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*A Monthly Journal of Medicine,
Surgery, Chemistry and
Scientific News.*

WINNIPEG, AUGUST, 1887.

MODERN OBSTETRICS.

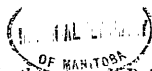
The zeal which is brought to bear in the practice of modern obstetric surgery, if pushed much further, will surround the parturient woman with such a hedging of supposed preventatives and palliatives as to make that period between the date of conception and that of convalescence after the completion of child-birth a time of misery and imaginary danger. Some practitioners of—we will call them—"the rising school" seem to regard the process of procreation as one of disease, and advocate what the older writers would stigmatize as meddling and mischievous interference, both during the period of gestation and the final act of uterine contraction. No doubt there are special cases which call for the exercise of the surgeon's skill. It is not to such our words apply, but to the tendency which is betraying itself to regard the process "a purely natural," though in part a painful, function as a condition of disease. The fallacy of the argument that we find used that in certain institutions the adoption of aseptic midwifery had largely reduced the mortality is best shown by stating that carbolic acid and iodoform, the antiseptics in general use, are pronounced by distinguished chemists of the present day as having no antiseptic properties whatever. Deodorizing properties they, no doubt, have;

but as germ-killers they are pronounced as being not only inert in such action, but it is contended that they absolutely exercise a preservative effect on the vitality of the germ. At a meeting of the Medico-Chirurgical Society of Montreal great stress was laid by several of the speakers on the great benefit derived by the practice of aseptic midwifery. If the chemists are correct in their conclusions, the benefit claimed for this treatment must be traced to another source; and the question will arise, were not the good results due to the greater cleanliness that would necessarily be employed in the carrying out of such treatment, and not in any way attributable to the use of antiseptics. The western hemisphere claims to be the home of obstetrics and gynecology. But the cautious advances made in this branch of medicine by illustrious obstetricians of bygone days would with advantage be still borne in mind by the enterprising surgeons of the present day. The comparative freedom with which the peritoneum can be incised has opened a field for venturesome surgery which bids fair to be strained to the utmost, and a mania for the performance of brilliant operations on the abdominal organs, especially of women, has become alarmingly developed. The method even of conducting an ordinary case of labor as laid down in the by no means old or obsolete text-books of midwifery does not suit this go-ahead age, and measures which are sufficient to startle the shades of Denman, Ramsbotham, Churchill, Shekleton and McClintock are publicly advocated. The patient obstetrician will have a far larger measure of success than the impatient and meddling practitioner. We cannot condemn too strongly the indiscriminate performance of an operation at present in constant use: "scraping out the womb." The very simplicity and ease with which the

operation is performed invites it, but it would be difficult for the operator in many of these cases to give a logical reason for its performance. It is a new fad in surgery, and will have its day, but that day will assuredly be a short one; and those who use the instrument for the destruction of intra uterine growths should bear in mind that their interference may not improbably alter a benign tumor which would give little inconvenience and not imperil life into a rapid, painful and destructive growth.

WE are not reponsible for the opinions any gentleman may express through our columns; but as the letter which appears is from the pen of Dr. Kerr, one of the most prominent members of the Winnipeg Hospital staff, it must be regarded with attention. Dr. Kerr does not specify the defects in the construction of the hospital, with which he finds fault. No doubt he will do so in a future number of this journal. But the profession throughout the province are quite aware that as a school in connection with a college for the granting of medical and surgical degrees it is lamentably inefficient. With the hospitals of the world to choose from as models, for both the construction of the building and the organization of the staff, the directing powers of the institution have ignored this wide experience, and in the result we find a faulty structure and a unique arrangement of the medical staff, the physicians and surgeons of the institution being one and the same. Such an arrangement is obnoxious to the welfare of the hospital, adverse to the well-being of the patients admitted there, and disastrous to its prospects as a medical and surgical clinical school. If the hospital aspires to be "the medical institution" of the province, the most important factor in the education of the future medical men who graduate in the Manitoba College. Before it

receives the confidence and support of the medical practitioners of Manitoba sweeping changes must be made so as to place it on a footing with the other hospitals of the universe that seek to attract students within their walls for the purposes of instruction. No fault is to be found or imputed to the gentlemen who so ably discharge their professional duties in connection with it. But a visit to the hospital by any person having a knowledge of the internal economy of similar institutions must lead to the conclusion that there is abundant room for improvement. Want of funds is no plea. It is as easy to have a model institution on a small scale as on a large one. The blunders that exist commenced at the opening of the institution, and the sooner they are corrected the better for the profession and the public at large. We entirely agree with Dr. Kerr that in no way can a man do so much good to his fellows or earn the respect and gratitude of those who are and are to come than in devoting his charity to the maintenance of institutions for the relief of suffering humanity, and in no way can money be applied to benefit a greater number or confer greater benefits. It is the bounden duty of every one to contribute towards the support and efficient working of hospitals. According to his means let him give; the widow's mite is as acceptable as the rich man's gold. It is a cause in which every one bears a certain amount of responsibility. Changes, no matter how requisite, are attended with expense, and we learn that the funds of the Winnipeg General Hospital are not in a flourishing condition. As it is a provincial institution, let the whole province come to the rescue. Let an hospital Sunday be established, as in England, and the proceeds devoted to placing this institution in the most advanced position for yielding medical aid to the suffering and providing a school for the practical training of



those who take up medicine as a profession.

We noticed in the *Sun* a desire expressed for instructions what to do in cases of drowning, as there have been three instances in this city within a short period. We give the following

APNEA FROM DROWNING.

First remove all impediments to respiration, such as collar, shirt-band, bodice or other article of apparel. Wipe off all mucus collected round the mouth and nostrils. Place the body with the face downwards on the edge of the table or support at an angle of 30; open the mouth and draw the tongue forwards, keeping it so until the water ceases to flow. Then place the body on the back, with the shoulders raised by a bolster or some other contrivance. The operator then stands at the head, seizing both arms he raises them by the side of the head until the elbows nearly meet, then bringing them down smartly to the sides again and pressing against the chest-walls, repeating this about fifteen times in a minute. Maintain the temperature by friction, hot blankets, and, if obtainable, a hot bath. Dash cold or hot water on the face. If the eyes are open, the pupils dilated, the conjunctiva insensible, the countenance placid, skin cold and heart-sounds inaudible, resuscitation is hopeless. In all cases the absolute cessation of the heart's beat must be ascertained by placing the ear over the region. This is known as the Sylvester method, and is preferred to the well known Marshall Hall proceeding, among other reasons from the fact that the body being placed on the back instead of on the side presents no impediment to the free entrance of the air into both lungs. Direct inflation of the lungs may also be performed by the mouth. To do this it is necessary to draw the tongue forwards, as in this condition the jaw

falls back, completely closing the laryngeal orifice.

DEATH FROM SUPPRESSION OF URINE.

MR. DUNCAN (EDINBURGH).

The wheel of a cart, which, with its contents, weighed about 25 cwts., passed over the lower part of a man's abdomen, about an hour after micturition. At 10 p.m., five hours afterwards, he was admitted to the Royal Infirmary, Edinburgh, with spasmodic abdominal pain, aggravated by movement, having an intense desire to micturate but being unable to do so. No fracture of pelvis or injury to spine could be detected, only bruising and abrasion of front of thighs at upper part; on account of an extremely tight stricture and false passages, no instrument could be passed, but after a morphia suppository the patient passed some blood-stained urine with great difficulty, while in a hot bath. He slept well, but woke up with symptoms unrelieved. At 2.30 p.m. Mr. Duncan saw the case, and having failed to pass an instrument and to draw off any urine by aspiration, he opened into the bladder by perineal section. Although no rupture could be felt with the finger, its presence was recognized by the only partial return of fluid injected by the perineal wound. Laparotomy was therefore performed, and a quantity of blood-stained fluid escaped from the peritoneal cavity. A rupture two and a half inches long was found on the upper and posterior part of the bladder. After washing out the abdominal cavity with hot water, a glass drainage tube was passed into Douglas' pouch, and the rest of the abdominal wound closed by catgut sutures. A drainage tube also was passed into the bladder by the perineal wound. At first the patient did well, but on the evening of the next day, that is the second day after the accident,

suppression of urine set in, and by midnight was complete. In spite of all treatment it continued, and death supervened on the evening of the fourth day after the accident, and third after the operation. At the post mortem examination the rupture of the bladder was found to be only half the length on the mucous that it was on the peritoneal coat. The kidneys showed signs of interstitial change with fatty degeneration of epithelium. Fatty liver. Very little peritonitis. No other condition of importance.

