's College Hospital, and Surgeon to the Royal London Ophthalmic Hospital, Moorfields. Third American from the third English edition, with copious additions by Charles Sherman Bull, A.M., M.D., Surgeon and Pathologist to the New York Eye and Ear Infirmary; Lecturer on Ophthalmology in the Bellevue Hospital Medical College. Illustrated with two hundred and fifty-four engravings on wood and six colored plates, together with selections from the test-types of Prof. E. Jaeger and Prof. H. Snellen. Philadelphia: Henry C. Lea's, Son & Co.; Montreal: Dawson Bros.

Since the appearance of the first edition of this valuable treatise it has been looked upon as one of the principal works of reference on all matters ophthalmological. The advances of the science are, however, so rapidly made that the production of new editions becomes an absolute necessity. The necessary revision required for this purpose has been performed by Dr. Bull, of New York, owing to the lamented death of the author at a time when the task was just in contemplation. It is only necessary to say that the American editor seems to have accomplished his self-imposed labor in a manner every way creditable to himself. The additions made bring up the work in every department to the most recent developments of the present day. They are quite numerous, indeed hardly a chapter but has thus been rendered more complete. A number of new illustrations have also been introduced.

Soelberg Wells on the eye, thus revised, is now simply in-

valuable to every one desirous of possessing the latest and best work on the whole science and art of ophthalmology.

A Treatise on the Practice of Medicine for the use of Students and Practitioners.—By ROBERT S. BARTHOLOW, M.A., M.D., LL.D., Professor of Materia Medica and General Therapeutics in the Jefferson Medical College of Philadelphia, formerly Professor of the Theory and Practice of Medicine and of Clinical Medicine in the Medical College of Ohio, &c., &c. New York: D. Appleton & Co.; Montreal: Dawson Bros.

This work has been for some time expected, the well-known name of the author being sufficient guarantee of the excellence of its quality. There was certainly room for a practical work on medicine to represent the recent views of American physicians upon pathology and the treatment of disease. Prof. Bartholow is a representative man, from whom such an authoritative exposition of these views can be looked for, and the present work will no doubt add to the high reputation he already enjoys in this country. It is not at all necessary to attempt any extended review of this hand-book, its scope will, of course, be gathered from its title. The author has discarded the customary initial chapters upon general pathology and plunged *in medias res*, rightly believing that these are very commonly passed over to get at the more practical parts of the book. The various classes of disease are then taken up and described *seriatim*. The descriptions are sharp, clear and concise, debated points are omitted, and only those retained concerning which there is a reasonable amount of general consensus. The language is always elegant and correct, nothing essential is found wanting, and thus it is compact and yet complete. It is, indeed, a model of its kind; very few of the articles are not illustrated by examples drawn from the author's own extended observations, the results, at any rate, of which are everywhere to be found. As regards the treatment of disease Dr. Bartholow's writings are specially reliable. He is well known to have devoted great attention to the subject of Therapeutics, and is a high authority

on the actions of drugs. His researches have led him to be one of the firm believers in judicious medication as opposed to the dangerous Nihilism fashionable at the present day. We cannot refrain from quoting the following sentence from his preface: "The influence of some of our most prominent medical thinkers has been offered to the value of medicines in the treatment of disease. The modern school of pathologists, absorbed in the contemplation of the ravages of diseases, are either oblivious of the curative powers of remedies, or openly ridicule the pretensions of therapeutists. I have, therefore, on the therapeutical sections, especially endeavoured to set forth true principles, and have taught the utility of drugs when rightly administered, but have none the less tried to indicate the limits of their utility, for he who is unmindful of the injury done by ill-directed or reckless medication is as unsafe a guide as the most pronounced therapeutical Nihilist."

To students and to practitioners this treatise can be thoroughly recommended as containing a satisfactory delineation of all important diseases, and a careful outline of the most appropriate treatment for each.

A Practical Treatise on Nasal Catarrh.—By BEVERLEY ROBINSON, A.M., M.D. (Paris), Lecturer on Clinical Medicine at the Bellevue Hospital Medical College, New York; Physician to St. Luke's and Charity Hospitals, &c. New York: Wm. Wood & Co.; Montreal: Dawson Bros.

This is a thoroughly practical work upon a very practical subject of everyday importance. The principal chapters are devoted to the varieties of coryza, acute and chronic, hypertrophy of the turbinated bones, and follicular disease of the naso-pharyngeal space (post-nasal catarrh.) These are preceded by others upon anatomical considerations, the various kinds of instruments suitable both for examination purposes and for the application of medicaments; and a good section is devoted to anterior and posterior rhinoscopy. It is well written and carefully prepared and illustrated by a number of useful woodcuts. General practitioners will undoubtedly find it a valuable work

for reference upon this special subject, on which so little is to be learnt except from special treatises like this.

A Compend of Anatomy for use in the Dissecting-room and in preparing for examinations.—By JOHN B. ROBERTS, A.M., M.D., Lecturer on Anatomy and on Operative Surgery in the Philadelphia School of Anatomy, Demonstrator of Anatomy in the Philadelphia Dental College, &c. Philadelphia: C. C. Roberts & Co.; Montreal: Dawson Bros.

This is a little book of handy dimensions, capable of being readily carried in the pocket. It consists of a compressed digest of the principal parts of Anatomy. The various systems into which the body is customarily divided are separately considered and a short description of each structure is given. A good deal of the work is done by means of tabulated statements, which afford a ready means of catching the eye and impressing the memory. After all, anatomy is really not to be learned in this way, and we do not think that helps of this kind are to be recommended for use by students in the dissecting-room; *there*, a good dissector's manual (Ellis, *e.g.*), which specially shows the relationship and inter-correspondence of parts is much to be preferred. But, for those preparing for a *written* examination on Anatomy (not a practical one on the subject), this handbook will no doubt prove a very useful assistant.

Hygienic and Sanative Measures for Chronic Catarrhal Inflammation of the Nose, Throat and Ears.—By THOS. F. RUMBOLD, M.D. St. Louis: Geo. O. Rumbold & Co.; Montreal: Dawson Bros.

