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## Original Communications.

### INTERALIGAMENOUS OVARIAN CYSTOMATA.\*

BY S. KEENE, M. D., BROOKLYN, N. Y.

In the hope of being definite and sufficiently comprehensive, I have chosen the term "intraligamentous ovarian cystomata," to designate the class cases of which I propose to discuss.

In order to define this matter as clearly as possible, I may state that I have observed ovarian and parovarian cystomata connected with the broad ligaments of the uterus in three different forms. First, the cystomata developed from the follicular portion of the ovary, and that were attached to the broad ligament by a small pedicle, composed mostly of an elongated portion of the peritoneum. Second, parovarian cystomata having a sessile attachment composed of peritoneum, derived from the posterior fold of the broad ligament, the anterior fold of which remained without material change. And lastly, cystomata developed from the ovary and situated completely within the folds of the ligament. The latter forms constitute the true intra-ligamentous cystomata which differ essentially from all others in being neither pedunculated nor united to the ligament by sessile attachment, but surrounded by a capsule formed from both folds of the ligaments. It is claimed by some that these intra-ligamentous cysts are usually of parovarian origin, but I am satisfied that they are also developed in many cases from the ovary, generally, perhaps, from the paroöphoron, and it is to this class that I propose to limit my attention on this occasion.

The essential difference between these and the ordinary ovarian cystomata is in the position they

occupy in relation to the ligaments of the uterus. The location may be called an unnatural one, because it differs from that which ovarian neoplasms usually occupy.

They are comparatively rare, a fact which indicates that they occur in this location under circumstances that are exceptional to the general laws of pathology which obtain in ovarian neoplasms. This raises the question regarding the causes operative in determining their peculiar characteristics. Two theories have been advanced to explain the morbid anatomy of these cystomata. The one assumes that owing to some error of development the ovary during embryonic life finds its way in between the folds of the broad ligament in place of remaining in its normal position.

If a cystoma occurs in an ovary so dislocated it is bound to convert the ligament into a capsule for itself. I am not aware that there is any positive evidence that this theory is correct. There are a number of cases on record of malposition of the ovaries which may fairly be attributed to lesions of development, but not any in which the ovary has been found within the folds of the uterine ligaments.

The second theory is, that during the growth of the cystoma it burrows, so to speak, into the ligament which forms a ligamentous capsule for it. In order that this may come about it is necessary that the ovary, by a special formation, be closely attached to the ligament, or fixed there by inflammatory adhesions. At the same time the cyst develops in the deeper structures of the ovary, and, meeting resistance on the free peritoneal surface, pushes its way in between the folds of the ligament, instead of growing towards the abdominal cavity. There is evidence that this theory is correct in the fact that these cystomata come from the paroöphoron, the portion of the ovary which is the most closely connected to the ligament, and are therefore predisposed to burrow and become intraligamentous. Furthermore, I have in one of my own cases found the ovary from which the cystoma came, imbedded in the posterior folds of the ligament. It would be more correct perhaps to say that the ovary was spread out upon the posterior fold of the ligament. It was so changed in form that I would have overlooked it, had it not been that there were several small cysts in it, surrounded by what appeared to be an ovarian

\*Read before the Ontario Med. Association, June, 1889.

stroma. In one other case I found while enucleating the cyst that it was firmly adherent at a point in the posterior fold of the ligament where the ovary is to be found, and the vessels were larger there than anywhere else. This led me to believe that the ovary was there also, but the parts were so changed by inflammatory products that I could not positively detect any ovarian tissue. This, I think, is sufficient to settle the question of location of some of these cystomata, and presumably the larger number, if not all of such; still it may be admitted that malposition of the ovary, because of a lesion of development, may obtain in some cases.

These cystomata may be simple or multiple. I think, however, that they are more often monocysts. All of my own cases, eight in number, have been so. Another interesting feature is that they are often papillary or proliferous cysts. This, according to some authorities, notably Bland Sutton, of London, is due to the fact that they are developed from the deeper structures of the ovary, the paroöphoron.

Special attention is invited to the position of these cystomata and their relations to the pelvic organs. This question of location has a very important bearing in regard to treatment, as will be seen further on. In my own practice I have found them occupying widely differing positions. In some, the tumor was situated in one ligament, displacing the uterus to the opposite side of the pelvis, and in a lesser degree the bladder also. In others the tumor occupied a position in both ligaments between the uterus and bladder. When thus located the tumor, uterus, bladder and ligaments have been found high up out of the pelvis, so that the most dependant portion of the tumor could not be easily reached through the vagina. Again, I have found the tumor behind both the uterus and bladder and yet between the folds of both ligaments. In all of these the pelvic organs were carried up out of the pelvis, but the tumor descended towards the pelvic floor. It appears that there is a rule which determines the location of those tumors in their relations to the pelvic and abdominal cavities, which may be formulated as follows: When situated between the uterus and bladder, the tumor and pelvic organs rise up into the abdomen in the latter stage of its growth, whereas if both uterus and bladder

are in front of the tumor it dips well down into the pelvis. The reason is that in the one case the vagina arrests the process of burrowing, while in the other there is no resistance to the descent of the cystoma. In all cases the broad ligaments become greatly enlarged and thickened, and usually cover the whole cyst. When the cyst does not descend into the pelvis and has attained considerable size, the upper portion of it may present a comparatively thin wall, owing to the fact that the ligaments diminish in thickness and vascularity until there is but little of their structure left except the peritoneum, and hence the upper part of the cyst then appears more like an ordinary intraperitoneal ovarian cystoma.

These facts regarding intra-ligamentous cystomata and their anatomical relations, are of the utmost importance in regard to their surgical treatment, and hence the reason for this brief account of the various ways in which they may be situated.

The diagnosis is likewise of interest because of the difficulties encountered in operating and the urgent necessity for clearly comprehending the exact conditions present, in order to manage them to the best advantage.

There is nothing in their history which is diagnostic. During the early stages of the affection distressing pains in the pelvis are often present. The functions of the rectum and bladder are frequently disturbed, especially if the cyst descends into the pelvis. In this respect the history differs from that of ordinary ovarian, and especially par-ovarian cystomata which usually cause very little local or constitutional disturbance, unless attended with complications. The physical signs vary somewhat according to the location of the tumor and its surroundings. Examination of the abdomen shows that the tumor is fixed at its most dependent portion and that the fixation is on one side, or extends from side to side according as the tumor occupies one or both ligaments. These signs contrast with those of a cystoma having a pedicle which permits of free movement of the tumor, but an ovarian cystoma fixed to the pelvic organs by inflammatory adhesions gives similar signs, and hence the two conditions cannot be differentiated by the abdominal examination alone. The vaginal and bimanual examinations give the most valuable evidence. In those which occupy both ligaments behind the uterus and bladder the

tumor is found low down in the pelvis, the bladder and uterus in front of it, the cyst wall and uterus are firmly united, the uterus is not enlarged to any extent, and fluctuation is noticeable in the pelvic portion of the tumor. The only other neoplasm, that I have met with, which gave similar signs, was a pedunculated fibrocyst, without enlargement of the uterus. The points of difference were, that the fibrocyst had far more solid portions below, and the uterus was movable upon the tumor. When the cystoma occupies both ligaments between the uterus and bladder it is high up in the brim of the pelvis, the uterus behind it and fixed there; the bladder high up in the abdominal cavity, and the tumor occupies a position in the upper portion of the pelvis where the normal broad ligament should be found. These signs may be simulated to some extent when a pedunculated ovarian tumor gets in front of and above the uterus, and crowds it back into the hollow of the sacrum, but the distinction can be clearly made, from the fact that in the latter case the uterus is not so absolutely fixed to the tumor, and is lower down and retroverted, a position which it could not occupy in a case of intraligamentous cystoma.