DIGITAL AMPUTATIONS UNDER COCAINE.

BY NELSON L. NORTH, JR., M. D., OF
BROOKLYN.

I wish to call attention to a very simple method of employing cocaine in cases where, from injury to the fingers, amputation is found to be a necessity.

On the entrance of the patient and the exposure of the injured member, the wound is thoroughly saturated with a 4% solution of the hydrochlorate of cocaine before any examination is made; and then, after waiting a few minutes for absorption to take place, one can examine and probe the wound with entire satisfaction, as the patient makes no resistance, because he suffers no pain.

The flaps may then be cut, following each considerable incision with a few drops of the cocaine solution, and also using it occasionally to wet the entire denuded part, ligatures may be applied, and the bone sawed as necessity may demand.

The wound is now ready to be closed, and, after thoroughly irrigating it with antiseptic solution and providing for proper drainage, sutures are applied and the wound dressed according to the principles of antiseptic surgery.

The method is simply one of saturating the wound with the cocaine solution—the cocaine is not injected. Not that there is any objection to such a procedure, but simply because of the lack of necessity—anæsthesia being sufficient without the use of the hypodermic needle.

The question has been asked, does the cocaine interfere with primary union? No; in the cases under observation no bad effects have resulted from this method, either on the constitution of the patient or the healing of the wound. I have also used cocaine somewhat extensively and in the same way with very happy results, in wounds of the scalp and face, and in allaying the pain of those very annoying "little things" in the way of injuries which go so far toward making minor surgery disagreeable both to the patient and surgeon, and yet are of themselves not dangerous to life.

ROYAL DUBLIN SOCIETY.

An adjourned general meeting of the Royal Dublin Society was held on Thursday, June 30th, for the purpose of confirming the new by-laws, and alterations in the old ones, rendered necessary by the resolution passed on March 3rd, to the effect that it is desirable that ladies be admitted as members of the Society. The great advances which have been made of late years in the higher education of women show that the fair sex are capable of doing excellent scientific work, and in such cases it is only just that they should be received as members of the societies to which they contribute the results of their researches. At the same time it will be as well not to be too ready in admitting all candidates, or there will be danger of converting what should be a scientific meeting into merely a social gathering.

EGAN VS. ORVILLE.

Egan vs. Orville was tried in the County Court before Judge Ardagh on Monday, and we regret to say the result was a non suit. The facts elicited were that Mr. Egan, who had been suffering from dyspepsia for some time, and then laboring under very aggravated symptoms of the affection, caused by an unusually costive condition, was persuaded to consult this so-called Professor and decided to do so on the ground that he conceived a Professor (?) must know more than an ordinary medical man. He presented himself at their rooms in the Queen's Hotel and was shown into a room where there was a gentleman of such acute penetration as to be able to say, without even a cursory examination that his case was a very bad one, and would be an *expensive one to cure*. Mr. Egan asked how much money it would take. The answer was \$150 paid in two instalments, \$75 down and \$75 more in three months. It being Saturday evening, Mr. Egan said he had not that amount with him, but would give security for the payment of it. This, however, was not agreeable. He then offered \$10 and the remainder on the following Monday, but eventually they got a cheque out of him for \$50. On Monday, feeling very uncomfortable, he went to these parties and requested some opening medicine. The answer was to use an enema. The bell was rung for another of the gang, who on coming in was asked what he would give baths and electricity for. He said \$10 a week. To this Egan objected, and the amount was reduced to \$5, and ultimately to \$2—"anything to keep the fly in the web." Mr. Egan naturally felt disgusted at this attempt to extract \$240 more after undertaking to entirely cure him for a sum of \$150. He grasped the fact that he was regarded as a pigeon

worth plucking, and decided to give Professor Orville and his surgeons a wide berth. He then consulted a regular practitioner, and by the use of ordinary remedies was completely relieved in a few days, and expressed himself at the trial to be as well as ever he was. "Professor" Orville, in his examination, stated that though he was a professor of calisthenics, gymnastics, and all the other ics and isms, he was not a professor of either medicine or surgery, of which sciences he was ignorant, but hired his "doctors" to attend to patients; and it is under the wing of a Dr. Airth, who registered at the College of Physicians and Surgeons of Manitoba a short time before the advent of this circus, that this man is enabled to evade the law of the province. The public may form their own judgment of the calibre of a professional man who would enter into such an arrangement. Orville's counsel boasted of Dr. Airth holding the license of the College of Physicians of London; but it will be soon demonstrated that this college does not permit its license to be trailed in the gutter. The case is on its way to the Council of the College, both from official and private sources and "*fiat justitia ruat cælum*" will no doubt be their answer. The quid pro quo that Mr. Egan received for his \$50 was a six-ounce mixture composed, as reported by Mr. Wright, public analyst, of "infusion of buchu, nitrate of potash, and simple syrup," one teaspoonful to be taken three times a day, the bottle to last one month—such were the directions on it. This was the treatment prescribed for a man suffering from considerable tenderness in the epigastric region, with liver and intestinal tract extremely sluggish, and with a very depressed condition of system. That the charter of the College of Physicians and Surgeons of Manitoba is lamentably deficient in conferring sufficient powers to protect the pro-

fession and the public against the wiles and subterfuges of charlatans is now apparent, and it is the duty of the officials to have their charter amended at the earliest possible moment, and for the profession throughout the Province to bring all the pressure they can to bear on their several representatives in the Local Legislature to support such amendments. We daily hear of the doings of the Orville fraternity, all betraying one end and aim—the raking in of the dollars; but yesterday we learned for the first time that young girls of respectable parentage in this city are being employed by this man, and we would warn such parents to pause ere they allow their pure-minded children to connect themselves with a traveling circus of self-styled professors, with whom no respectable medical practitioner would associate. As the drowning will catch at a straw, so will those who are enfeebled by disease and demoralized by the thought of impending death grasp at the most illusory hope, and it is on such that the quack and the charlatan, the empiric and impostor feast and fatten.

TREATMENT OF HYPERTROPHIED PROSTATE.

DR. A. LANDERER (LEIPSIK).

Gives a case of a man, *æt.* 63, who had trouble in micturition for several years, and for one year hæmorrhages from the bladder, latterly pain the predominating symptom.

Exploration revealed an enlarged prostate, and on repeated introductions of sounds a rough body was once felt. Diagnosis of stone or incrustated tumor was made. Operation after Thompson, as if for tumor, was made, and after introduction of index finger into the bladder a stone was easily felt. At the moment, however, that attempts were made to secure

the stone with forceps, narcosis became incomplete, and when the forceps were withdrawn after the spasms had ceased, the stone had eluded the instrument; but between the blades was found a portion of the middle lobe of the prostate. The stone being subsequently removed, the rest of the middle lobe of the prostate was trimmed off, iodoform applied, a drain fixed in the perineal wound, and irrigations of the bladder performed twice a day.

The wound healed in two weeks, the drainage tube having been removed after eight days. At the time of reporting, fifteen months after operation, the patient was in excellent health, and all trouble arising from the previous condition of the prostate had entirely vanished.

At first the author was vexed with the unintentional interference with the prostate, but when he observed what good effects followed, he was led to believe that surgical interference of this kind was the proper treatment for hypertrophied prostate—at least in all such cases where the enlarged middle lobe causes the trouble, as in the majority of cases.

Extirpation of the entire gland he believes to be unjustifiable; the prostatic capsule should not even be opened on account of the venous plexus of the prostate, injury to which is apt to cause serious complications.

To facilitate the operation the author has constructed a special pair of forceps, somewhat resembling strong polypus-forceps with a sharpened edge. There is only a slight hæmorrhage. The drainage of the bladder acts beneficially upon the cystitis generally present in these cases.

Comparison with other methods, such as injection of ergot, electrolysis, and galvano-cautery after Bottini are made in favor of the author's method.

Special attention is given to the

bodily conditions and habitus of the class of patients generally suffering from hypertrophied prostate.