This book is written in the interests of that numerous class of persons in this country who have become subject to that most annoying complaint, nasal or pharyngeal catarrh. There is no doubt that in numerous instances the condition is perpetuated by ignorance or neglect of many points in their every day life, which have a more or less direct bearing upon the existence of the malady. These deficiencies are here pointed out and means

suggested whereby they may be counteracted. Too often, perhaps, physicians themselves are somewhat to blame, for they may allow their patients to trust too much to their medication, either local or general, whilst insufficient stress is laid upon the importance of correct sanitary and hygienic surroundings and mode of life. To many, therefore, the present volume will convey useful lessons. We cannot, ourselves, agree with everything advanced by the author. We think, in his anxiety to urge the necessity for wearing warm covering to the entire body as a valuable protective measure, he is running into the opposite extreme and advising the employment of an excess of garments which might be very hurtful—*e. g.*, "When the weather becomes cold in the fall, a heavier suit should be put on over the thin stocking-knit suit already on the body. As soon as the thermometer ranges in the neighborhood of 15° F., female patients should put on a *third* suit as heavy as the second; and if at any time they are to go on a journey in the railroad cars, or are to be exposed for several hours during the coldest winter months, a *fourth* suit should be donned," and Dr. Rumbold inveighs against the folly of the female sex because they *will not* follow his advice!

Geo. P. Rowell & Co.'s American Newspaper Directory, containing accurate lists of all the newspapers and periodicals published in the United States, Territories, and the Dominion of Canada, together with a description of the towns and cities in which they are published. New York: Geo. P. Rowell & Co.

This is an important publication from the above well-known firm of advertising agents. It contains all it professes to, as above, and indeed a vast deal more. As far as we can judge by an examination of the lists of Canadian publications with which we are acquainted, the information seems to be always perfectly accurate and reliable. To anyone having to do with advertising matters in this country or in the United States, this book is simply invaluable, and indeed to anyone it is a Gazeteer showing the respective importance of various towns and locali-

ties as guaged by their several publications of all kinds. The firm, which is probably the largest of the kind in the world, undertake the placing of all sorts of advertisements "where they will do most good"; and present a long array of most flattering testimonials from their former patrons of the success which has attended their efforts in this direction. We think we are giving good advice when we advise everyone to entrust the making of their advertising contracts to Geo. P. Rowell & Co.

Books and Pamphlets Received.

Treatise on Therapeutics. Translated by D. F. Lincoln, M.D., from French of A. Trousseau and H. Pidoux. Ninth edition. Vol. III. New York: Wm. Wood & Co.; Montreal: Dawson Bros.

A Manual of Minor Surgery and Bandaging. By Christopher Heath, F.R C.S., &c. Sixth edition,—revised and enlarged with 115 illustrations. Philadelphia: Lindsay & Blakiston; Montreal: Dawson Bros.

A Practical Treatise on Fractures and Dislocations. By Frank Hastings Hamilton, A.M., M.D., LL.D., &c. Sixth American edition,—revised and improved. Illustrated with 352 wood-cuts. Philadelphia: Henry C. Lea's, Son & Co; Montreal: Dawson Bros.

Diet for the Sick. By J. W. Holland, M.D. Louisville: John. P. Morton & Co.

Ophthalmic and Otic Memoranda. By D. B. St. John Roosa, M.D., and Edward T. Ely, M.D.

Cutaneous and Venereal Memoranda. By Henry G. Piffard, A.M., M.D. and Geo. Henry Fox, A.M., M.D, Second edition. New York: Wm. Wood & Co.

How a person threatened or afflicted with Bright's disease ought to live. By Joseph F. Edwards, M.D. Philadelphia: Presley Blakiston.

A Treatise on Surgical Diagnosis, designed as a manual for Practitioners and Students. By Ambrose L. Ranney, A.M., M.D. Second edition. New York: Wm. Wood & Co.

A Treatise on Diphtheria. By A. Jacobi, M.D. New York: Wm. Wood & Co.

Medical Heresies, historically considered. A series of critical essays on the origin and evolution of sectarian medicine, embracing a special sketch and review of Homœopathy, past and present. By Gonzalvo C. Smythe, A.M., M.D. Philadelphia: Presley Blakiston.

Extracts from British and Foreign Journals.

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

Diagnosis and Treatment of Obscure Pelvic Abscess,—By Dr. PAUL F. MUNDÉ. The author said that the title of his paper in full was "The diagnosis and treatment of obscure pelvic abscess, with remarks on the differential diagnosis of pelvic peritonitis and pelvic cellulitis." He would begin by a review of the differential points. He had been induced to bring up the old question as to pelvic peritonitis and pelvic cellulitis by a recent revival of the question as to their relative frequency. Filling all the interstices of the space between serous membranes and the parenchyma of the organ was a cellular membrane. Dr. Mundé then went on to give in detail the anatomy and deflections of the pelvic peritoneum, which it is not necessary for us to repeat, as we presume it is known to every reader of the GAZETTE. There was also, he said, connective tissue between the layers of the broad ligament. Its presence had been recently denied by Guerin, who had, accordingly, denied the possibility of the occurrence of pelvic cellulitis in this situation. But the recent researches of Kœnig and Schlesinger had demonstrated its presence, both at the bedside and in the dead-house. When the possibility of pelvic cellulitis of the broad ligament was questioned, as Dr. Mundé's clinical experience had, to his mind, demonstrated the opposite, he brought up the question in the obstetrical society, and the unanimous opinion of the members there agreed with his experience. In the operation of enucleation of the uterus for cancer, etc., he had found that the peritoneum at the cervix uteri was not closely connected to the parenchyma. The place of election for an inflammation of the cellular tissue was between the layers of the broad ligament; on account of the great number of blood-vessels and lymphatics which it contained, and the periodic congestion of the ovaries. Their situation allowed of the collection of an exudation which might fill one side of the pelvis and crowd the uterus to the other side. How was a pelvic cellulitis to be diagnosed from a pelvic peritonitis? In the first place it must