When the tumor is confined to one ligament, the physical signs found upon examination of the abdomen show that the tumor is most prominent on one side and there is a space occupied by intestines on the opposite side. The fixation below and on one side is complete. By the vaginal touch the uterus is crowded far over to the opposite side of the pelvis and fixed to the tumor, but not lateroverted to any great extent. The bladder is also displaced laterally as shown by the touch and sound. The touch further shows, as it does in all cysts within the ligaments, that the tumor rests directly upon the pelvic walls without the folds of the broad ligament intervening. There is fixation of the tumor but it is not absolute unless there has been inflammation in and about the cyst. Obscure fluctuation can be generally found by the bimanual touch. There are several affections which closely resemble a cystoma in one ligament in the early stages of its development. These are, an intraligamentous uterine fibroma, a hydrosalpinx and ectopic gestation. Fibroma can be excluded by the absence of the extreme density characteristic of the variety of tumor, non-enlargement of the uterus, and the history. Hydrosalpinx

differs from a cystoma in the ligament, in being farther back in the pelvis and in being in part behind the uterus, and the uterus is not necessarily fixed to the tumor. Ectopic gestation gives physical signs more like a distended Fallopian tube, and differs from all other pelvic tumors in its general history. Should a doubt exist, time will suffice for the cystoma to enlarge beyond the usual limits in the size of any of the three affections which are to be differentiated.

It must be admitted, however, that cases will come along occasionally that will leave a doubt in the mind in regard to the diagnosis, even though the examination be most critical. In fact, it is impossible to make a complete diagnosis upon the evidence obtained by the history, symptoms, and physical signs, in some cases. Under these circumstances the question arises, whether or not the patient should be subjected to an exploratory laparotomy. I have always decided in favor of laparotomy, except when there was a suspicion that the tumor might be malignant. In such doubtful cases there is usually free fluid in the peritoneal cavity. A portion of this fluid should be removed by the aspirator, and if blood and the characteristic papillary cell is found, on microscopic examination, surgical treatment is uncalled for. I may add that I have seen several cases of ovarian cystosarcoma which were supposed to be cystomata in the ligaments, but on an examination of the fluid the diagnosis was made, the correctness of which was proved *post mortem*. In one case I made the diagnosis and advised against interference, but a friend made a laparotomy and found that he could not remove the tumor.

In the absence of all evidence of malignant disease I favor laparotomy to complete the diagnosis and treatment if found practicable. At the same time, I must say that it is not always an easy task to complete the diagnosis after laparotomy. A few words on this subject may be admissible, in view of the importance of the matter and the fact that this operation has become so fashionable. We hear much about making an exploratory operation for diagnostic purposes, without being told how to do it; but leaving us to infer that it is easy to do. I am satisfied that skill is necessary in order to be successful. To recognise just what is present and to determine just what to do in these cases, when the tumor is exposed, is

not easy, and still a diagnosis must be made upon a rapid inspection and palpation. Moreover, upon a prompt decision, regarding the exact conditions and how to manage them, depends the success of the surgeon in uncomplicated cases. To do all this promptly, considerable training is required which can only be obtained by seeing and handling such morbid growths. This is the opinion that I have formed after having had my share of trials and vexations. I have also seen, in the practice of others, much confusion and delay in making a diagnosis and in deciding how to proceed with the treatment, all of which, increases the risk to the patient.

I am not confident that I have seen or carefully thought of all the conditions which may simulate intraligamentous ovarian cystomata, as seen after the abdomen is opened, but I have encountered a number and shall briefly state what I have observed and how they may be differentiated.

*(To be continued.)*

### EARLY OPERATIONS IN DISEASES OF THE ABDOMEN OF DOUBTFUL DIAGNOSIS.\*

BY J. C. MITCHELL, M.D., C.M., ENNISKILLEN, ONT.

The number of fatal cases variously diagnosed as Peritonitis, Intussusception, Volvulus, Perityphilitis, etc., that at different times have come under my notice, induces me to bring this subject before the Association.

In the majority of these cases the diagnosis was not verified either by operation or post-mortem examinations. Nearly all were treated in the orthodox way without any operation having been attempted.

Our leading surgeons at the present time do not hesitate to open the abdominal cavity in nearly all cases where the diagnosis is not clear, and a very large percentage of their reported operations are attended with success; but in the country, and probably in some towns and cities, many patients still die without having even the chance for recovery that an operation might give them. The statement was made at this Association last year in one of the discussions, that no one should attempt a laparotomy, or any similar operation,

\*Read before the Ontario Med. Association, June, 1889.

without previous experience, so that in every case a man skilled in that branch of surgery should be called to operate. This statement should no doubt stand unchallenged for cities and large towns where experienced surgeons are at hand, but in country districts, especially among the poorer classes, if the necessity for such an operation presented itself, the attending practitioner or some convenient consultant must undertake the operation.

The diagnosis of the exact anatomical cause of acute obstruction is seldom possible, and where it is persistent if an operation were at once performed the chances of success would be increased. I will relate two cases of obscure abdominal disease which although resulting fatally from too long delay in operating may, I hope, draw forth some expressions of opinion from those who have had experience in abdominal surgery; and may encourage my fellow country practitioners so that some fellow-being suffering from a similar disease may be given that chance to recover.

CASE I.—Mrs. S., aged 62, an active little woman, mother of a large family, had a femoral hernia of right side and had suffered occasionally from intestinal colic, for both of which troubles she received medical treatment. She was taken ill Dec. 29th, '87, with moderate abdominal pains; on the 30th inst. I was called in and found her suffering considerable pain, chiefly in the right inguinal region; pulse and temperature almost normal, bowels inactive, no flatus passing; bowels usually constipated. The abdomen not distended, not tender, hernia, causing no trouble, tongue coated a dirty yellow, some nausea. I administered the usual remedies and found her more comfortable in the evening; nausea however increasing with some vomiting.

31st inst. Persistent pain, bilious vomiting, quickness of pulse and slight elevation of temperature, no movement of bowels although enemata were administered and other treatment faithfully carried out. Sunday, Jan. 1st, '88, symptoms aggravated; she began vomiting faecal matter; the heart, which in health had been intermittent, became more irregular in action, and pulse feeble.

Jan. 2nd.—Vomiting profuse and stercoraceous, pulse intermittent and weak, temperature 100°. Dr. McLaughlin, of Bowmanville, saw the case with me, and was fully agreed as to treatment and

diagnosis of obstruction; the symptoms being those of strangulated hernia. We considered the advisability of an operation, but as the patient was in a somewhat collapsed condition, hands and feet cold, face pinched; pulse 100, small and irregular, we decided it was useless to think of it at that time.

Jan. 3rd.—She was easier, had vomited less, but was in a very weak condition. On the afternoon of Jan 4th, as she had rallied a little, Dr. Hillier, of Bowmanville, was called, and we decided to operate.