PUERPERAL DISEASE CURED BY AMPUTATION OF THE SEPTIC UTERUS.

BY B. S. SCHULZE (JENA).

Author reports the following case: Patient, 21 years of age, gave birth to a seven months' child. The umbilical cord was torn away by the midwife, in attempting to remove the placenta. A few hours later the cervical canal was so reduced in size that it was impossible to reach the placenta. Warm baths, the application of the galvanic current and deep narcosis tried during the two following days, failed to enlarge the canal, which only just admitted one finger. On the evening of the second day there was considerable elevation of temperature, and a chill, with putrid discharge from the uterus. Disinfecting irrigation of the uterine cavity frequently made. On the evening of the third day the attempt was again made in deep narcosis, to reach the placenta. One finger alone could be introduced, and by means of this it was ascertained that the uterus was double at the fundus, the left cavity being empty, while in the right the placenta was firmly adherent. During the next two days, the fourth and fifth, there was considerable fever, accompanied by chills and symptoms of peritonitic irritation. Operation in the morning of the sixth day. Laparotomy. After the uterus had been drawn forward with the hand, and a rubber tube passed around the neck, incision was made and the offensive smelling placenta removed. The destruction of tissue in the wall of the uterus reached to within 2mm of the peritoneum. The left half of the organ was also much discolored. Several portions of the intestines

lying nearest the uterus were much injected, having a granulated appearance. No exudation in the abdominal cavity. The infundibulo-pelvic ligaments were tied and divided, the uterus and ovaries drawn well forward, and the former amputated. Schultze prefers suturing the stump of the amputated uterus and replacing it according to Schroeder's method. In this case, however, the surface of the wound was too suspicious looking, and Hegar's method of suturing the stump in the abdominal wound was carried out. The latter was then closed and the end of the stump cauterized. This was afterwards treated with chloride of zinc. The temperature remained during the same day below 37 (Celsius), rose to 40.2 during the next two days and then decreased. Two weeks later no fever. Superficial gangrene attacked the stump, extending to the abdominal walls, where it soon localized itself. On the ninth day after the operation the stump could be removed with the scissors. The rubber constrictor was withdrawn on the eleventh day, and the remaining sutures in the abdominal wound on the thirteenth day. Patient made a good recovery. At no time did any peritonitic symptoms appear. The septic condition of the uterus in this case was owing to the retention of the decomposing placenta, and this was due partly to the malformation of uterus. Retention of the placenta in cases of normal uterus, and septic infection of the puerperal uterus without retention of the placenta, may both give rise to the same indications for an operative procedure. Author considers the operation indicated: firstly, when the source of the infection is known to exist in the uterus and is not removable through the genital tract; secondly, the only source of infection threatening life must be confined exclusively to the uterus; thirdly, in cases where it is ascertained that no other sources

of infection, more centrally situated, in all probability exist, such as thrombosis or embolism. The knowledge, however, that portions of the placenta and even the whole of this, may remain for months in the uterus without causing any infection; and furthermore the fact that many women recover from severe puerperal infection, must necessarily limit the indications very materially.—*Annals of Surgery.*

THE STRING DRAIN.

BY A. R. JENKINS, M. D.

It consists in introducing one end of thirty or forty feet of rough string, highly hygroscopic, and completely aseptic, through the usual "Chassaignac drainage tube," so that, when the last is placed in the wound, the string may be drawn through, from time to time, as will be explained hereafter.

The string may be of cotton, linen or wool, that has been freed of fat and disinfected, for which purpose it is recommended that it be treated after the manner that V. Bergmann prepares his gauze—by immersing the absorbent string for one hour in the following: Sublimate 1, glycerine 50, alcohol 100, water 150, warmed, to be dried and kept in hermetically sealed glass jars; it will then hold one-third per cent. sublimate, and is very absorbent. The end of the string being passed into the tube, and the tube placed in the wound, and it closed, then the strings and aperture or apertures of tube are covered by the usual protective of "gutta-percha paper" or "Lister's oiled silk," to hinder evaporation or gluing of the string. The string is now tried to see that it draws freely, and is so placed that it lies along the line of least resistance, and closely applies to the body's surface; over the gutta-percha paper and string the gauze and cotton, etc., are to be placed. The coil of the string may be

kept in an antiseptic magazine, such as a glass bottle (suggested by my colleague, Dr. Arch. Dixon), which can be included in the bandage or left out as desired; in the last case, when not being used, the bottle should be tightly estoppered and covered by an antiseptic bandage. The draw-end should be left out, and can be drawn upon from time to time as may be necessary until it comes free from secretion. The soiled end of the string can then be cut away, and it and the bandage at its emergence disinfected with a saturated solution of iodoform in ether. The other end should be protected most rigidly against infection, as mentioned above. Or the string might be placed in a coil in the wound itself, in form of tampon, and passed out through a drainage tube. This might apply in wounds such as would be left after the removal of tumors (as lipoma), or might thus be used with Martin's drainage tube in "Douglas' fossa."

The process advocated is recommended during the first forty-eight hours when the wound is pouring out a large quantity of serum, before granulation is established on the wound's walls, which follows especially operations in which "carbolic" or other irritants are extensively employed, and in this time the tube is most likely to be stopped by coagula. Also, the secretion thus brought out would be a ready criterion for examination of the wound's progress.

Kehrer substitutes for "Cheyne's catgut bundle" a similar arrangement of wool, the hairs lying parallel, and secured in a drainage tube of glass. Mosevig v. Moorhof extols this method, having tried in a case of ovariectomy.

Macewen inserts a bundle of horse-hair in a decalcified bone drain, the hair to be removed in forty-eight hours, the tube to remain "in situ."—Mosevig v. Moorhof, *Chir. Technik*, u. v. a.

These methods are mentioned because they are the only ones in which the writer has been able to find a resemblance to the one described above.—*Annals of Surgery.*

BONE-GRAFTING IN CASES OF EXTENSIVE LOSS OF SUBSTANCE.

BY M. PONCET (LYON).

From a child, *æt.* 11, the author removed the entire right tibia excepting the superior articular surface; the portion extirpated was 30 cm. long and but 15 or 16 cm. of periosteum was preserved. After several series of grafts a useful tibia permitting locomotion was produced; the repair was complete in the ninth month. The author considers this practice of advantage in extensive losses of bone substance, such as are observed after acute necrosis of long bones in children and adolescents or after compound fractures, when a considerable portion of bone has been sacrificed, since it will obviate to a certain extent the shortening of the diseased member, and above all permit the conservation of its functions by assuring the solidity of the skeleton. In infectious epiphyseal osteitis, the resection should not stop with the removal of the necrosed bone, but extend to the neighboring bone ulna or fibula, taking care to make the section within the epiphyseal cartilage, in order to prevent the growth of this bone beyond its fellow and the resulting deformity. For the success of bone grafting certain conditions are indispensable both to the transplanted fragments and the point of implantation: (1) The grafts should be small, not exceeding six to eight millimetres in length and three to four in thickness; they should include the periosteum and be taken preferably from parts of the skeleton where ossification is the more active; whenever

possible the bones of the new-born, dead, dead without pathological taint, should be used; limbs amputated in consequence of traumatism may also furnish material for bone grafts; so also with the bones of young animals. The fragments should be detached carefully with a strong scalpel, never with a saw, in a direct parallel to that of the bone; the surface of the section should be smooth, and present no projecting laminae. (2) The place of implantation plays an important role in bone grafting. Implantation should be performed in the period of repair of the wound, when the inflammatory troubles have completely disappeared, when the granulations are healthy, vascular, rosy and suppurating but little, and when the edges have commenced to epidermize. The transplanted fragments probably never grow; perhaps they are even absorbed after a greater or less time; in any case they enter for a certain time into the formation of the new bone, which they render firm and reinforce after the fashion of stone or brick in a substance capable of hardening. It is probable also that they awaken by their presence osteogenic properties in the neighboring tissue. Antiseptics of the graft and of the wound is indispensable; so also is immobilization such as can only be obtained by a plaster splint.

WOUND OF THE INTERNAL JUGULAR VEIN, FOLLOWED BY RECOVERY.

BY JAMES BELL, M. D., SURGEON TO THE MONTREAL GENERAL HOSPITAL.