be admitted that the two diseases were often associated so that it was impossible to separate them. Emmett had recently expressed the opinion that the distinction between perimetritis and parametritis was merely a theoretical one which could not be made in practice. The etiology might aid in deciding the question as to which disease was before us; sources of irritation from within the pelvis were more likely to set up peritonitis, while injuries to the cervix and from external causes were more likely to produce cellulitis. Dr. Mundé thought that he had seen cases which were clearly and undoubtedly cases of pure cellulitis. The shock was greater in peritonitis than in cellulitis. But the physical signs gave the best and most reliable indications as to the nature of the disease. The vaginal roof was thickened in peritonitis, but was at first without the bulging and doughy feeling met with when a fluid was present. When exudation took place, the fluid passed into Douglas' cul de sac, immediately behind the os; at first it was soft, and afterwards, as coagulation occurred, it became hard. It was only when there was a large quantity of fluid that it was found at the side of the pelvis; but it was always at the back part of that cavity and behind the broad ligament; and it pushed the uterus forward and not to the side. In cellulitis the amount of fluid was generally small, accumulated inside of the uterus, was low down, pushes the uterus to the opposite side, and was felt at the level of the os. It was felt as soon as there were symptoms of inflammation. In both diseases the uterus was immovable. In peritonitis, the uterus was pushed downward and forward; in cellulitis it was pushed toward the side. It could not be denied that in many cases the diagnosis was difficult to make. Of much greater importance was the question of prognosis than that of treatment. Both diseases were amenable to the same measures, and both exhibited the same tardiness in recovery. There was great difference of opinion as to the relative frequency of the two affections. Among over two thousand cases of his own, Dr. Mundé had found one hundred and eight cases of pelvic effusion, of which seventy-three were cases of pelvic cellulitis, twenty-six of pelvic peritonitis, and nine of the two diseases

together. He should add, in explanation of the apparently small number in which the two diseases coexisted, that although this was probably true of the greater number, he had given the case the name of the disease whose symptoms were most pronounced.

Dr. Mundé now took up the subject of the *diagnosis and treatment of peculiar pelvic abscesses.* A pelvic abscess was a collection of pus occurring in the exudation of pelvic cellulitis. He would here refer only to abscess of the broad ligament. At first it was soft and doughy; then it became hard, and shrunk. In the majority of cases it gradually melted away under treatment, and in from two to eight weeks faded away entirely, leaving as a memento a little-cicatricial tissue, an adhesion in which the ovary was encased. Some went on to suppuration, opening in most cases through the rectum. He had, however, met with seven cases which had a different history, and had lasted for a long time. In these cases there was found a solid tumor, but no fluctuation could be detected by bi-manual examination.

CASE I.—There was nothing to show the presence of fluid, except the long duration of the case. On introducing the hypodermic needle he drew out half a syringe full of clear, bloody serous fluid. As he thought that the pressure of the fluid might be the cause of the long continuance of the case, he aspirated, and drew off two ounces of clear serum. The operation was followed by no bad symptoms, the woman improved, the tumor shrunk, until finally nothing was left but a fibrous band.

CASE II.—Was one of menorrhagia, depending upon vegetations, which were removed by the curette; as this did not produce a cure, fuming nitric acid was applied causing an attack of pelvic cellulitis. As the result of this there remained in the pelvis a large tumor which resisted all ordinary methods. Dr. Mundé aspirated it, and immediately afterward the tumor began to show improvement and finally disappeared.

CASE III.—Had been originally one of voluntary abortion, which had been followed by symptoms of gradual septic poison-

ing. There was found a hard mass in the left side of the uterus; this Dr. Mundé aspirated with a medium sized needle; at first it could be felt to go trough a creaking mass of the thickness of an inch and then to enter a cavity; thick pus was withdrawn, and the operation was followed by a complete recovery.

CASE IV.—There was a large, brawny induration which could be indented at a few points. This he aspirated, and drew off about an ounce of gummous fluid. Contrary to instructions, the patient felt so well the next day that she got up and went out; this brought on another attack of inflammation, and when she recovered from this the first one had disappeared.

CASE V.—There was a mass similar to the others already described, and in it there was detected a doughy, boggy feeling. Dr. Mundé aspirated it, and withdrew a small quantity of creamy pus; the needle was then inserted in another place, and again a small quantity withdrawn; this was done, in all, eight times. It would seem that there had been a number of small parenchymatous abscesses. There was no immediate diminution in the size of the tumor, but after a time it disappeared.

CASE VI.—There was a high fever, and a large pelvic tumor was found, in which no fluctuation could be detected. A hypodermic needle was introduced, but no pus was found. That night, while having a movement of the bowels, the patient felt something give away inside of her, and immediately there was a discharge of a considerable quantity of pus. From this time the patient steadily improved. A small needle was used on this occasion, to which fact the failure to obtain pus might be attributed, though Dr. Mundé thought the insertion of the needle opened the way for the escape of the pus.

CASE VII.—There was a large convex tumor, in which there was no fluctuation, though a boggy feeling could be detected. Dr. Mundé introduced the needle a number of times in different places, and each time drew off a small quantity of pus, showing that there were a number of small cavities. This was followed by immediate improvement.

The special points which he wished to make were: first, the anatomical difference between pelvic peritonitis and pelvic cel-

lulitis; secondly, the possibility of suspecting pus in a tumor such as described, from its long continuance, its rounded appearance, its boggy feel, and its softening at points; thirdly, the safety of aspiration; and fourthly, the rapidity and certainty with which such patients could be cured. Not less than two months should be allowed to elapse before any such operative interference should be undertaken. The most dependent and boggy part should be selected, any part in which there was pulsation being, of course, avoided. Dr. Mundé had first introduced a hypodermic, and then, if pus was found, used the aspirator. To avoid this double introduction, he had made a large, strong syringe, to which a long slender needle was attached. This instrument he exhibited. If, after the first withdrawal, the fluid re-collected, it should be withdrawn a second time. In some cases the stimulus of the introduction of the needle, even if no fluid was found, seemed to start up the processes of nutrition, so that the fluid was absorbed.—*Medical Gazette.*