Thursday, 5th inst., a.m.—Patient was a little weaker than on the previous night, having been vomiting in the meantime; she was again examined by Drs. McLaughlin, Hillier and myself without any fresh development, no hernia could be detected nor any tumor, bowels resonant and a little tender. The rectum, as before, was empty, and nothing abnormal could be felt. There had been no tenesmus or passage of flatus since the last natural action of the bowels on the 29th ult., a period of seven days. The urine had been normal. Everything being in readiness we proceeded with the operation. The ordinary antiseptic precautions were observed; I opened the abdomen by the usual central incision. We found the peritoneum normal, bowels congested, and on examining the right side found the cæcum and surrounding parts normal. Tracing the undistended ileum from this point we soon came on the seat of obstruction, as we found the bowel firmly attached, and on close examination, the trouble proved to be an *obturator hernia*. The bowel was quite inflamed and adherent, and was withdrawn with considerable difficulty. The loop of bowel, although much inflamed, was apparently in a recoverable condition. The wound was closed with a drainage tube at lower part. Patient rallied fairly; she complained of a good deal of pain, which was relieved by a hypodermic of morphia. Flatus passed freely through the bowels the next day. The patient never recovered strength, as she was unable to take nourishment to any extent by the stomach, and though rectal alimentation was faithfully tried, it proved of no avail; she gradually weakened and died on the fifth day after operation. The bowels moved quite freely the day before her death; at all times flatus passed freely, and there was much greater freedom from pain. The wound

healed nicely, notwithstanding the condition of patient, and at the time of death was nearly united. From the relief afforded by the operation and the length of time the patient lived afterward, had the operation been undertaken early the chances of recovery would have undoubtedly been good. The delay until the patient was weakened by the excessive vomiting and pain told very strongly against her chances of recovery.

CASE II.—This case occurred in the practice of my neighbor, Dr. Fish, of Blackstock. He has kindly furnished me with the history, of which I will give you a synopsis. Master A. H., aged 15, nearly six feet in height, very well proportioned, intelligent, and fond of sport in which he took a great interest. He had taken an active part in the games in Cartwright, on the 12th of July, 1888. For two weeks previous to his illness he had not felt so well as usual, but had made no complaint, nor had his parents noticed anything amiss.

On July 19th, 1888, after a free natural movement of the bowels he was taken with pains in the belly, and his father procured and gave him two pil. Cath. Co., which moved him two or three times, when pain became more severe and the doctor was called in. He found the patient with legs drawn up, suffering intense pain, very restless, anxious expression, temperature 103°F., pulse 120. The pain extended over the entire abdomen and was not referred to any particular part. The diagnosis was peritonitis. Appropriate treatment was applied, but the patient gradually grew worse. Enemata were used freely, but no passage of fæces or flatus took place.

I saw the patient at one a.m. of the 23rd inst. He was apparently in great pain, although opiates had been freely administered. Peritonitis well marked and undoubtedly obstruction from some cause; I advised an immediate operation as the only thing that would give the boy a chance to live. This suggestion was not acted upon and I returned home. On the afternoon of the 24th inst., in company with Drs. Hillier and Lammiman of Bowmanville, I again saw the patient, when symptoms were much aggravated and he was in a decidedly worse condition for operation. After a long discussion with the parents it was decided to operate and about 5 p.m. we began. Pulse 110 small and thready; temp. 100½°. Found the abdo-

men exceedingly tender, very much distended, tympanic at the upper portion, slightly dull at the lower part, dullness more marked in left inguinal region. No flatus had passed since the beginning of the illness.

On opening into the abdomen the parietal layer of peritoneum was found to be much inflamed. Dr. Fish extended the incision through this and a very nauseous odor at once filled the room; when the incision was but a short distance below the umbilicus, putrid pus welled up from the wound. On closer examination the case was found to be one of peritoneal abscess, situated in the left inguinal region, and in the sack of the peritoneum.

The obstruction was doubtless caused by the pressure of the abscess. The amount of pus was estimated at fully half a gallon. The peritoneum and the bowels as seen through the visceral layer were greatly inflamed, and dark in color. After the pus was thoroughly evacuated, a drainage tube was inserted, the wound was closed and the patient placed in bed.

He rallied nicely and had a pretty comfortable night; bowels moved twice and flatus passed freely, being the first since the 19th inst.

Next morning, 25th inst., temp. 99°, pulse 100 and firmer, free from pain except a certain amount of soreness over the bowels, looked brighter, felt better, could take broth and whiskey. From that time he partook of nourishment freely, pulse gradually getting stronger and more regular. Temperature normal, bowels moving naturally. He continued to improve until the evening of the 29th, when he complained of pain in the shoulders and right side. The doctor thought these symptoms due to absorption of pus, and the quantities given of whiskey and quinine were increased.

The next day, 30th, pain increased, with elevation of temperature; a decided change for the worse, and he died quietly on the evening of that day.

From two to four ounces of pus were drawn off daily by syringe, besides that discharged from tube. The wound was carefully washed out twice daily with carbolized water. A peculiarity of the case was, an abscess of that size being found on the fifth day of the boy's illness, as he had not previously complained of any trouble.

Dr. Fish says, in concluding his remarks on this case, "I may say, there is not a doubt in my

mind, that had an operation been done the night you first came, he would have recovered."

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## Correspondence.

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### OUR PHILADELPHIA LETTER.

(From Our Own Correspondent.)

### CLINICAL LECTURE—UNIVERSITY HOSPITAL.

H. C. WOOD, PROFESSOR OF THERAPEUTICS.

*Gentlemen,*—We will first consider this morning the treatment of the present prevailing epidemic. This treatment does not differ from that pursued in a rational consideration of an ordinary "cold" in its various ramifications, bronchial, laryngeal, nasal, pulmonary and constitutional. At the beginning of an attack I prefer to order pilocarpine in the following manner: dissolve one-half grain of the drug in one-half ounce of water; giving a teaspoonful of this every fifteen minutes until a drenching sweat is produced; this breaks the fever and relieves the other symptoms, care being taken of course that no exposure occurs after or during this treatment. In addition quinine and strychnia can be added; tonics are indicated if there is much depression or exhaustion. The lung symptoms if present must also be attended to; for this purpose a weak mustard plaster over the chest is often sufficient; the object being to establish a gentle counter-irritation. For a cough mixture, muriate of ammonia in brown mixture is an excellent thing; the muriate being about the only one among the older expectorants which still holds the confidence of the profession. Better still is the combination of apomorphine with the muriate of ammonia; apomorphine is one of the best expeorants, especially to re-establish secretion; one-fifteenth of a grain in brown mixture can be used to great advantage. Of course with this treatment it will be necessary for the patient to remain at home for two or three days.

Our first case is that of a woman complaining of paroxysmal pain; this patient has been before us before and we diagnosed her case as probably of rheumatic origin. This pain began in the occipital region, extended over the head, down the body to the abdomen, associating with itself sick

stomach. The pain is dull in character, is not concentrated at any point and exhibits but little tenderness on pressure. She was put on the salicylate of soda, but the results are not encouraging: the pains still persist and she feels no relief. The pains have spread out somewhat and are in the body rather than in the head; she complains now of feet-pains. It is always well in treating a case of supposed rheumatic origin to remember the gouty diathesis which is closely allied. Some cases of rheumatism which find no relief in the salicylates, often are benefited by colchicum, and *vice versa*, cases not improved by colchicum are favorably impressed by the salicylates. It is often necessary to recall this fact, there seems to be no way in which to know or learn the cases which will be benefited by each treatment beyond that of actual experiment. In the gouty diathesis in Americans there is generally tenderness on deep pressure over the small bones of the arch of the foot; in this country the classical great toe-symptom is lacking generally. We will try rest in bed in this case with the administration of the wine of colchicum.