On the 27th of November last Fred V., a carpenter, aged 27, was working on a scaffold placed on ladders, when one of the ladders gave way and he fell to the floor, a distance of about four feet, with a sharp inch-and-a-half carpenter's chisel in his right hand.

In falling the chisel entered the right side of his neck, making a vertical wound a little more than an inch long, with its upper extremity just below and behind the angle of the jaw. He immediately withdrew the chisel, which was followed by a tremendous gush of blood. He grasped the side of his neck with his hand, and got up and walked down a flight of a dozen steps of stairs to where his comrade was working. The change of position and the pressure of his hand stopped the bleeding for the moment, but the neck swelled rapidly and the bleeding recommenced. When he reached his comrade he felt faint and giddy, and when he attempted to speak he found that "his voice was gone" and that he could only speak in a whisper. His comrade laid him down and tied a handkerchief tightly round his neck, but as this failed to stop the bleeding he applied pressure over the handkerchief with his hand. The Montreal General Hospital ambulance was telephoned for and arrived in a few minutes, accompanied by Dr. Kirkpatrick, of the hospital, who found that the patient had lost and was still losing a large quantity of blood. He took charge of the wound and controlled the hemorrhage by compression until he reached the hospital, when he was assisted by the medical superintendent and the other resident medical officers. I was immediately telephoned for, and on reaching the hospital I found him still losing a great deal of blood in spite of the well-directed efforts of the resident staff to control it by digital compression applied over the wound. The patient was weak and pale, and showed unmistakably the evidences of having lost a large quantity of blood. Having made the necessary preparations, I directed compression to be applied over the common carotid artery (which could be felt in the lower part of the neck, although the tissues higher up were much infil-

trated with blood), and the compressing hand having been removed from the wound I hastily thrust my right forefinger into it. The performance of this act, although easily and speedily executed, was accompanied by an alarming gush of blood. I directed the wound to be compressed around and against my finger, which arrested the hemorrhage. The blood was apparently venous in character, although up to this time the lesion had been thought to be a wound of the carotid artery. I found that the wound extended upwards and backwards behind the sterno-mastoid muscle and along the base of the skull. I could feel the bodies of the upper cervical vertebrae, the styloid process of the temporal bone, and other prominent points about the base of the skull, but I could not put my finger upon the bleeding point so as to arrest the hemorrhage. As his condition was a very desperate one, and the permanent arrest of the hemorrhage seemed to be almost an impossibility, I sent for Dr. Fenwick in order to have his advice and assistance before removing my finger from the wound. I consequently retained my finger in the wound, and compression was applied against it, as already described, until Dr. Fenwick arrived. Dr. McClure then took my place and introduced his finger as I withdrew mine, the change being accompanied by a tremendous gush of dark venous blood. We then decided to tie the common carotid artery, thinking that although the gushes of blood were very dark and apparently venous in character, a large vein could hardly be wounded in this situation without some of the great arterial trunks being wounded at the same time, and that this operation would be a wise precaution as a prelude to further treatment. The patient was then etherized and the artery was tied below the omohyoid muscle, the infiltration of the cellular

tissue with blood greatly obscuring the ordinary guides to the vessel. The ligature of the carotid had no effect in reducing the hemorrhage. We then decided that, judging from the rate at which the blood flowed whenever the pressure was relaxed, any attempt to enlarge the wound and catch the bleeding vessel would be fatal in a few seconds, and that our only recourse was to compression within the wound. Accordingly two large-sized fine Turkish sponges, which had been prepared but had never been used, were taken from corrosive sublimate solution and their interstices filled with iodoform. Taking one of them I rolled it up tightly in a somewhat conical form, and introducing it through the skin wound, pushed it firmly back to the base of the skull along the track of the wound; the second sponge was then introduced on top of this and a Lister dressing firmly applied to the neck. This completely arrested the hemorrhage—a little blood-stained serum only finding its way through the dressing. The patient was now very weak and pale, and almost pulseless. He could not swallow except with the greatest difficulty, could not speak above a whisper, and his right pupil was very much contracted. He soon rallied, however, and in a day or two could swallow very well, although his voice has never been restored. A moderate degree of ptosis of the right lid was observed the following day. It probably existed from the first, but was overlooked in the presence of so much graver symptoms. The dressings were changed on the fourth day and again on the ninth day, when the outer sponge was withdrawn without difficulty, and without being followed by any sign of hemorrhage. On the sixteenth day after injury the dressings were again removed. The external wound was lengthened and enlarged by an incision backwards from its posterior border, and the larger

part of the remaining sponge, which was firmly held in the wound, was cut away with curved scissors. The wound was then irrigated and stuffed with iodoform gauze, and a gauze dressing applied. It was again dressed on the twenty-first day, and again on the twenty-eighth day after the accident. At this latter dressing the sponge was found to have become detached and to have worked its way out nearly to the surface of the wound. It was easily removed. The subsequent progress of the case was uninterrupted, and the wound is now (seven weeks after the accident) almost completely healed. There is still a little sinus leading down to the ligature which was applied to the carotid artery; the ptosis remained unchanged, as well as the contraction of the right pupil. The voice has slightly improved, but is still whispering and low pitched, and he carries his head towards the injured side. The latter is probably due to the contraction and stiffness about the wounds.

Remarks.—There can be no doubt, I think, that the source of the hemorrhage was a wound of the internal jugular vein close to the base of the skull. The paralytic symptoms also show clearly that the sympathetic and superior laryngeal nerves were severed. The partial ptosis may also be explained by the sympathetic nerve lesion. It seems scarcely credible that, under the circumstances, this patient did not bleed to death on the spot. This may be explained, I think, by the fact that the wound was a valvular one, and when he altered the position of his head so as to stand up and look straight before him, the sternomastoid muscle was interposed between the bleeding vessel and the wound in the skin so as to completely close the latter, and thus the flow was for a time arrested. The behavior of the sponges is very instructive, and shows

that venous bleeding from any source may be controlled permanently by well applied pressure. Both the original wound and that made for the ligation of the artery remained aseptic throughout.—*Canada Medical and Surgical Journal*.

THE AIR OF SEWERS.*

BY PROF. CARNELLEY, D. SC., AND J. S. HALDANE, M.A., M.B., UNIVERSITY COLLEGE, DUNDEE.

Owing to the complaints which had been made of bad smells in the House of Commons, a Select Committee was appointed in the spring of 1886 to inquire into the ventilation of the House. By that committee the authors were instructed to make a series of analyses of the air in the sewers under the Houses of Parliament, and to report thereon. Since then they have examined a considerable number of sewers in Dundee, and have also made a number of laboratory experiments. The object of the research was to obtain a general idea of the amount of some of the more important impurities in sewer air, and to throw some light on their sources, and the conditions affecting their dissemination.

After giving a brief résumé of the results of the analyses which had been previously made of sewer air, the authors describe the methods they have employed, and the nature and the condition of the sewers they have themselves examined.

As a result of their investigation they found: (1) That the air of the sewers examined was in a much better condition than might have been expected. (2) That the carbonic acid was about twice, and the organic matter rather over three times as great as in outside air at the same time, whereas the number of micro-organ-

isms was less. (3) That in reference to the *quantity* of the three constituents named the air of the sewers was in a very much better condition than that of naturally ventilated schools, and that with the notable exception of organic matter it had likewise the advantage of mechanically ventilated schools (*cf.* paper by the authors and Dr. Anderson in *Phil. Trans.*, 1887.) (4) That the sewer air contained a much smaller number of micro-organisms than the air of any class of house, and that the carbonic acid was rather greater than in the air of houses of four rooms and upwards, but less than in two and one roomed houses. As regards organic matter, however, the sewer air was only slightly better than the air of one-roomed house, and much worse than that of other classes of houses (The data for all the classes of houses refer to sleeping rooms when occupied during the night)

The amount of carbonic acid found by the authors was much less than that noted by earlier observers, showing that the sewers they examined were much better ventilated than those previously investigated.

On taking the average of a comparatively large number of analyses it was found that the quantity of organic matter in sewer air increased with the carbonic acid, whereas the micro-organisms on the whole decreased with increase of the other constituents.