Influence of Varicocele in the Nutrition of the Testicle.—Dr. Will, in a recent clinical, discusses this subject at length, contrasting the opinions of such surgeons of eminence as have recorded their beliefs. Sir James Paget is of the opinion that the fears so frequently expressed by patients, that varicocele is a forerunner of wasted testicle, debility of sexual organs, impotence, etc., are groundless. Sir Astley Cooper writes that "varicocele should scarcely receive the title of a disease, for it produces in the greater number of cases no pain, no inconvenience, and no diminution of virile powers;" while Professor Humphrey thinks it is rarely productive of any decidedly injurious effect upon the testicle or the character of its secretion. Evidence of the opposite character comes from Barwell, Curling, Henry Lee, Gosselin and Percival Pott. Mr. Barwell thinks that the testicle from which the varicocele springs, is not of much use. Mr. Jonathan Hutchinson's views are peculiar. He thinks the cause of the varicocele, as well as the wasting of the testicle, is

due to central nerve disease. Will thinks it impossible to reconcile the diverse views of authorities, but brings forth some strong clinical evidence to substantiate the view that the nutrition of the gland is endangered by a varicose condition of its veins, especially when the varicocele is large. The fact that the condition of the gland improves after successful operation, is very strong evidence in favor of the latter view. He lays down the following conditions as being those indicating operation: 1. If the varicocele is very large or increasing. 2. If the testicle is atrophied. 3. If acute pain be complained of. 4. If the patient be disqualified from entering the public service. 5. If the stability of his mental faculties be endangered. — *Lancet.*

Salicylate of Soda in Typhoid Fever AND ERYSIPELAS.—At the last meeting of the Société Médicale des Hopitaux (*Gaz. Hebd.*, August 20), Dr. Hallopeau read a paper on the above subject. In typhoid fever, he observed, two indications are pressing: to attack the infectious principle, the cause of the disease, and to combat the elevated temperature; and, in general, apyretic medicinal agents are also antizymotics. Liebermeister, of Basle, has treated a great number of cases by antipyretics, and, in place of a mean mortality of 15 per cent. in mild epidemics, he has obtained one of 11 per cent. He commenced with a gramme and a half of calomel, and with the use of cold baths according to Brand's method, and then gave from two to three grammes daily of sulphate of quinine, or from six to eight of the salicylate. He found the temperature rapidly became lower, and was maintained at 38° and 39° C. Dr. Hallopeau, following this example, gave calomel the first day also, and then administered quinine and the salicylate alternately, only having recourse to the cold baths in great and menacing hyperpyrexia. Some observers have condemned the use of the salicylate after employing it in doses of ten, twelve, or fifteen grammes per diem; but there is no proof that in smaller doses this salt acts at all mischievously. It should be given in doses of about two grammes a day, and

never exceeding four grammes; and even then it should not be continued too long without interruption, and should be proscribed altogether when great dyspnœa is present, or a tendency to hemorrhage. It has been objected that the antipyretic effect of the salicylate is but slight, and even less than that of quinine; but all the thermal curves attached to Dr. Hallopeau's paper show a notable diminution of temperature after the administration of two grammes. He admits, however, that its action is fugacious, and may disappear at the end of two or three days; but then quinine may be administered, and the two agents alternated, avoiding thus an accumulation of the salicylate. In no case has he observed any ill effects produced upon the kidney; and if the salicylate be sufficiently diluted, neither ulceration of the pharynx or stomach nor diarrhœa will be caused. It has seemed in some cases to increase dyspnœa and the disposition to intestinal hemorrhage; and where there is a tendency to these conditions it should not be employed. It has been said that the diminution of the temperature has been the sole effect produced by this agent, without its exerting any influence on the course of the affection; but Dr. Hallipeau has found the disease less grave and of shorter duration than usual. In a series of twenty cases he has only met with three deaths, and in two of these cases not as a direct consequence of the disease; while in a second series of nine cases they all recovered.

Dr. Hallipeau has also given the salicylate internally, in doses of four grammes per diem, in erysipelas; and, basing his practice on the experiments of M. Bochefontaine, who has shown that this salt is absorbed by the skin and passes into the urine, he has also prescribed the application of compresses dipped in a solution of the salicylate (one in twenty). In an infant, eight months old, the subject of erysipelas of the leg from a slight erasure opposite the knee, after having employed compresses wetted with elder-flower water and sulphate of quinine, which were not tolerated, he obtained by means of the salicylate a rapid amelioration of the general symptoms, the arrest of the erysipelas which had invaded two-thirds of the thigh, and the cure of the little patient. In all the fourteen cases in

which this substance was employed, the temperature, at the end of twelve, thirty-six, or at most forty-eight hours, had fallen to its normal height; and among the fourteen cases only one death occurred, and that in an old man who was also the subject of purulent pleurisy. Dr. Labbé stated that he had also employed the salicylate in erysipelas, but had not derived any advantage from it, even in large doses. In his opinion, the regular course of this disease, especially on the face, which had formerly led to its erroneous assimilation to eruptive fevers, entirely depends upon anatomical reasons, such as the disposition of the lymphatic net-work, or that of some of the cutaneous muscles of the face and neck. It lasts for a week on the face, and longer when it gains the trunk; but the use of the salicylate does not modify its course. In typhoid fever, Dr. Labbé gives enemata with three or four grammes of this substance, which always produce a marked sedative effect and sleep, while disinfecting the stools. Dr. Hallipeau replied that he also employed the salicylate locally in erysipelas, and in six of his fourteen cases, he obtained evident amelioration in twenty-four hours. The cases of erysipelas of the face so treated by him did not last a week.—*Med. Times and Gazette*, Sept. 4, 1880.

Laparatomy for a Singular Case.—A man, three weeks before being brought to the Vienna General Hospital, had introduced a varnishing brush, seven inches long, into the rectum in order to relieve constipation. When the brush had entered deeply, the handle slipped from his hand, and he continued for three weeks to keep the body in the abdomen, in the hope that it would be discharged at stool. Violent pains then coming on, he was brought to the hospital, and a diffused peritonitis was found to exist. An exploration of the rectum by Simon's method was practised without the body being detected; and, as the patient was quite positive that the brush was still in the abdomen, Hofrath Prof. Billroth performed laparotomy. It was found that the brush had penetrated as far as the sigmoid flexure, twenty-five centimetres distant from the anus, and there had penetrated the intestinal canal, producing

a diffused peritonitis. The man died six hours after the operation.—*Allg. Wien. Med. Zeit.*, August 17. [In the same journal for August 31 is related by Dr. Walser, of Graz, a very similar case, which, however, having been seen much earlier, had a more fortunate termination. A man, three days before his admission to the hospital, had passed the handle of a hammer, twenty-five centimetres in length and two and a half in breadth, into the rectum in order to arrest a diarrhœa, and while doing so it slipped from his hand and disappeared. The abdomen was moderately distended and only slightly sensitive; and, on making firm pressure over the umbilicus, a hard, movable body could be felt, having its end exactly in the middle of the epigastrium. It could not be followed downwards, but seemed to have entered the pelvis. The general state of the patient was satisfactory, but he resisted exploration by the rectum so much that he was put under anæsthetics. Although the body could not be felt in the rectum, by pressure and manipulation of the upper end, Dr. Walser was at last able to get hold of it with a lithotomy forceps and slowly remove it.—*Med. Times and Gazette*, Sept. 25, 1880.