The next case comes to us with the simple history of "head-ache." In such a case it is necessary to determine the cause by exclusion. It will be essential to go over the list of possible causes. I remember a case of Bright's which came to me with the history of constant, intolerable pain in one temporal region; this was all noted by the patient. An examination of the urine revealed the presence of kidney trouble which had been unsuspected by the attending physician, simply because he failed to examine the case thoroughly. Our patient here, a woman, has tenderness on pressure over the eye-ball, she is dizzy at times; has palpitation on slight exertion, is nervous, but sleeps well. She had her ovaries removed some time ago. Her appetite is good but her bowels are costive. Now let us take up the various causes in a systematic order which would produce her headache. Firstly, then we have reflex causes; these are most common. In the majority of cases they are due to eye-strain; less often they are reflex from nasal trouble. The character of the headache decides much for us; but the only satisfactory way of determining the eye-element is to have an examination made by an oculist. Headache due to nasal sources is gen-

erally referred to the region of the frontal sinuses and may be of any form. Uterine or ovarian diseases may register itself in headache. Inquiry in regard to this element is always essential in female cases. The next great cause of headache is local disease. Heart disease is a common factor in producing this symptom, especially among children. Constitutional poisons generate headaches; always inquire into the habits and businesses of these cases. Excessive tea or coffee drinking, or the excessive use of alcohol or tobacco, are very frequent producers of this symptom. Uræmia, rheumatic poison, lead and syphilis should also be remembered. I believe however, that syphilis does not produce headache without producing at the same time organic disease. Organic brain disease also produces headache; brain tumors, pachymeningitis, syphilitic gummata, tubercular trouble, sunstroke are all factors bringing on prominent distressing headaches. Then again there are a set of headaches for which we can find no cause; to these we give the name of "essential headaches." They seem to be the outcome of some peculiar nervous force which we are at present unable to appreciate.

In this case the woman thinks her head trouble is increased by reading; she has no discharge from the nose; uterine and ovarian trouble has been excluded. Her eyes have yet to be examined, but if her headache is reflex it is due to this source. She is not addicted to excessive tea or coffee-drinking or alcohol, and her urine seems to be normal. However, never trust to "seems;" it should be examined. There may be no albumen present; but in many cases I have seen of uraemia, a persistent, low, specific gravity has been the only symptom. Rheumatic headache is very common, but here there is no distinct history of such trouble; nor is there any more distinct trace of syphilis. Her heart is normal and there is no sign of brain trouble; no loss of memory; no change in nature; no sunstroke or other cephalic disturbance. Rarely it is, I think, that headaches are due to gastro-intestinal disturbances; here her appetite is good, although she occasionally has acid risings from her stomach. Now let us imagine that she is a patient in our office; what will we do for her? First send her to an oculist to have her eyes examined, examine at the same time her urine; try if you wish the rheumatic



treatment or gastro-intestinal treatment. Remember her bowels are inactive, and she has a little acid dyspepsia frequently; a mercurial laxative or a pill containing calomel and ipecac or aloes and podyphyllin, or silver nitrate with hyoscyamus, may give happy results.

Next we have a man with partial loss of power in his right arm. Do not attempt to jump at conclusions in such a case; begin with general ideas and terms. In the first place it is a paresis; a loss of power. It is monoplegic paresis, because one limb is alone affected. The man feels well, he can say "a" distinctly; but has a rather slow response to pin pricks over the affected area. In getting him to squeeze my hands I find that the grip is about the same in both hands. Now that we have reached monoplegia, let us think what forms of this paresis we have; there are two natural divisions, organic and functional. A better term for functional is hysterical monoplegia. The man looks and acts anything but hysterical. So we can eliminate this division. Now do not attempt to sort over the various forms of organic monopolies in a vain, unscientific effort to find one that fits your case, but go at the matter with intelligence and precision. There are two forms of organic monoplegia, central and peripheral. The central are in the brain; where Almost always in the motor cortex; because in the cortex the nerve fibres are spread out more than in the deeper portions, and a lesion has less chance to affect great groups of muscles than in the deep brain where the fibres are in close contact. The peripheral monoplegias are either in the cord, the nerve trunks or in the muscles. We distinguish these lesions as follows: if the change is in the cord there is a change in the electrical re-action, due to the fact that the trophic centres are involved. In the brain, there is a certain loss of power with little or no wasting, as we find here. The lesion in the nerve expresses itself by tenderness over its course, while the wasting is greatest if the lesion is in the cord, as the trophic centres of the nerves are the last to succumb. There is a class of organic monoplegias, in which there is a partial loss of power dependent on exclusive use, the so-called "business neuroses," such is the scrivener's palsy. These are readily distinguished by the simple fact that it is only in certain actions that power is lost; for example, inability to write when a knife or axe

can be used with perfect facility. We will let you consider for yourselves under what form our present patient falls.

To the Editor of the CANADA LANCET.

SIR,—I have read with much interest the letter of Dr. W. T. Harris, in this month's LANCET, and heartily concur with him in his remarks regarding Medical Education. It is time the Profession took active means to oppose the continuance of the injustice at present being done by the Ontario Government to the independent medical colleges, to those outside the medical department of the Provincial University. Further remarks are unnecessary, the wrong being so palpable. I merely desire to be one more to record my protest.

Yours, etc.,

WM. GEDDES STARK.

Hamilton, Ont., Feb., 1890.

### Selected Articles.

#### REPORT OF THE SECOND HYDERABAD CHLOROFORM COMMISSION.

(Concluded from March No.)

(34) On another occasion, during Experiment 117, the animal was very nearly killed by a comparatively short inhalation of chloroform, owing to the electrodes becoming accidentally short-circuited and failing to keep up the irritation of the vagus. Something similar occurred in Experiment 117, the effect of the irritation of the vagus passing off while the chloroform was still being pushed, and thus putting the animal into a condition of extreme and unexpected jeopardy. Nothing could be more striking than these near approaches to accidental death from failure to irritate the vagus efficiently.

(35) Other Experiments were made to test the truth of the statement that chloroform increases the action of electrical stimuli applied to the vagus, and showed conclusively that it has no such effect. In one instance only the inhibition seemed to be intensified as the chloroform was commenced, and diminished when it was discontinued; but apart from the fact that the supposed effect ceased much too suddenly, a repetition of the experiment on the same and other animals showed that there was in reality no such effect. The increased inhibition in this instance was due to the chloroformist compelling the attendant who was holding the electrodes to change his position, and thus making him unconsciously apply them more efficiently.

When the chloroformist withdrew they were restored to their former position. This affords an instance of the care that has to be taken in making experiments if one is not to be deceived.

(36) To test the effect of shock due to vasomotor change rather than affection of the heart, Goltz's experiment on the frog was repeated on three dogs. In one there was slight lowering of pressure, which was not extensive, and in the others no effect was produced at all. Other operations which seemed likely to produce shock, such as violent blows upon the testicle, were singularly devoid of effect. Failing to lower blood pressure by any of these methods, recourse was had to section of the splanchnics; but the low condition of blood pressure this produced appeared, like stoppage of the heart from vagus irritation, to be a source of safety rather than of danger during chloroform administration. In this connection Experiment 111 may be studied. There was not much external hæmorrhage, but the splanchnics were divided—a proceeding which as is often said, bleeds the animal into his own vessels. The pressure was after this extremely low, but chloroform was repeatedly given and various other actions taken, and then chloroform had to be pushed on a saturated sponge enclosed in a cap for eleven minutes before respiration ceased.

(37) The conclusion, then, is this: Chloroform has no power of increasing the tendency to either shock or syncope during operations. If shock or syncope from any cause does occur, it prevents, rather than aggravates, the dangers of chloroform inhalation.

(38) The experiments on dogs that had been dosed with phosphorus for a few days previously show that the fatty and consequently feeble condition of the heart and organs so produced has no effect in modifying the action of chloroform. The ease with which vagus irritation and the Glasgow trace could be produced in these animals, by even slight degrees of asphyxia, was very remarkable; but this was equally the case in dogs that had been given phosphorus only a few hours before the experiment, and whose organs were not yet fatty. Many of these cases were in the last stage of phosphorus poisoning, and several of their companions died without any experiment having been performed on them before or on the same day as they died. (*vide* the low state of blood pressure in Experiment 63). Numerous attempts were made in these animals to produce shock by operations in the recumbent and vertical positions, but without any more result than in those that were healthy.