With regard to the sources of the several impurities in sewer air the following conclusions are drawn: (1) The *carbonic acid* in excess of outside air may be partly due to diffusion from the neighboring soil, but its chief source is probably the oxidation of the organic matter in the sewage and in the air of the sewer. (2) The *organic matter* in excess of outside air is most probably wholly or for the most part gaseous, and is of course

*Abstract of a paper read before the Royal Society, June 16th, 1887.

derived from the sewage itself. (3) The *micro-organisms* in sewer air come entirely, or nearly so, from the outside, and are not derived, or only in relatively small numbers, from the sewer itself. This is proved by the following facts: *First*, the average number of micro-organisms in sewer air was less than in outside air at the same time, viz., about 9 in the former to 16 in the latter. *Second*, the number increased with the efficiency of the ventilation. *Third*, the average proportion of moulds to bacteria in sewer air was almost exactly the same as in outside air at the same time, whereas one would expect the proportion to be very different were the outside air not the source from which they were derived, seeing that such a difference has been proved to exist in the air of houses, schools, etc. *Fourth*, the naked eye appearance of the colonies from sewer air is similar to that of those from ordinary air. *Fifth*, the state of filthiness of a sewer seems to have no perceptible effect on the number of micro-organisms. *Sixth*, the view that the micro-organisms in sewer air chiefly come from outside is in perfect agreement with what is known as to the distribution of bacteria in the air. *Seventh*, results obtained in the laboratory with an experimental sewer prove that the micro-organisms present in air are diminished to nearly one-half in passing along a moist tube 5 feet long and 1¼ inches in diameter at a rate of nearly one foot per second. Although most of the micro-organisms in sewer air come from outside, yet there was distinct evidence of their occasional dissemination from the sewage itself. This is the case when splashing occurs, owing to drains entering the sewer at points high up in the roof. It is, therefore, of great importance that drains should be so arranged as to avoid splashing as much as possible.

In view of the fact that ordinary

sewer air is to all appearance comparatively innocent as regards its micro-organisms, experiments were also made to see whether it contained any poisonous volatile base of the nature of a ptomaine. These experiments so far as they went had negative results.

Experiments as to the efficacy of ordinary water traps in preventing the escape of sewer gas into houses confirmed and extended the results previously obtained by Fergus.

Though the authors do not discuss the effect of the inhalation of sewer air on health, yet the results of the above investigation are clearly such as to make one much more suspicious as to supposed evidence of the bad effects of ordinary sewer air (at least when not vitiated by splashing) such as that examined by them.—*Chemical News*.

INFANTILE DIARRHŒA AND INFANTILE FOOD.

THE EDITOR.

At this period of the year infantile diarrhœa and various forms of choleraic seizures are prevalent in most countries north of the equator, but more especially are those affections to be met with in cities and towns. The more unsavory, the more unhygienic the town is, the greater the number of these cases are to be found, and the greater fatality attending them. Probably in no city of the world is there a greater neglect of all measures conducive to the preservation of the public health than in this city of Winnipeg. Owing to the healthful breezes that waft over it, its comparatively small population, and the beneficent provisions of nature, the inhabitants of this city suffer from but a tithe of the full measure of disease which the almost entire negligence of sanitary precautions subjects them to. The air is polluted and the nostrils offended by disgusting stenches

at every turn; accumulated heaps of refuse matter together with stagnant pools are to be met with everywhere, and to linger in the vicinity of a sewer grating is to have one's olfactory nerves assaulted by pestiferous gases pregnant with disease. The growl concerning the condition of affairs is almost universal, but as "there are none so blind as those who won't see," and in this case won't smell, this serious state of sanitation bids fair to continue until other eyes and other noses are at the head of civic affairs. The cant remark that the hot weather is the cause is utterly fallacious in the meaning it is intended to convey. It is not the atmospheric condition that is the proximate causation of disease, but its action on unsanitary and decomposing animal and vegetable matter which has been allowed to collect and set up putrefactive action, emitting gases which are said to form a purgative combination, but unquestionably are of a highly irritative character. It is not, therefore, the degree of temperature to which these epidemics of diarrhoea are to be attributed, but to the action of heat in producing noxious gases and organic matters through the neglect of proper sanitary precautions.

There is another cause, however, irrespective of that arising from the foregoing, which induces and aggravates diarrhoea, and though a vast amount of attention has been drawn to it, paradoxical as it may appear, very little attention is actually given to it, and that is proper food. In numerous instances when a child is seized with diarrhoea and vomiting, though accustomed to many kinds of nutriment, they are all abandoned for a milk diet. The argument is that the mother's milk is the natural food for the infant, failing that the cow's milk comes next, and the infant is dosed with it. A large proportion of

that swallowed is ejected in the form of curds, and what is taken into the system in many instances adds to the intestinal irritation. This is caused by the casein forming into masses in the stomach and intestines, the child's digestive organs being unable to assimilate it. This is one of the effects of cow's milk. The milk itself may contain morbid germs from decomposition, from being kept in closed or imperfectly cleaned vessels, or from standing near any noxious matter, and lastly though the milk may be as pure as it came from the cow it may contain highly irritative and poisonous qualities from the herbage on which the animal is fed. The prairies of this country abound with medicinal herbs of all kinds. It may be called to mind the rapidity with which a cow partaking of wild garlics impregnates the milk with its taste and odor as to render it useless. Unquestionably in the same way milch cows roaming on the prairies feed on herbs which, though having no deleterious effect on themselves, so enter into the mammary secretion as to render the milk absolutely unfit for infantile food. This does not apply to milch cows confined in old and carefully laid down pastures, but it does to all cattle allowed to roam, and more especially to those feeding on the abounding herbs of the Manitoba prairies. Milk is a prolific vehicle of disease. Some of the severest outbreaks of typhoid fever have been traced to its consumption. Some time since several cases of typhoid occurred in one of the most aristocratic districts of London. The drainage was examined and the water supply analyzed without finding anything to account for the onset of the disease. It was discovered that the fever attacked only the inhabitants of those houses who were supplied from a particular dairy some miles from London. A commission was

appointed to visit it, and found magnificent pastures, a splendid herd of cattle in the healthiest condition, but further investigation showed that the water used for the cattle was obtained from a pond into which a manure heap drained. This rectified, no further cases of typhoid manifested themselves. When diarrhoea occurs, in children particularly, at this season, milk as a diet should generally be avoided. Thin arrow-root and barley water, with gum or isinglass dissolved in them and slightly sweetened, given in small quantities at a time should be the only food. If much thirst exists and the stomach is irritable, a little cold water is beneficial, but the precaution of boiling it first should be taken. In protracted cases boil some flour in a napkin, allow it to dry, scrape and make a drink with rice water and a little white sugar. The body and extremities should be kept warm, and the first solid food taken a preparation of rice. The patent and advertised foods for children are legion, and no doubt many of them are very valuable; but the diet advised is easily obtainable and readily made at home.

ETHER OR CHLOROFORM AS AN ANÆSTHETIC.

DR. GERSTER, said, at a meeting of the New York Academy of Medicine, both chloroform and ether were dangerous anæsthetics. Chloroform caused very marked depression of the vaso-motor function; the depression occurred only occasionally when ether was used. The practical significance of this fact was that chloroform was the more powerful agent, and that its administration required much greater caution. But this was not sufficient ground for its unqualified condemnation. After consciousness had been restored there was no secondary dan-

ger from chloroform. On the other hand, although ether had not so often caused death on the operating-table, yet danger from its use did not cease when the patient regained consciousness; there were numerous cases of pneumonia and nephritis following its use, many of which terminated fatally. The author thought that physicians were prejudiced regarding the relative value of ether and chloroform as anæsthetics; this was especially true in New York, Boston and Philadelphia, where ether was used almost exclusively. He proposed to point out the cases in which chloroform was contra-indicated; also those in which ether was contra-indicated, admitting that, on the whole, ether was the safer anæsthetic, and that in general preference should be given it, especially by the inexperienced. He regarded Ormsby's as the best inhaler; less ether was required with it, and recovery from its influence was much more prompt on that account.