The Hot Rectal Douche.—At the last meeting of the American Gynæcological Association held at Cincinnati on the 1st September Dr. Chadwick, of Boston, read a paper on "The Hot Rectal Douche." The idea was suggested to him by the hot vaginal douche as carried out and extolled by Emmet and many others in the treatment of pelvic inflammations of all kinds. A glance at the anatomy of the pelvis will show that a much more extensive surface for the operation of the hot water must be available by the rectum than by the vagina. The only objection which, however, would seem to render the hot rectal douche inapplicable in the acute stage of such inflammations is the peristaltic action which may at first be excited by it. Dr. Chadwick has employed this remedy in two groups of cases. The first includes cases in which diarrhœa, acute or chronic is a prominent symptom, but characterized by small frequent stools from inflammation or perhaps only irrita-

tion of the lower bowel. The causes of such inflammation are laceration or contusion of the rectum during labour, and the continuance of inflammation or congestion caused by contiguous inflammation, or by hardened fæces. The second—a more important one, is pelvic inflammations of all kinds. In such cases, especially in the last group, Dr. Chadwick has found this treatment eminently successful.

The method by administration of the hot rectal douche to get the best effects, aims at securing the passage of as large a volume as possible of hot water to as high a point as possible, and its retention as long as possible in the intestine. The water is used as hot as the hand can bear; the patient is placed on her side, preferably the right side in bed; a fountain syringe, holding two quarts, is used; it is suspended quite low, so that the flow shall be quite slow. The finger is kept in the vagina, and as soon as it detects distension of the rectum, the current of water is stopped for a few minutes, the nozzle being allowed to remain. In this way one or two quarts of water may usually be injected without giving rise to peristaltic action. It is not wise to resist expulsive efforts, as the bowel will be apt to be stimulated to more violent efforts, and irritation increased. The douche may be taken two or three times a day for weeks if necessary.

Expectant Plan of Treating Caries of THE ANKLE IN CHILDREN AND YOUNG ADULTS.—In the *Medical Record* of August, 1880, we find an interesting paper on this subject by Dr. T. S. Satterthwaite, of New York. He alludes to the report made by a committee from the Therapeutical Society of New York. A synopsis of twenty-four cases demonstrated to this committee that the expectant plan pursued in most cases was competent alone to effect a satisfactory cure, with a very inconsiderable loss of function, and within a reasonable time. These conclusions have been further sustained by an elaborate paper from Dr. V. P. Gibney, wherein he reviews the final results in thirty cases that came under his own observation. Attention is called to a fact now recognized by

surgeons and orthopædists on both sides of the water, viz: that many children annually suffer amputation of the foot, when, under conservative treatment, the member could have been saved. It is further stated that neither excisions, partial or complete, nor other operative procedure offer advantages superior to the expectant plan, which at once assures a more perfect result than any known to the profession. If the joint is inflamed, entire rest is ordered; if abscesses form, they are opened; if loose bone is detected, it is simply removed, as if it were a foreign body interfering with the process of healing; if, in the further progress of the disease, malposition of the parts is found, a support or brace is given to rectify the deformity. This method is simply one that addresses itself to immediate symptoms, and recognizes any treatment that would suggest itself to a practical surgeon or orthopædist, provided only he does not practise chiseling (gouging), exsection or amputation. The number of affected males and females were equal, and the majority were attacked between the ages of six and thirteen. Of sixteen cases, in only four was there an alleged injury without the suspicion of blood disease; but in five others the two were associated. In the two remaining, there was positively no record of an injury, and the personal and family history was excellent—an interesting circumstance suggesting that there may possibly be causes apart from traumatism or cachexia. In a total of sixteen cases, useful joints were obtained in fourteen. Goughing or chiseling was practised in five cases in conjunction with other methods, and gave a useful foot in three of them. It may be questioned whether it is well to anticipate nature in her effort at recuperation, for it is seen that the most perfect final results are those which nature has accomplished unaided. In place of the carious bone, she deposits sub-periosteally new material, which, gradually encroaching upon the disease, is ready to supplant it when the process of removal has been completed. It is capable, in almost every instance, of saving the foot from amputation, and even excision, partial or complete. The result is better, and the time to accomplish it has yet to be shown to be longer.

Catheterization of the Larynx as a SUBSTITUTE FOR TRACHEOTOMY.—In the "Bellevue Hospital Reports," published in the *Medical Record*, we find a report of this interesting procedure. A baby a few weeks old had the appearance of being in a healthy and well-nourished condition. It had, however, persistent convulsions and attacks of laryngeal spasm. On examining the pharynx, a laryngeal spasm was promptly produced, and the baby became suddenly asphyxiated to an alarming extent. Respiration ceased at once, and the face became livid. Artificial respiration was resorted to immediately, but neither Schutze's, nor Marshall Hall's, nor Sylvester's method did the least toward restoring the child. The tissues of the larynx were completely relaxed, but there was not sufficient life in the child to enable it to breathe. The heart continued to beat. A male silver catheter was quickly introduced through the larynx, and respiration was immediately restored. The convulsions were controlled with chloroform, and the child, after passing through such an ordeal, recovered.

The practical point of interest is the catheterization of the larynx in preference to tracheotomy in a case demanding prompt action to prevent death from asphyxia.

The following points are noted in the *British Medical Journal*, by Wm. MacEwen, in its favor over tracheotomy. The air passing through the mouth, etc., becomes warm, moist and filtered. One of the great dangers in tracheotomy is pneumonia. In a few minutes after the tube is introduced into the mouth, it attains the same heat as the body, and its interior becomes covered with moisture, and offers an adhesive surface for organic particles passing. The following conclusions are arrived at.