(39) The truth about the fatty heart appears to be that chloroform *per se* in no way endangers such a heart, but, on the contrary, by lowering the blood pressure, lessens the work that the heart has to perform, which is a positive advantage. But the mere inhalation of chloroform is

only a part of the process of the administration in practice. A patient with an extremely fatty heart may die from the mere exertion of getting upon the operating table, just as he may die in mounting the steps in front of his own hall door, or from fright at the mere idea of having chloroform or of undergoing an operation, or during his involuntary struggles. Such patients must inevitably die occasionally during chloroform administrations, and would do so even were attar of roses or any other harmless vapour substituted for chloroform.

(40) The effect of hæmorrhage was tested by opening the femoral artery and allowing a considerable quantity of blood (eight to twelve ounces) to escape. An immediate lowering of the blood pressure results, and this is very slowly recovered from. Such an accident, however dangerous it may be in itself, in no way effects the action of the chloroform, except in so far that a patient who has been nearly bled to death would require less chloroform in his system to put him into a state of anæsthesia. The low condition of his blood pressure produced by the hæmorrhage would tend to prevent the too rapid intake of chloroform, exactly as in the case of cutting the splanchnics.

(41) When the hind feet are lowered on to the floor so as to place the animal in the vertical position, a considerable fall of blood pressure in the carotid artery occurs; but when the animal is replaced on the table in the recumbent position the pressure is fully restored. Various operations were performed on animals in the vertical position, but in no case was anything resembling dangerous shock produced. Inversion of the body, so that the animal stands on its head, has exactly the opposite effect, the pressure rising in the carotid artery, and again falling to its former state when the animal is replaced in the horizontal position. Inversion of the body, failed to restore an animal that was in the last stage of chloroform poisoning, though it raised the pressure in the usual way as long as it was continued. The change in the pressure of the blood of the carotid, which occurs when the position of the body is changed, appears therefore to be due simply to the effect of gravity.

(42) As regards the effect of chloroform upon different animals, it may be said to be the same as far as its anæsthetic action is concerned. There are certain peculiarities in its effect on the respiration and circulation connected with its local irritant action on the nostrils and fauces which are interesting to notice. Thus, when concentrated chloroform vapour is applied to the nostrils of rabbits, they hold their breath, and the heart's action is slowed at once. This is always said to be due to reflex inhibition of the heart from irritation of the nasal branches of the trigeminus reflected through the vagus, and is by no means peculiar to chloroform, but is produced equally by any irritant vapour, such as ammonia or acetic acid.

(43) In some dogs, and especially in those to which phosphorus had been given stoppage of the respiration and slowing of the heart occurred immediately after the application of the chloroform to the face, or on forcibly pulling out the tongue, and this suggests that the mechanism of cardiac arrest in them is precisely the same as it is in the rabbit. On the other hand, in rabbits, as in all other animals, it is possible to give chloroform so gently that no spasm of the chest occurs, no reflex effect is produced, and then the pressure falls in the same regular curve and with the same succession of phenomena (anæsthesia, cessation of the respiration, and lastly cessation of the heart beat) that was above described as typical of chloroform inhalation.

(44) Goats have a great tendency to hold their breath while inhaling chloroform, and monkeys resemble dogs rather than rabbits, as when ammonia was held before a monkey's nose (Experiment 98) it did not cause immediate stoppage of the respiration and heart as it does in rabbits.

(45) The experiments with ether show that it is impossible to produce efficient anæsthesia with this agent unless some form of inhaler is used which thoroughly excludes the air. If an ordinary cap containing a sponge saturated with ether is applied very closely to the face, the animal generally holds its breath and struggles, and we at once get the fall of blood pressure and slowing of the heart that invariably occur under these circumstances. If the ether is continued in this way after the animal has recommenced breathing a condition of semi-anæsthesia results, in which the cornea is sometimes sensitive and sometimes insensitive, and the pressure rises and falls alternately to a slight amount and forms a wavy trace, which may be continued right round the drum without any particular change. As soon as air is rigidly excluded, the pressure commences to fall gradually exactly in the same way as with chloroform, and with the same succession of phenomena—viz., first anæsthesia then cessation of the respiration, then of the heart movements, and finally death. How far this is due to ether and how far to the results of asphyxia it is impossible to say, but an exactly similar succession of events can be brought about by making the animal inhale carbonic acid gas alone.

(46) If surgeons choose to be content with a condition of semi-anæsthesia, it can no doubt be produced with perfect safety, though with discomfort to the patient, by ether held rather closely over the mouth. Such a condition of imperfect anæsthesia would never be accepted by any surgeon accustomed to operate under chloroform. If more perfect anæsthesia is required, it can be procured by excluding air more rigidly, but when there is exactly the same danger as in giving chloroform. How very suddenly and rapidly the pressure may fall and death ensue is well shown by Experiment 33. Ether injected

into the jugular vein produces a fall of blood-pressure and anæsthesia in the same way as chloroform does, but in all cases in which it was so injected large clots were found in the heart immediately after death. It is interesting to note that Claude Bernard seems to have formed a very similar opinion with regard to ether, as the following quotations from his work entitled "Leçons sur les Anesthésiques et sur l'Asphyxie," published in 1875, show. The first quotation (p. 50) is as follows:—"Aussi, un certain nombre de chirurgiens proposèrent ill d'abandonner le chloroforme pour revenir à l'éther dont l'usage paraissait moins à craindre. Aujourd'hui encore les chirurgiens de Lyons emploient préférablement l'éther. On croyait le chloroforme plus dangereux que l'éther parce qu'il était plus actif; mais, en réalité, la fréquence relative des accidents par le chloroforme tentait peut-être tout simplement à ce que c'était cet agent anesthésique qu'on employait dans l'immense majorité des cas. Plusieurs discussions ont été provoquées par les partisans de l'éther surtout par les représentants de l'école de Lyons, duit un certain nombre d'accidents mortels. Les deux agents anesthésiques usités peuvent donc, l'un comme l'autre, entraîner quelques risques de mort, et la chirurgie humaine a conservé presque partout le chloroforme, dont l'action est plus rapide et plus complète." The second quotation, to be found on p. 101 of the same work, runs:—"Quant à l'éther et au chloroforme, leur action est à peu près la même au point de vue physiologique, sauf une différence d'intensité en faveur du chloroforme, ce qui nous fera généralement employer ce dernier corps de préférence à l'éther."

(47) The A. C. E. mixture given gently with plenty of air and the other conditions mentioned before under chloroform produces the typical chloroform trace. Given freely to a struggling animal, it can produce a very rapid and dangerous fall of blood pressure. In Experiment 52. Fig. 4 shows very perfectly the effect on the heart of holding the breath.

#### ACCIDENTAL DEATHS.

31. The notes of the cases of accidental deaths that occurred during our experiments have been left amongst the other notes in the position in which each occurrence took place, and they can be readily found by a reference to the index. The fatal result was brought about either by neglecting to watch the condition of the respiration during or after the administration of chloroform, especially while the carotid artery was being exposed, or from a reckless administration of chloroform in the endeavor to check or prevent struggles. In all the cases of accidental death the usual chloroformist was absent, and no one was attending to the chloroform. The notes would have been more complete

if someone could have watched the condition of the animal and noted the gradual but unheeded cessation of respiration without calling attention to it. As it is, one has to be content with the remark that the breathing was noticed to have stopped at some particular time, but there is nothing to throw any light upon the condition during the important period that immediately preceded this discovery. A similar hiatus appears in the account of accidental deaths in the human subject, and is unavoidable. These cases are probably identical with the instance referred to by Snow "in which animals died in a sudden and what was thought unaccountable manner whilst chloroform was given to prevent the pain and struggles which would be occasioned by physiological experiments." The death was not really sudden, but only rapid, and the result of reckless administration of concentrated vapour in the first instance, and careless neglect of the condition of the respiration in the second. There is no evidence whatever that a single one of them was due to paralysis or sudden stoppage of the heart, as Snow assumes to have been the case.