Ether was contra-indicated in kidney disease, as Emmet had pointed out. A case was cited in which the patient died from Bright's disease after the use of ether. Chloroform was much safer when disease of the kidneys was present. It had been employed in such cases for hours without any injurious effects. Ether was also contra-indicated in bronchitis, especially of the aged, and pneumonia. Three hospital cases were cited in which death occurred from pneumonia following an operation requiring the prolonged administration of ether. The house physician of another hospital had given him the notes of three cases of death from pneumonia during the year 1886 after the use of ether in operations. In five cases serious bronchitis occurred after the use of ether in the German Hospital during 1886. There was a class of operations in which ether could not easily be given,

such as kelotomy, those involving the peritonæum, and the removal of deep-seated tumors in the vicinity of large vessels. It had been said that ether always produced perfect anæsthesia within a few minutes, but, out of 125 cases in which it was administered in the German Hospital during 1886, in eleven satisfactory relaxation of the muscles could not be produced. In those cases chloroform was substituted and produced complete anæsthesia.

There was but one contra-indication to the use of chloroform, namely, a fatty or weak heart. Ether was also objectionable in these cases, but less so than chloroform. Patients addicted to the use of alcohol, perhaps in only moderate degree, took ether badly. During his hospital practice he had known pneumonia to follow the administration of chloroform in only two cases; both were cases of a bloody operation upon the mouth, and the pneumonia was due to blood entering the trachea. Both patients recovered. Valvular lesions of the heart were not necessarily contra-indications to the use of chloroform. In such cases there was often compensating enlargement of the heart. Fear and nervous depression contra-indicated the use of chloroform. In such cases, if it was necessary to employ chloroform, he would precede its administration by that of stimulants and a small amount of morphine.

DR. R. F. WEIR said there was a growing feeling among us that ether was not so safe an anæsthetic as we had for some years believed. He had frequently given it to persons having signs of kidney disease, and without untoward effects, but he had come to employ additional precautions in such cases. Regarding pneumonia, it was more frequent when the spray was used; it was also more frequent since the free use of carbolized cloths over the wound. In other words, pneumonia occurring after the administra-

tion of ether, according to his observation, was due to exposure of the patient. He had seen less of this trouble since he had called the attention of the hospital attendants to that matter. Ether had been employed almost exclusively in the New York Hospital since 1850. From that time to 1870 about 7,700 operations had been performed, with three deaths from ether. From 1876 to 1886 there had been 2,289 operations, with one death from ether. During the latter period there had been 802 operations in the House of Relief, with one death from ether. While in many cases the patients took ether badly, he could not recall any in which an operation had had to be discontinued.

DR. L. A. SAYRE said he was so thoroughly convinced of the correctness of his views regarding the relative safety and value of ether and chloroform, that he continued to use the latter in spite of the opposition which it met with in this country. He preferred chloroform to ether because it was more agreeable to the patient, it was more speedy in its effects, it did not produce spasmodic muscular contraction, and it was not followed by bad effects, such as vomiting, Bright's disease, pneumonia, etc. He strongly condemned the careless and free use of ether and chloroform largely mixed with air, as was so common. Chloroform and ether were powerful agents, each having caused many deaths; therefore they should be used with the same care and skill employed in the administration of any other powerful drug.

The speaker exhibited an inhaler which he had employed for many years for administering chloroform. Twenty or thirty drops of chloroform employed in this way would almost invariably produce anæsthesia with a very few inhalations, and when so small a quantity was employed, if by any possibility the heart should cease

to act, a few artificial respirations would restore the patient. When the anæsthetic was given freely mixed with air, so much of it entered the system that it would be impossible to restore the patient should the heart cease to beat. There was no struggle or difficulty in bringing children under the influence of chloroform when this inhaler was employed, as they became anæsthetized while blowing into it as a plaything.

DR. W. GILL WYLIE had not, so far as he knew, had any fatal result from ether during or after an operation until within two months, when two patients had died—one from acute Bright's disease ingrafted on a chronic process, the other apparently from suffocation within an hour after an operation for strangulated umbilical hernia. In the latter case the patient was extremely fat, and in such persons the danger of suffocation was greater. He had expressed a choice for chloroform before the operation. He would use chloroform in the lying-in room and for children. As a rule, he would give ether, especially in surgical operations; but he would give chloroform in certain cases of disease of the kidneys and of the respiratory organs. He also referred to another case of death from ether during an operation.

DR. J. A. WYETH thought chloroform was to be preferred for almost all persons under six years of age, in childbirth, and in cases in which previous experience showed that the patient took ether badly. If nephritis was present, he would proceed carefully with ether, and if dangerous symptoms arose he would substitute chloroform. He had never seen an accident from ether; certainly not a death. He had not met with the class of cases referred to by Dr. Gerster, in which the patients could not

be brought under the influence of ether.

DR. ROBERT ABBE said that since 1873 he had seen one death from ether. It was in the practice of the late Dr. Little. He thought the two chief ill effects of ether, bronchitis and nephritis, were under our control, whereas the danger from chloroform was entirely beyond our control. The sudden effect of chloroform upon the heart was not relieved by artificial respiration; but, when there was asphyxia from ether, artificial respiration would restore. Within the past year he had seen four cases of acute nephritis, which he thought were due to the use of ether, but the disease in cases like these could be controlled. Bronchitis was due oftener to exposure to drafts, etc., than to the use of ether.

DR. P. F. MUNDE had formerly used chloroform many times; of late years he had employed ether almost exclusively. He had seen no immediate deaths from it. He had seen syncope occur which might have ended fatally had not vigorous measures been resorted to. Whatever anæsthetic was used, he felt more anxiety with regard to it than with regard to the operation. He thought it wrong to trust the administration of the anæsthetic to the new interne, or to any unskilled hands. He used Glover's inhaler by preference. In some cases he had failed to get the patient properly under the influence of ether, and had substituted chloroform with satisfactory results. In short operations and in obstetric practice he preferred chloroform.

DR. R. W. AMIDON referred to the beneficial influence of atropine or some preparation of belladonna administered prior to giving ether, in preventing the collection of mucus in the respiratory tract.

PROFESSOR BARTHOLOW says: In no malady, as I conceive, is milk more abused than in acute rheumatism. It is very often the chief—sometimes the only—aliment employed during the whole course of this disease. Besides the objection inherent in its mere bulk, certain theoretical considerations of its nature should have considerable weight in deciding the question of use. The very obvious objection that milk furnishes lactic acid as a product of its fermentation should not be ignored. All the world knows the intimate relation between lactic acid and the rheumatic poison. By the introduction of lactic acid a form of endocarditis not distinguishable from the rheumatic, is set up; and of those diabetics treated by lactic acid a considerable proportion suffered from attacks of rheumatic fever (acute rheumatism). It is difficult, of course, to determine this point with certainty, but I have reason to believe that patients with rheumatic fever do not get well so quickly, and are much more apt to have relapses when they consume much milk during the course of the disease. Surely sufficient reasons exist for undertaking a thorough investigation of the question. My own practice, in the cases in which I am consulted, is to advise against the use of milk as an aliment in acute rheumatism.

In typhoid fever, milk is the one food now given, irrespective of the character of the cases. Of late this almost univocal practice has come to be challenged. It has been depended on, without investigating the state of the digestive functions, and quite unmindful of the effect it may have on heat production. It is often given in too great quantity at a time, or so frequently that the stomach has not disposed of one quota before another is thrust upon it. Unless the gastric juice has preserved to a considerable extent its power of converting the al-

buminoids into peptones—which we have no right to expect—the casein resists its action; hence it follows that the materials of digestion should be administered soon after the milk is taken, and to prescribe it without reference to the ability of the stomach to dispose of it is to insure increased fever and delirium, and more frequent stools. Beside supplying the means for proper digestion of the milk, attention should be given to its administration at such intervals that every portion given may be disposed of before another is permitted to enter the stomach. It is a trite observation, which is not therefore less true, that it is more important to the nutrition if some food be well digested rather than a large amount be merely swallowed.

Notwithstanding, since Donkin's first reports, milk has entered largely into the dietary of diabetics, its utility has recently come to be seriously questioned. If conversion of milk sugar into grape sugar does not take place, there can be no doubt of the value of milk in this disease, since it possesses so great a number of alimentary constituents. If, as is now asserted, this conversion does take place, the free administration of milk in diabetes, must be regarded as an abuse.

CORRESPONDENCE.