Tubes may be passed through the mouth into the trachea not only in chronic but in acute affections, such as œdema glottidis. They can be introduced without putting the patient under an anæsthetic. The respiration can be perfectly carried on through them. The expectoration can be expelled through them. Deglutition can be carried on during the time the tube is in the trachea. Though the patient at first suffers from a painful sensation, he soon becomes tolerant of the presence of the tube.

The patient can sleep with the tube *in situ*. It may be used in operations on the face and mouth to prevent blood from gaining access to the trachea, and for the purpose of administering the anæsthetic. In all the cases tried it proved harmless, and the ultimate results were rapid, complete and satisfactory. Tubes of varying size must be used. It may be known to be in the trachea by feeling the instrument pass through the rings of the trachea, and by finding the air and mucus expectoration passing through it.—*Virg. Med. Monthly.*

Venesection in the Treatment of Hæ-MOPHILA.—Mr. Henry Finch reports the following in the *Lancet*, October 2, 1880:—A stout, healthy lady, between fifty and sixty years of age, was suddenly attacked in bed, at night, with profuse bleeding from the nose. I was sent for, and the patient, whose indomitable pluck and steady coolness under a full knowledge of the danger she was incurring, contributed much to the fortunate issue, told me that a brother had died in a few days, from uncontrollable bleeding from some very trivial skin wound, and that an aunt had frequently suffered from copious bleeding consequent on very inadequate exciting causes. The patient was treated in the routine manner—astringents syringed into the nasal fossæ, ice, iron, and ammonia internally, and finally plugging the nares; but all to no purpose. The bleeding, if it ceased for a time, soon came on with redoubled energy; the patient at intervals vomited quantities of dark blood. I was with the patient two nights, who, notwithstanding the increased pallor, anæmia, and weakness, preserved her spirits wonderfully. After forty-eight hours of this continuous bleeding, it was evident that unless the hemorrhage could be stayed death would speedily ensue, and as a last resource, in a sort of empirical way, we determined to try the effect of diminishing the blood-pressure by opening a vein in the arm. The state of the patient, while it nerved us to adopt any probable means of staying the flow, made recourse to this particular remedy without previous experience an anxious proceeding. Mr. Sloman opened a vein in the bend of the left arm with some

difficulty, owing partly to its small size, and partly to the presence of much superficial fat. The nasal appendage stopped as soon as a little dark blood had flowed away. After making sure that no further loss was taking place, the vein was closed. The hemorrhage did not return, and from thence forward the patient made a protracted but perfect recovery. In two other cases which I can call to mind—a gentleman of thirty and a girl of seventeen years, both with well-marked hemorrhagic diathesis, and with hereditary history of the complaint—I have tried venesection, and in both cases success has been immediate and complete.

Empyema.—Twelve cases of empyema are detailed in the *Medical Record* by Dr. W. S. CHEESMAN, of Bellevue Hospital. Concerning the treatment of these cases, he remarks: "It is interesting to observe that most of these cases began as pleurisy with effusion, and that in two, at least, empyema was a sequel of croupous pneumonia. In half the cases the whole pleural cavity was involved; in half the empyema was encapsulated. Seven cases died, all of whom had been cut; but in two death was due to complications, while in two others the empyema was a concomitant of conditions already fatal in their tendencies. So that in only three cases can death be attributed to empyema alone. Five cases recovered; two *without* operation, the pus having been absorbed, or having undergone calcareous or other changes. In the one case retraction of the side remained; in the other none. Of the three others who got well after operation, one recovered with only a sinus; one with a sinus and retraction of the side, and one with sinus, retraction, and probably waxy liver and kidneys. "In considering these results we are not led to regard incision for empyema as one of the triumphs of surgery. Leaving out those fatal cases in which empyema was complicated with phthisis, erysipelas, etc., three remain whose lives the operation failed to save (though one was in *articulo mortis* when it was done). In Case 9 the operation seems to have hastened the patient's death. Of those who recovered after operation, all have sinuses, and two are

deformed. "Perhaps it is not unfair to hope that the results might have been better had the patients not been operated on in a large public hospital, where the food is poor, and where nosocomial malaria abounds."—*San Francisco Western Lancet.*

Acute Articular Rheumatism.—Thoresen has analyzed (*Norsk Magazin for Lägevidensk, Nord, Medicin. Archiv*) the conditions of two hundred and seventy-seven cases of acute articular rheumatism, which have been under his care during the last twenty-five years. He has not been able to find any connection between the frequency of the disease and the state of the weather, the temperature, or the amount of moisture; and, after distributing the cases of the disease among the different months, he can not assign to articular rheumatism any place as a representative of a fixed morbid constitution. Upon the other hand, he has found that the cases of rheumatism diminish in proportion to the height above the level of the sea, and increase in proportion as this is approached. His professional colleagues practicing in the higher regions have informed him that acute rheumatism is almost unknown to them. He believes that acute articular rheumatism is an infective disease, which, like intermittent fever, belongs to the diseases of low lands. Cold, he thinks, has been overrated as a cause. The good effects of salicylic acid are regarded by Thoresen as confirmatory of his idea that rheumatic fever is an infective (malarious?) disease.—*British Med. Journal.*

The Therapeutic Use of Pilocarpine IN SKIN DISEASES.—In the St. Petersburg *Med. Wochenschrift* of 19th July, quoted in *Med. Rec.*, appears a notice of the results obtained by Professor Pick from the use, over the space of two and a half years, of pilocarpine and its preparations in prurigo, psoriasis, eczema, pruritus, urticaria chronica, alopecia areata, trichoptilosis, alopecia pityrodes, acne, hyperidrosis, pemphigus chronicus, and lichen exsudativus, *i.e.*, in all skin-affections where the secretion of sweat is more or less altered. Small doses of one-sixth of a grain, in solution, were ordered

twice a day, one to two hours after food. Perspiration followed generally four or five minutes afterwards. After several weeks' use, unless intermitted, the dose had to be increased. The skin became softer and more pliable, scaliness diminished, and the hair was less brittle. The use of the remedy even for months in no way disturbed the general health. In 32 cases of prurigo the tormenting itchiness disappeared, and the relapses were somewhat delayed; while, again, in 25 cases of psoriasis no effect was seen. In two cases of pruritus senilis, and one of urticaria, a cure was accomplished. In eczema, the result was not decided. In ten cases of alopecia pityrodes, good results followed; while in four cases of alopecia areata, no decisive result was obtained.