32. It must be remembered, in studying the tracings, that except when it is expressly stated to the contrary, chloroform was throughout administered very freely. The degree and rapidity of the fall of blood pressure are almost in all cases much greater than should be the case in administering chloroform to human beings. To avoid complicating the notes, the inhaler was kept on much more persistently, with none of those little interruptions while the cornea is being examined etc. which always occur in practice. The whole series, with few exceptions, may be characterised as examples of reckless administration of chloroform, and accidental deaths would have been much more numerous had it not been that, when once the animal was connected with the manometer, it was kept under the most careful observation. Experiment 79 affords a most interesting exception. The chloroformist, though present in body, was absent in mind, and failed to observe and report the cessation of the respiration. The chloroform was, in consequence, pushed much further than it should have been, and the animal died sooner than was intended.

33. These cases are of themselves quite sufficient to show that animals are just as liable to death from the careless administration of chloroform as human beings; and the accidental deaths which occurred during the experiments of the Commission afford the best possible proof that the effects of chloroform are identical in the lower animals and in the human subject. The statement so frequently made, that dogs are more resistant to chloroform than human beings, is entirely incorrect.

#### PRACTICAL CONCLUSIONS.

34. The following are the practical conclusions

which the Commission think may fairly be deduced from the experiments recorded in this report:—

I. The recumbent position on the back and absolute freedom of respiration are essential.

II. If during an operation the recumbent position on the back cannot, from any cause, be maintained during chloroform administration, the utmost attention to the respiration is necessary to prevent asphyxia or an overdose. If there is any doubt whatever about the state of respiration, the patient should be at once restored to the recumbent position on the back.

III. To ensure absolute freedom of respiration, tight clothing of every kind, either on the neck, chest, or abdomen, is to be strictly avoided; and no assistants or bystanders should be allowed to exert pressure on any part of the patient's thorax or abdomen, even though the patient be struggling violently. If struggling does occur, it is always possible to hold the patient down by pressure on the shoulders, pelvis, or legs without doing anything which can by any possibility interfere with the free movements of respiration.

IV. An apparatus is not essential, and ought not to be used, as, being made to fit the face, it must tend to produce a certain amount of asphyxia. Moreover, it is apt to take up part of the attention which is required elsewhere. In short, no matter how it is made, it introduces an element of danger into the administration. A convenient form of inhaler is an open cone or cap with a little absorbent cotton inside at the apex.

V. At the commencement of inhalation care should be taken, by not holding the cap too close over the mouth and nose, to avoid exciting, struggling or holding the breath. If struggling or holding the breath do occur, great care is necessary to avoid an over-dose during the deep inspirations which follow. When quiet breathing is ensured as the patient begins to go over, there is no reason why the inhaler should not be applied close to the face; and all that is then necessary is to watch the cornea and to see that the respiration is not interfered with.

VI. In children, crying ensures free admission of chloroform into the lungs; but as struggling and holding the breath can hardly be avoided, and one or two whiffs of chloroform may be sufficient to produce complete insensibility, they should always be allowed to inhale a little fresh air during the first deep inspirations which follow. In any struggling persons, but especially in children, it is essential to remove the inhaler after the first or second deep inspiration, as enough chloroform may have been inhaled to produce deep anaesthesia, and this may only appear, or may deepen, after the chloroform is stopped (*vide supra* sub-paragraphs 2 and 9 of conclusions in paragraph 30). Struggling is best avoided in adults by mak-

ing them blow out hard after each inspiration during the inhalation.

VII. The patient is, as a rule, anæsthetised and ready for the operation to be commenced when unconscious winking is no longer produced by touching the surface of the eye with the tip of the finger. The anæsthetic should never under any circumstances be pushed till the respiration stops; but when once the cornea is insensitive, the patient should be kept gently under by occasional inhalations, and, not be allowed to come out and renew the stage of struggling and resistance.

VIII. As a rule, no operation should be commenced until the patient is fully under the influence of the anæsthetic, so as to avoid all chance of death from surgical shock or fright.

IX. The administrator should be guided as to the effect entirely by the respiration. His only object, while producing anæsthesia, is to see that the respiration is not interfered with.

X. If possible, the patient's chest and abdomen should be exposed during chloroform inhalation, so that the respiratory movements can be seen by the administrator. If anything interferes with the respiration in any way, however slightly, even if this occurs at the very commencement of the administration, if breath is held, or if there is stertor, the inhalation should be stopped until the breathing is natural again. This may sometimes create delay and inconvenience with inexperienced administrators, but experience will make any administrator so familiar with the respiratory functions under chloroform that he will in a short time know almost by intuition whether anything is going wrong, and be able to put it right without delay before any danger arises.

XI. If the breathing becomes embarrassed, the lower jaw should be pulled, or pushed from behind the angles, forward, so that the lower teeth protrude in front of the upper. This raises the epiglottis and frees the larynx. At the same time it is well to assist the respiration artificially until the embarrassment passes off.

XII. If by any accident the respiration stops, artificial respiration should be commenced at once, while an assistant lowers the head and draws forward the tongue with catchforceps, by Howard's method, assisted by compression and relaxation of the thoracic walls. Artificial respiration should be continued until there is no doubt whatever that natural respiration is completely re-established.

XIII. A small dose of morphia may be injected subcutaneously before chloroform inhalation, as it helps to keep the patient in a state of anæsthesia in prolonged operations. There is nothing to show that atropine does any good in connection with the administration of chloroform, and it may do a very great deal of harm.

XIV. Alcohol may be given with advantage before operations under chloroform, provided it

does not cause excitement, and merely has the effect of giving a patient confidence and steadying the circulation.

25. The Commission has no doubt whatever that, if the above rules be followed, chloroform may be given in any case requiring an operation with perfect ease and absolute safety so as to do good without the risk of evil.

EDWARD LAWRIE, (President),  
T. LAUDER BRUNTON,  
G. BOMFORD,  
RUSTOMJI D. HAKIM, } Members.  
EDWARD LAWRIE, Surgeon-Major.

Hyderabad, December 18th, 1889.

(True copy.)

#### A DISCUSSION ON FOODS FOR INVALIDS AND INFANTS.

In accepting the invitation you were so good as to address to me, that I should open a discussion in this important Section on the subject of foods for invalids and infants, I felt that you had asked me to deal with an unusually wide and comprehensive, although undoubtedly a most interesting and practical subject, and one which is very intimately associated with recent progress in therapeutics.

The subject is, however, so large, and extends over such a very wide field, both of observation and experiment, that I must ask you to allow me to remain strictly within my rôle of "introducer," and to content myself with pointing out a few topics which appear to me to be especially suitable for discussion in this Section, adding here and there a few observations of my own with the view of stimulating or provoking further expressions of opinion from those who may be able to throw more light on the questions involved than I am.

The connection between invalids and infants may not appear to some minds to be a very close one, and if I had had my own choice in this matter, I might perhaps have been disposed to "drop the infant," for my acquaintance with infancy is entirely uninterested and impartial, and is not complicated by claims of ownership. But if I cannot claim that direct and intimate association with the state of infancy which so many of you are, no doubt, able to do, I may, perhaps, for that very reason, be able to take a more calm and dispassionate view of its wants and its weaknesses.