STEAMSHIP POLYNESIAN, }
At Sea, June 23d, 1887. }

In compliance with my promise to you to contribute a few notes during my tour of observation through the hospitals and centres of medical education in Europe, I take the opportunity that the luxurious leisure of the cabin grants to say something in reference to our Canadian institutions. The only medical schools and hospitals that I pretend any knowledge of in the Dominion are outside of Winnipeg, namely: Montreal and Toronto,

referring only to McGill and the two Toronto schools; Bishops and the others I know little of. I can speak of McGill from an intimate acquaintance with its teachers and hospital extending over fifteen years. The present position of McGill is certainly an enviable one. In its resources for medical study it is probably as well equipped as any other medical college on this continent; and that these facilities are fully realized the standing of her graduates abundantly testify. The recent princely donation of a million dollars to build a hospital, with special facilities in its location and design for presenting clinical instruction, will supply a defect long felt and place the medical school of McGill with few rivals. It is here of importance to enquire into some of the causes that have brought about this result in this college. Undoubtedly to the devotion to her interests, as well as the high attainments of her teaching staff, this success is mainly due; but what is of more importance for us to consider is the fact that without the outside aid of Montreal citizens, acting under the high impulses of a generous desire to advance the more scientific branches of medical training, this enviable position of McGill must inevitably have been postponed for many years, to come. It seems to be a fact in the modern experience of medical education that the ordinary medical school without this extraneous help is unable adequately to equip itself with the requisites for successful medical study. Nor can there be any object that can commend itself better to the rich who are desirous of devoting part of their wealth to acts of public beneficence than promoting the higher branches of scientific education; nor among these objects none can offer more tangible results than the endowment of medical colleges. In no branch of learning is this outside aid more needed at the present day. Nor can I imagine

any means by which those who wish to perpetuate their memories to posterity as evidence of the exalted motives that they attach to the responsibility of accumulated riches than in supplying the facilities for the study of scientific medicine to those struggling colleges that cannot otherwise, from ordinary sources of revenue, obtain them. It is no use arguing that these unendowed and unequipped colleges should not exist. While there is the same "rush to the professions" these aspirants for medical degrees will find convenient colleges. The multiplication of medical colleges can best be stopped: first, by elevating the standard of medical education; and, second, by making those colleges that have the best qualifications to teach the most desirable to the student, not only in the quality of their degrees but in the facilities for acquiring degrees.

It is to be hoped that the examples set by our Smiths, Stephens, Redpaths and Vanderbilts may have many followers in Canada and the United States.

Medical circles in Toronto are much exercised over the university question, but I fear the only result will be to add one more to the already too many medical colleges in Ontario.

I went over the hospital, of course. This is always a special pleasure in store for the visitor to the Queen City, especially if he be in search of objects for medical observation.

Whatever may be the respective merits of the various hospitals in Canada as to facilities for clinical study, I think there can be no doubt. Toronto is the best designed, arranged and especially the best managed.

It one time promised to be the boast of Winnipeg that she would have, for its size, the best equipped in Canada; but, unfortunately for our aspirations, the designs of that hospital were never finished in several essential particulars.

without which no hospital can be worthy of the name; and these defects are still omitted, although the original cost of the hospital has nearly doubled, and now I understand another expenditure sufficient to do more than supply every possible hospital demand for the next decade in Manitoba is about to be incurred, and yet the Winnipeg Hospital remains deplorably defective in these essentials without which it will still remain fifty years behind the times.

In Toronto they manage things differently. Qualified medical opinion is in authority. The result is very apparent. It will be found always so. Your trustees, directors, or by whatever name they go, are useful up to a certain point, and their official swagger does little harm as long as it does not seriously interfere with the medical authority; but when the average citizen attempts to run a hospital without reference to medical advice he certainly makes a mess of it ordinarily. Commercial pursuits do not qualify for the management of a houseful of sick people any more than they qualify for the management of a single case. Of course it must be apparent to any one visiting Toronto that the hospital is exceptionally well administered by its superintendent, who stands deservedly very high. I was not very fortunate in seeing anything of especial interest in the wards of the hospital. I understand Dr. Cameron has had during the last year over a dozen laparotomies, and with more than the average success.

I was more fortunate in Montreal. Dr. Gardner removed the appendages while I was there, and I also witnessed with him a vaginal by operation. In my humble opinion, Montreal possesses in Dr. Gardner an operator who is soon destined to give a material advance to abdominal surgery in Canada. He is a close follower of Tait, and his record so far leaves no doubt

as to his future success. Dr. Trenholm, of Bishops, divides with Dr. Gardner the gynecological honors, and in Montreal a very promising and likely competitor in the same race is J. Johnstone Alloway, of lacerated perineal fame. He assists Gardner in his abdominal and gynecological surgery.

Allusion to this branch of practice in Montreal that omitted reference to Dr. Fenwick would be glaringly incomplete. Dr. Fenwick has done more, perhaps, than any other Canadian surgeon with his pen, but especially with his scalpel, to uphold the position of surgery in the Dominion. He is admired by all who have had the privilege of witnessing his manipulative skill, as he is beloved by all who know him.

I must ask your consideration for my defective penmanship. Remember this was written on the Atlantic, and what with the heaving billows, a turbulent epigastrium, and the other atrocities of the ocean, caligraphy and composition are alike difficult.

Yours faithfully, JAMES KERR.

IODOFORM AS AN ANTISEPTIC.—Iodoform has for so long been looked upon as having antiseptic properties that any statement to the opposite effect is naturally surprising. Messrs. Heyn and Rosving maintain that these powers have been assumed but not proved, and a long series of experiments made by them brings them to the conclusion that it is not an antiseptic at all. Sterilized iodoform jelly, when inoculated with micro-organisms, was found to be full of them, all growing freely on the third day. One of these jellies was further mixed with iodoform powder and then injected into the knee of a rabbit; on the following day the rabbit was evidently ill, and the knee much swollen. On the third day some pus was taken from the joint, and from this characteristic pure cultures were obtained.

PROFESSIONAL ETIQUETTE.

To the Editor of the Lancet:

DEAR SIR,—The benefit to the profession of your venture in establishing THE MANITOBA LANCET could not be better illustrated than it is by the opportunity it affords me of bringing to the notice of the profession without public notoriety what I consider a gross breach of medical ethics.

I was called to see a woman who had been attended in confinement by Mrs. Suttie, who had neglected to give the ordinary instructions necessary, especially in a *prima para*, and in consequence abraded nipples and severe inflammation of one mamma resulted. I was called in when suppuration appeared imminent, but after two and a half days' persevering treatment the danger had passed. The patient could not speak English, and her husband only very imperfectly. However, he told me that a man who was distantly connected with his wife was from the first wishing to bring in another doctor, and that he had telephoned to Dr. Clarke, a homeopath, who came down and finding I was in attendance, and he had not been called in by the husband, refused to attend. Not satisfied, this officious friend sent for Dr. Good, a gentleman occupying a prominent position as a member of the Manitoba College and on the staff of the Hospital, and from whom the profession would naturally expect an ordinary observance of professional etiquette; but I am sorry to say that he utterly disregarded the fact that I was in attendance, and at the request of an outsider and not of the husband, but against his wishes, took charge of the case and instructed this impertinent interpreter to discharge me. It may be that Dr. Good was to some extent misinformed by this intruder, who assumed to dictate in the household of Mr. Barrett, and from whose assumption of authority the husband

has been obliged to ask for the protection of the police; but living as I do almost next door to the patient, it could have been no trouble to Dr. Good to have called in and asked me about the case. Surely we require protection from unworthy members of our profession as well as from Orvilles.

GEO. T. ORTON.

MISCELLANEOUS.

YTTRIUM.

Professor Crookes is still pursuing his investigations upon the supposed element yttrium, which seems to be composed of six or seven substances of like chemical properties which can only be separated by an elaborate process. Professor Crookes says that each component part of yttrium is a complete element in itself, but that its molecule is made up of several atoms.

DR. ALFRED CARPENTER announces that carbolic acid is worse than useless as a disinfectant, inasmuch as it preserves disease germs in their vitality.