Treatment of Biliary Calculi by Olive Oil.—Dr. Kennedy states that various agents have been from time to time employed in the solution and expulsion of biliary calculi. Of these, chloroform alone or with ether is said to have removed these bodies; but this mode does not seem to have come into general use, probably, Dr. Kennedy thinks, because it requires time; but he believes that he has now obtained a simple medicine readily available in practice, and having the required properties. In every instance in which the calculi were proved, or presumed to have been the cause of periodic suffering, these bodies were promptly and painlessly expelled in larger or smaller numbers by the use of large doses of olive oil. The author appears to have administered the oil in six-ounce doses at bed time.—*The Lancet*, Sept. 18, 1880.

A New Dressing for the Navel.—Dorhn recommends under this title the following arrangement in order to avoid the evil effects which occasionally follow the separation of the cord when dressed in the usual fashion. The newly-born child, after having its navel-string tied and cut, is first washed in the usual manner, after which it is laid on a table, and the remains of the navel-string, as well as the parts round about the navel, washed with a 2½ per cent. solution of carbolic acid. The cord is now tied a second time with a ligature which

has been duly carbolised, and the superabundant portion of navel-string cut off with its previous ligature attached to it. A layer of carbolised wool is applied over the stump of the navel-string, and over all a portion of sticking-plaster about the breadth of the hand is firmly fastened. This dressing is allowed to remain till the seventh day without being either aired or renewed. On removing it the remains of the navel-string will be found either nearly or entirely separated. In the former case it is cut off with a pair of scissors. The author declares that he has found this dressing very satisfactory in twenty-eight cases.—*Cbl. f. Gynäkol.* Nov. 14, 1880; *The Edinburgh Med. Journal*, Sept., 1880.

To Get Leeches to Fasten.—Almost every physician has at times experienced the difficulty of getting these animals to bite. The following plan is commended, and will be found effectual in all cases when the leeches are healthy. Put the animals in a small glass vessel half filled with water. The part of the body which is about to receive them is carefully washed with warm water, and the glass is quickly inverted upon the skin. The leeches attach themselves with surprising rapidity. When all the animals have bitten, the glass is carefully removed, the water escaping being absorbed by a sponge. If a single leech is to be applied, the same plan is adopted, using a test tube in place of a glass; by this means the animal may be compelled to bite at just the point desired.—*Philadelphia Medical and Surgical Reporter.*

Worms in Children.—Prof. J. Mathews Duncan, the eminent obstetrician, says I have never seen a case of vulvitis that I could ascribe to worms. I believe this is an illustration of the injurious tendency to repeat what has been said before. Because one author of repute says a thing every one repeats it. You have been taught that worms cause convulsions in children. I never saw a case of convulsions that I could reasonably trace to worms, a case of worms that caused convulsions.

CANADA

Medical and Surgical Journal.

MONTREAL, DECEMBER, 1880.

TYPHOID AT LENNOXVILLE.

The public mind in this city has been much excited lately over the announcement that typhoid fever had reappeared at Lennoxville School. The following are the principal facts of the case: In the early part of last summer the fever first made its appearance. At least ten of the boys were affected, and one died. Many of the cases also were of great severity. The school was broken up, rather tardily, and the cause investigated. When the drains came to be examined, it was found that they were very defective, and had, in places, become quite choked up. Not only so, but actually the outlet of the drain had never been completed, and the soil-matters therefrom were allowed to penetrate into the ground at some distance from the main building. The authorities of the school took medical and other skilled advice as to the measures necessary to prevent the disease in future, the result of which was that the drains were all thoroughly gone over and put in as efficient a condition as possible. Moreover, the dry-earth system of closets was introduced for general use; the only water-closets retained being in the quarters assigned to certain of the masters of the school. It was then pronounced safe for occupation. In September, therefore, pupils were received as usual for the Fall term. As already stated, typhoid again broke out about three weeks ago, and since then six of the boys (at least) have suffered from it. One has died. Of course, this second outbreak is a very serious matter for the reputation of the school, and one from which it will never recover, except public confidence in its sanitary condition can be restored. We

are unwilling to make any more extended comments upon this lamentable occurrence until in the possession of further information, but it is right to say that we have heard very strong complaints made against the responsible authorities, especially on two grounds: first, that drinking-water is supplied from the same well as previous to the first endemic, although at least one medical man had urged that it should be condemned and filled up; second, that the true nature of the illness in the recent cases was not made known for several days, to the great risk of all the other pupils. We merely give these statements as they have come to us. We certainly think that Lennoxville School will be acting in its own best interests if it publishes a full and complete account of all the circumstances connected with this serious visitation. We would suggest that the authorities send out some medical man from this city who is known to have practical knowledge of the special subject of the communication of disease by insanitary conditions—let him stay there just as long as he finds it necessary to investigate every possible source of infection—and let him give a report thereon. It is only in this way, we believe, that a satisfactory conclusion can be reached. As this is a matter of great public interest and importance, we hope to recur to it in a future issue.

TRAINED NURSES.

An important movement is now being inaugurated in the Montreal General Hospital. For some years past, the attention of the Governors has been directed to the advisability of making permanent arrangements whereby their hospital could be supplied with a reliable staff of educated nurses. The great value of properly trained women to serve in hospital wards has been now so clearly demonstrated that no one would be rash enough to deny it; and the question has been how can a supply of such qualified persons be best obtained, and how can vacancies in their ranks be filled? When, some years, ago a Lady Superintendent came from England with a number of nurses from the Nightingale School, it was always in contemplation to amalgamate a school for the education of other young women under the

same management. This was a matter in which the public took great interest, both from a desire to see their most important hospital well nursed, and also because the intention was to send out yearly from it several well-trained sick nurses who might become active and valuable members of the community. Unfortunately, owing to collision between the Managers and the Superintendent, these plans were never carried out, and the training school scheme fell to the ground. During the past year, however, the matter has again been discussed by the governing body, and definite action has at last been taken. The services of a Lady Trainer have been secured, who comes to us with the highest recommendations from the schools of Boston and New York, in both of which she has served a prolonged apprenticeship. Applications are at present being asked for from candidates for admission, the term of service to begin with the incoming year. The Managing Committee and the Medical Staff are now engaged framing suitable rules for the governance of the school. This is a very important matter, and we hope such careful attention will be given to defining accurately the special duties of the various officials that all possibility of future difficulties will be avoided. We need scarcely point to the lamentable scandals recently enacted at Guy's Hospital to show to what serious and wide-spread trouble misunderstanding arising from ill-defined duties may give rise. Nothing tends so much to demoralize a public institution of this kind as friction between its various component departments; and, on the contrary, nothing will so much advance its prosperity and success as harmonious co-operation of them all for the common good. In the introduction, therefore, of this new element into our General Hospital, we trust such care and foresight will be exercised as will result in permanently securing a much improved nursing service for the future, besides being a boon to the outside public as well.