There is, however, this very important connection between invalids and infants—namely, that they are commonly dependent on others for the provision or selection of their food, and it is for this reason, I presume, that we are invited to consider their food wants together.

And, first, with regard to the feeding of inva-

lids, I would suggest that we should consider chiefly the foods most suitable to be given in acute febrile diseases; for if we allow ourselves to wander into the question of the dietetics of chronic disease, including such questions as the diet most appropriate in diabetes, albuminuria, uræmia, phthisis, scrofula, anæmia, diseases of the digestive organs, of the heart, etc., we shall be overwhelmed with the magnitude of our subject.

#### FOOD IN ACUTE DISEASE.

We all remember the remarkable words of the late Dr. Graves, of Dublin: "Lest when I am gone you may be at a loss for an epitaph for me, let me give you one in three words, 'He fed fevers.'" Since the time when these pregnant words were uttered there has been little inclination displayed by physicians in this country to go back to the starving methods of some of Graves's distinguished predecessors or contemporaries. Yet it can hardly be doubted that the conclusion arrived at by some of the older physicians, that the free administration of food in fever occasionally intensified the febrile process, rested on some basis of practical observation; and we do not, in the present day, altogether lack occasions of observing that the indiscreet administration of food in acute diseases, food unsuitable either in quality or quantity, is distinctly injurious.

No one can be more willing than I am to recognize the necessity and importance of administering a sufficiency of food to febrile patients, especially with the object of lessening or compensating for that tendency to destruction of tissue, which is one of the most serious consequences of fever; but I am at the same time convinced that, especially in large public institutions where patients are nursed *en bloc*, the free administration of food and alcoholic stimulants is far too much a matter of routine, and sometimes partakes more of predetermination than discrimination. I have seen a nurse, a competent but very firm lady nurse, stand with teeth set and lower jaw advanced, and every firm outline of her muscular frame breathing forth unyielding determination, over a fever patient, and forcibly thrusting down his throat, an easy conqueror in this unequal struggle, the detested hourly "feed" of black beef-tea, mixed with cheap port wine (for what public institution ever uses anything but cheap port?). The poor fevered lips and parched tongue are craving all the time for "a cup of cold water," which is denied them, either because the patient is not sufficiently conscious of his wants to ask for it, or because "the doctor has not ordered it."

I would plead, then, for more discrimination and less of routine in the feeding of fever patients. and I would suggest for consideration the fact that food undigested only serves to intensify the febrile process and adds to the distress of the pa-

tient, and that in administering condensed solutions of nitrogenous extractives we may incur the danger of adding to the already large accumulation of nitrogenous waste in the blood. I would also put this question to the medical officers of hospitals: Are you satisfied that those cheap and common qualities of wines and spirits, almost universally used in such institutions, a single glass of which many of us here in sound health would wisely fear to take, are you satisfied that they do not also injuriously affect the fever patient, who, moreover may have been entirely unhabituated before the attack to the use of such beverages?

We feed fevers and we are undoubtedly right in so doing. Bauer and Künstle appear to have established, by careful observations on the diet of typhoid patients, the fact that a due "supply of albuminous food to a fever patient" effects a saving of albumen in the body, "for though the excretion of nitrogen is increased, the loss of the same element from the system is reduced." But do we not sometimes overfeed fevers, and use less discrimination than is desirable in the kinds of food we administer?

It has appeared to me that we may formulate two chief rules which should guide us in the feeding of cases of acute disease: 1. Endeavor to utilize food to the greatest extent that is safe and possible for the purpose of checking the waste of tissue which is associated with the febrile process. 2. Be careful to administer no food that cannot be readily absorbed and assimilated. Do not overlook the fact that the functions of the digestive organs are gravely impaired during fever, and, therefore, if we give food which the patient is unable to assimilate, this undigested food will decompose in the stomach and intestines, and cause much local irritation and augment the pyrexial movement.

I have been accustomed to teach, and I submit that teaching to your criticism, that in acute and short typical and febrile attacks, such, for instance, as one of acute croupous pneumonia of average severity and running an average course, we should not manifest any anxiety as to the taking of much food, unless in the aged and feeble, for by forcing the consumption of a considerable quantity of food in such cases, in the absence of all appetite, and with obvious febrile derangement of the digestive organs, we do more harm than good.

There is a general consent amongst all authorities that, owing to the interruption of normal gastric digestion in fever, all food should be given in the fluid form, that is, in a form that can be readily and immediately absorbed, that it should be given in small quantities and at short intervals. The two kinds of fluid food most commonly used in cases of acute disease are, first, milk, and, secondly beef-tea, and under the latter denomination I would be asked to be allowed to include all fluid

meat extracts, broths, soup, meat juices, etc. The consideration of both these forms of food will probably yield some suitable topics for discussion.

The very great convenience of milk as a food has, I think, acted, in a certain sense, as a snare, for there is a tendency especially with nurses, to think no evil of that which is so handy, requires no preparation, and gives so little trouble. But the great drawback in the use of milk in acute disease is the fact that, although a fluid food out of the body, it becomes a solid food in the stomach or intestine. No doubt it is an excellent food in all cases in which it is well tolerated and quickly digested and absorbed, but there are many cases in which it is not so, and when these happen to be cases of typhoid fever very serious injury may be done the patient if this peculiarity is not observed. I have seen several cases of typhoid in which the administration of milk has not appeared to cause any gastric disturbances, but yet has produced great intestinal irritation, and the motions have been largely composed of firm milk curd. One of the reasons why milk so frequently disagrees with patients is that it is given in too concentrated a form and in too great quantity.

Sir Henry Thomson has called attention to the absurd custom, now so prevalent, of using milk as if it were a simple beverage, and to drink it like water, with quantities of solid meat and other food. Why should we hesitate to dilute the milk we give to fever patients? They require water, pure water, in much larger quantity than they usually get, and yet we hesitate to mix water with the milk we give them. Their digestive powers are excessively feeble, and yet we will give them concentrated foods! When we wish to rely on milk as a food in acute disease we should give it in small quantities at a time at short intervals, mixed with water, or, better, with an alkaline water, such as Vichy or Apollinaris. I am accustomed in hospital practice to prescribe powders, each containing 20 grains of bicarbonate of soda and 20 grains of common salt, and to direct that one such powder should be added to every pint of milk, and this is to be diluted when administered, with an equal quantity of water. Two ounces of milk and two ounces of an alkaline water every hour (and a fever patient requires a drink every hour) will give the patient two pints and a half of milk a day. I am, of course, thinking of cases in which the digestion of milk is difficult.

Greater use ought also to be made of whey in those in cases which milk is not digested readily. I have often used it in private practice and in hospital with great advantage. It can be prepared in a pleasant form by boiling a pint of milk with two or three teaspoonfuls of lemon-juice, and a few fragments of lemon peel for the sake of flavor; if the curd be well broken up, then strained through muslin, and all the fluid pressed well out of the

curd, much of the cream and some of the finely-coagulated casein will pass into the whey, which will thus become a fairly nutritive fluid. If necessary, it can be made more nutritious by the addition of meat juice. Or if an egg be whipped up with twice as much boiling water, added slowly and then strained, a fluid will be obtained holding in suspension a considerable quantity of albumen coagulated in fine particles, and this may be added to whey (or to beef-tea), thus supplying the defective albuminate.

I must not dwell longer, however, on milk. I merely make these suggestions with the view of eliciting further observations. I will ask you at the same time to consider the use of "butter-milk" as an invalid food, not so largely used in this country as in Germany, but calculated, I believe, to be of service in many cases of gastric difficulty. It is highly acid from the presence of lactic acid, and it contains the casein of milk in a very finely divided form. I have known dyspeptic patients live upon it in comfort for considerable periods at a time, taking only a little thin water biscuit besides.