THE *Deutsche Med. Wochenschrift* reports the case of a tanner who was taken suddenly ill with anorexia, griping and mental oppression, followed later by a severe epileptic fit. A saline purgative administered to the patient caused the passage of several thousand larvæ, or grubs of flies. Upon their discharge the attack at once ceased and the patient recovered. The journal named considers the case important as placing beyond doubt the possibility of symptomatic epilepsy due to entozoa, which has been disputed; and further, that it demonstrates the danger of the ingestion of cold meats, left where they can be reached by flies. The ova are deposited on the meat; and, unlike the meat, they are not affected by the action of the gastric juices.

STROPHANTHUS, the new heart tonic, introduced by Professor Fraser of Edinburgh, is in the market and can be obtained in the form of tincture. A supply of the seeds has arrived from the African Lakes Company. Reports indicate that this is the most active heart tonic yet discovered, more powerful than digitalis, and more rapid in its action.

CHLORODYNE.—Chloroform, 2 oz.; ether, $\frac{1}{2}$ oz.; rect. spirits, 2 oz.; treacle, 2 oz.; liquorice oz. 1- $\frac{1}{4}$; muriate morphia, gr. 4, of menth pip, m 8; syrup simp, oz. 8 $\frac{1}{2}$; prussic acid, oz. 1. Dissolve morphia and oil of pip. in the rect. spirits, mix chloroform and ether with solution, dissolve liquorice in syrup, add treacle, shake all together and add prussic acid.

DR. B. W. RICHARDSON lately told the Association of Public Sanitary Inspectors that in England they are better off than the Americans and Australians in the matter of sanitation. It will probably be news to a good many people to hear that "in Sydney, Melbourne and Adelaide the death-rate of children is three times as great as in the worst London slums." So dear, dirty old London is not such a bad sort of place after all.

PARIS comes out badly in comparison with London and with the other English large towns. The general town rate of mortality is but 22 per 1,000—in London it is lower; but the Paris rate exceeds 27 per 1,000. Moreover, the rate from diphtheria amounts to 0.71 per 1000, and is rising; while in London the mortality from that disease is less by five-sixths. And Paris is one of the healthiest of continental cities, far in advance of Vienna and Berlin.

THE *British Medical Journal* says: Dr. Mial has used tannin for ingrowing nails, and does not find it necessary to enjoin rest. A concentrated

solution—an ounce of fresh tannic acid dissolved in six drachms of pure water, with gentle heat—is used, by painting the irritated soft parts twice a day. Two cases recently had no pain or lameness after the first application, and went about their work immediately, which they could not do before. This painting with the tannin is to be continued until the nail has grown to its proper length and breadth. No other treatment was necessary.

THE *London Lancet* mentions the case of a woman, *enciente* (eighth months), admitted to hospital suffering from acute pneumonia—whole of left lung, with a history of illness covering the four days previous to admission. On the evening of that day her temperature was 103.6° F, and she was delivered of a female infant, which died in less than twenty-four hours after birth, with symptoms of acute pneumonia. A post-mortem examination showed acute pneumonic consolidation of the whole left lung. The mother made a rapid and good recovery. Attention is called to this particular and rare transmission of "acute pneumonic fever" by the pregnant woman to her offspring, yet *in utero*, although the transmission of some other diseases has been recorded.

IN cases of persistent nasal hemorrhage, Professor John Chine of Edinburgh advises that plugging the posterior nares should not be done until an attempt has been made to check the hemorrhage by firmly grasping the nose with the finger and thumb so as to completely prevent the air passing through the cavity in the act of breathing. This simple means, if thoroughly tried, will usually arrest the bleeding, by allowing a clot to form at the site of the ruptured blood-vessel. The finger and thumb should exercise pressure enough to prevent breathing through the nose for some time.

THE COMPOSITION OF BUTTERS OF DIFFERENT ORIGINS.—E. Duclaux.—

The author questions the constancy of the proportion of volatile fats in genuine butters. He finds that the sum of the butyric and caproic acids ranges from 7.95 to 5.77 per cent. The greatest uniformity is found in the butters of Isigny. In this district there is the greatest uniformity in the race and in the conditions of alimentation. M. Duclaux thinks that, in addition to the care employed in making and preserving the butter, the race of the cows and the food supplied, the geological nature of the soil, and the climate, are not without influence.

DETECTION OF ANNATO IN BUTTER.

—Sir,—In giving a method for the detection of annato in butter (*CHEMICAL NEWS*, lv., p. 49) I recommended testing the filtered fat, and that is a good plan when the commercial "butter colors," containing annato coloring-matter, dissolved usually in some oil, are employed. I have, however, recently met with a butterine which gave only a very faint annato reaction from the filtered fat, while the unfiltered fat, decanted from the water, salt and curd, and tested as I have directed, gave a fine reaction. I noticed that the filter-paper through which the fat had been filtered assumed an orange-red tint, and on extraction with ether I got an annato reaction from this paper. Evidently in this case the annato had been employed in the solid state, and much of it had not been dissolved in the fat, so that it would be well to test the clear unfiltered fat for annato in such a case.—I am, etc., H. B. Cornwall, John C. Green School of Science, College of New Jersey, Princeton, June 8th, 1887.—*Chemical News*.

THE *Æolus* Waterspray General Ventilating and Electrical Engineering Company gave an interesting exhibi-

tion of the action of their patent ventilators, at their premises in High Holborn. This system of ventilation was patented several years ago, and is now becoming widely known and appreciated throughout the country. The method employed for inducing a current of air is, as its name implies, by a spray of water squirting through a nozzle of peculiar construction, so arranged that it can be flushed in a few moments whenever necessary, simply by giving a few turns to a screw. The action of this spray is somewhat similar to that of a Bunsen filter-pump or a Gifford injector, the rush of water dragging the air after it. One gallon of water is said to be sufficient to move 1,000 cubic feet of air, which is much more than could be done if the power used was applied to driving a fan for the same purpose. Besides ventilating apparatus, this company supply all kinds of electrical machinery and appliances for electric lighting. Their mechanical or acoustic telephone is by far the simplest and most effective telephone for short distances, such as a mile or so; it is free from all patents, does not require an electric battery to work it, and is very cheap, three points in its favor which should strongly recommend it.

COLONIAL AND INDIAN EXHIBITION.

—It was originally intended to confine the reports of this exhibition to the consideration of raw products only, or such manufactures that might be of importance to trade between England and her colonies. A few exceptions have, however, been made in the case of some exhibits which appeared to be of special interest. The first report is on Mining Industries, by C. Le Neve Foster, and is, owing to the vast mineral resources of the colonies, of very great importance. The collection of metallic ores, coal and other minerals was an extensive one, and attracted a good deal of

attention from visitors to the exhibition. The supply of grain is a question which is of universal interest. Wheat, which has been called "the king of grains," is the principal food-stuff of our race. Its cultivation of late years has increased so enormously abroad that it no longer pays the farmer to grow it at home. Canada, the oldest colony, is the first examined in this report, but it does not appear that the export has yet reached a very large total; much is, however, expected in the course of a few years from Manitoba and the Northwest Territories. Victoria has been making rapid strides during the past fifteen years, during which period the land under cultivation has been trebled in extent. Since 1877 Victoria has exported wheat regularly, and in some years largely, but is beaten by South Australia, whence wheat has been exported since 1850, and last year to the amount of 14,000,000 quarters.

DR. SCOTT, of Tyson, Vt., says: I was an eye-witness to the occurrence where an iron bar penetrated the brain of a man without fatal results. It occurred in 1848, in my native town

of Cavendish, Vt., while the man was working on the railroad just below the village. He was tamping down a charge with an iron bar which was both tamping-iron and drill, with a "belly" near the middle about an inch and a quarter in diameter. During this process the charge exploded, the drill end being uppermost; it entered the upper maxillary bone and passed up through the brain, coming out near the union of the parietal bones. The bar crossed the track of the optic nerve and was supposed to have cut it off, or injured that part of the brain where it takes its rise, as the sight of one eye was destroyed. The man was brought to the hotel in a wagon, and walked upstairs by himself. The physicians who attended him concluded not to adopt any active treatment beyond dressing the wound. The accident occurred in September, and the next May I saw him walking on the street at Cavendish. Dr. Harlow, who attended him, resides at present, or has resided for the past twenty years, in the town of Woburn, Mass. It was a most remarkable case, and I would not have believed it if I had not seen the man myself.

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