PYO-PNEUMOTHORAX SUBPHRENICUS.—Our readers will no doubt observe with interest the remarkable case bearing this title published amongst our communications. From the de-

scription, it will readily be seen how difficult it was to determine the exact situation of the great cavity of pus and air. No doubt similar conditions have been observed by other individual writers, but, as far as we know, it was Leyden who first gave it the above designation. It is useful to have some such term for the special disorder in question, as that serves to direct attention towards it, and saves verbal description. The cases of this kind must certainly be rare. In our own experience, this one is unique. But we should be glad to hear if others have been noticed in this country—cases either recorded or not. We had the privilege of seeing the patient during life in consultation with Dr. Gardner, and of being present at the autopsy. One point is specially worthy of attention in the case, viz., the situation of the liver. One of the main diagnostic points of Leyden is decided depression of the liver into the abdomen. As the condition here was diametrically opposed to that, it shows that too great stress must not be laid upon this observation.

Medical Items.

—The *Student's Journal* gets off the following epigrammatic remark anent affairs at Guy's: "Priestliness, women and physic, in association, are a deathly trio. Separately and alone, they are of use, because then they can be held in subjection."

Progress of Psychiatry in this Country.—In February, 1880, Dr. J. C. Shaw, Medical Superintendent of the King's County Insane Asylum, burned all the camisoles, wristlets, strait-jackets, and other forms of restraining apparatus in his institution. Dr. Shaw did not, in the Byronic manner, awake the next morning and find himself famous; but he did, nevertheless, perform an act which will make his name historic among alienists, since he now stands as the first American physician to do away entirely with mechanical restraint in the treatment of the insane.

Treasure-Trove of the Dissecting Room.—Prof. Agnew reports that he saw, in the dissecting room of the Philadelphia School of Anatomy, a female subject, afterwards learned to have

been insane, in whose intestinal canal was found three reels of cotton partially unwound; two roller bandages, one of them 2¾ inches wide and 1 inch thick, the other was partially unrolled, one end being in the ileum, the other in the rectum; a number of skeins of thread, a quantity being packed tightly in the cæcum; and finally a pair of braces.

NEW TEST FOR TRICHINÆ.—A Holstein peasant, uninstructed in microscopical research, and not possessing the requisite instruments of precision, has devised for himself a new test for the presence of trichinæ in pork. When he killed a pig, he was careful to send a portion of it—a ham or a sausage—to his pastor, and then waited the consequences for 14 days. If his pastor remained healthy, then he felt perfectly easy in his mind, and well assured that his pig fulfilled the requisite conditions of soundness of food, and he proceeded to dispose of it accordingly in his own family. This ingenious method of research has not been considered satisfactory by the district physician.

BISHOPS AND DOCTORS.—"I am not ashamed to say I have a son a doctor." (*Speech of the Bishop of Liverpool to medical men.*)

> How kind of the Bishop, and how patronizing,
> And yet to his *Punch* 'tis a little surprising,
> That speaking to medical men there in session,
> He dared speak of shame and a noble profession.
> A Bishop looks after our souls, but how odd is
> The sneer that's implied at the curers of bodies;
> For surely it would be no hard task to fish up,
> A hundred brave doctors as good as the Bishop.

—*Punch.*

GENERAL PRACTITIONERS AND SPECIALISTS.—Dr. George Johnson, at the introductory address of the King's College Medical School, said some pretty severe things regarding the abuses which had grown about specialism. After referring to the indiscriminating way in which the public often looks at the matter, he related the following anecdote of Dr. Latham: "Dr. Latham, as you are aware, was a very eminent, learned, and accomplished physician of St. Bartholomew's Hospital, but he had published more on the diseases of the heart and lungs than on

any other subject. A patient of his, who had recently recovered from some pulmonary affection, one day said to him: 'I feel that as regards my lungs, I am quite well, and now I think of going to consult Dr. Watson about my general health.' To which Dr. Latham replied: 'Yes, I see—in your estimation Dr. Watson is an architeet, and me, I suppose, you look upon as a bell-hanger.'" Dr. Johnson advised the students to be architects, learning at the same time how to hang a bell.

—A London journal gives these verbatim copies of written exercises in one of the Greenwich schools:—"Infections are brought on by bad smells, such as small-pox, measles, scarlet fever, glass pox, S. C., they are brought on by bad drainerges suers; they must be well ventolated.—Infection desease are caught by touching such as charcoal, chloride of lime, &c. Measles, feaver are called disinfectionous because they are catching.—Fainted. If a person as fainted, take her out in the open air lay her down with her head. And do the clothing round the neck and dashed cold water the face and hand and put smelling saults to her nose.—Degestion is paines in the head, paines in the stom-ach, bad tempers. From degestion comes consumption, information, head ache, neuralgia."

Painless Operation for Ingrowing Nails.—Dr. J. H. Converse, in the *American Med. Journal*, says: "I will give this for the benefit of your readers, as perhaps it will be new to some of them. It consists of wedging cotton under the free margin of the nail, placing over it a piece of adhesive plaster with a hole cut into it the size and shape of the nail to be removed; then moisten the end of a pencil of caustic silver and apply it to part to be removed, taking care not to touch any other portion. The next day the nail will have assumed a black or brown appearance. Upon raising the nail it will be found to have become separated from the sub-adjacent tissue, and all there is required to complete the cure is to clip off the dead portion.