Another form of fluid food very extensively used in cases of acute disease is "beef-tea;" this term is usually applied to very strong extracts of beef, and this fluid is generally estimated in exact proportion to its concentration. Why, I have never been quite able to understand. As I have already said, a patient with pyrexia requires and should be given much water; why not give him some of that water with his beef extract? The intense dislike of beef-tea which many patients manifest is especially directed to this very concentrated form. It is mere slavery to routine—mere want of resource—that has perpetuated the invalid's sad restriction to milk and beef-tea. Conceive the dread monotony of a six or seven weeks' limitation to these two articles of diet. Now there are many forms of meat infusion or meat extracts that can be rendered very palatable by suitable care in preparation, infinitely better adapted to serve as foods in pyrexial cases than strong beef-tea. Well-made mutton, veal, and chicken broths to which some well-strained oatmeal or barley gruel can be occasionally added, make excellent invalid foods. They contain in a dilute form the same constituents, and, with the additions I have named, even more nutritive alimentary principles than beef-tea. But clear soups—*consommes*—are exceedingly agreeable, readily absorbable, and stimulating foods, and they usually contain some vegetable juices and salts which greatly add to their food value.

Sir William Jenner some time ago directed the attention of the profession to the remarkable oversight so frequently practised in the feeding of cases of fever, of the omission of vegetable juices from their dietary. It is quite easy to obtain the

juice of fresh boiled vegetables and savoury herbs, and too add it to these clear animal soups. "Fruit soups" are used in Germany, and are made by boiling fresh or dried fruits with water, expressing the juice and straining.

I am not one of those who think ill of beef-tea as an invalid food, but I object to making either beef-tea or milk the universal invalid food, and I see no reason why we should desire to use such very concentrated beef-teas, when we know that fever patients need so much water. I regard beef-tea as an excellent stimulant and restorative, as it contains very little, if any, albuminates in solution. But it contains gelatin, which is very readily digested, and appears to serve as an "albumen-sparing" food in the body, as well as saline and stimulating extractives.

I was greatly surprised a short time ago on being told by a hospital sister, that in the hospital she nursed in they were forbidden to put any salt into the food of the typhoid patients. Surely this was a very unwise regulation. If chloride of sodium is so important in health, may it not be quite as important in disease?

Dr. Lauder Brunton has hinted, in one of his suggestive papers, that beef-tea may occasionally contain peptones, which by passing directly into the general circulation, act as poisons; and he asks the question "whether beef-tea may not very frequently be actually injurious, and whether the products of muscular waste which constitute the chief portion of beer-tea or beef-essence, may not under certain circumstances be actually poisonous?" I leave you to answer this question, contenting myself with remarking that I have never encountered a case of "beef-tea poisoning." And this brings me to another consideration, and that is the administration of peptonised or predigested foods to invalids. I must leave this large subject mainly in your hands, or I should have to occupy far too much of the time available for this discussion. I will simply remind you that it has been authoritatively suggested that "digestive ferments," and "artificially digested foods" "may be edged tools and capable of doing harm as well as good." But with you, sir, to direct us in a subject you have made so peculiarly your own, we can scarcely go wrong.—I. Burney Yeo, M.D., F.R.C.P., in *Brit. Med. Jour.*

(To be continued.)

#### TREATMENT OF MEDICAL EMERGENCIES.

The surgical emergency has been the subject of numerous addresses and papers, but the medical emergency has rarely, if ever, received systematic consideration. Yet the instances in which it de-

mands treatment are scarcely less numerous than in the case of the former.

In the *University Medical Magazine* for January, 1890, Professor Tyson contributes a valuable paper as to the treatment of the more frequent medical emergencies, of which the following abstract represents the most important points:

Under the head of the treatment of medical emergencies, Dr. Tyson refers to the treatment of—*first*, syncope, or fainting; *second*, the apoplectic seizure; *third*, the convulsion, whether caused by epilepsy, Bright's disease, peripheral irritation, or hysteria; *fourth*, lung hæmorrhage; *fifth*, nasal hæmorrhage; *sixth*, gastric and intestinal hæmorrhage; and, *seventh*, asphyxia or suffocation.

1. In fainting, the heart does not cease to beat, unless it be fatal syncope, but its action becomes so feeble, and the quantity of blood sent out so small, that there is not enough sent to the brain to maintain consciousness.

The symptoms of fainting are, of course, familiar to every one. In the treatment of syncope, the first step is to place the patient in a recumbent position flat on the back, with the head low. The clothing should be loosened around the neck and body, the access of fresh air should be freely permitted, and to this end persons should be kept at a distance. Diffusible stimulants, as aromatic spirits of ammonia, and brandy or whiskey, should be administered, or strong ammonia may be inhaled. Cold water may be dashed in the face, the respiration being thus excited and in turn the heart caused to beat. If recovery unsue, the heart's beat becomes more distinct, the pulse reappears at the wrist, and consciousness slowly returns. It is only in cases where the heart is too badly damaged, as where there is fatty metamorphosis of its muscular fasciculi, or its valves are badly diseased, or where too much blood is drawn off, that resuscitation fails to take place.

2. The apoplectic seizure is a most dangerous condition. Accompanied, like fainting, by unconsciousness as an essential symptom, it is due to a very different cause. There is here too much blood in the brain, either within or without the blood-vessels. In treating it the patient requires to be bolstered up, the head high, and the blood kept out of the brain as much as possible. In the true apoplectic seizure, with even a moderately strong pulse, blood is to be taken from the arm freely, sixteen ounces or more. Simultaneously an aperient, which in the absence of consciousness must be one of which the dose is small, as  $\frac{1}{6}$  of a grain of elaterium in pill or powder, or a couple of drops of croton oil in a teaspoonful of sweet oil or glycerine. A large enema, to which an ounce of turpentine is added, is useful. Ice to the head—an ice-cap—may be used. Of less service is counter irritation to the nape of the neck or the temple by a blister.



3. There is no symptom more alarming than the convulsion. Beginning with a distortion of countenance, due to clonic muscular contraction of the face muscles, which rapidly invades the entire voluntary system, and is as promptly followed by unconsciousness, the victim mostly falls heavily to the floor, although he is sometimes warned by an aura which permits him to seek a place of safety. Serious injury and even death may be caused by the fall itself.

In treatment, the first steps are measures to prevent the biting of the tongue, which is unfortunately, often too early a result to be averted, being caused by a primary and sudden closure of the jaw muscles. A piece of wood, a clothes-pin, or a cork secured so as to prevent its being swallowed, or a towel thrust into the mouth will answer the purpose. Then the patient's clothing is to be loosened, as in fainting, and he is to be restrained from such motion as may result in further injuring himself.

If the convulsion be due to epilepsy, nothing further can be done; if due to reflex irritation, as occurs in teething in children, or are overloaded stomach, the gums should be lanced in the former instance, and vomiting secured in the latter. The difficulty is to introduce the emetic; but irritation of the fauces by the fingers or a feather will frequently have the desired effect. Should the fit continue, a movement of the bowels should be brought about by an enema. In all cases in children, immediately after the cessation of the fit, if the bowels have not been moved during it, an aperient should be given to remove irritating matter in the alimentary canal, since this may avert a recurrence. Among such irritating matter are to be included the various intestinal worms.

If the convulsions are due to Bright's disease, a more active treatment is necessary. If it be perpetual nephritis, in addition to the measures taken to protect the tongue, the first step is undoubtedly to bleed from the arm, and, if the convulsions continue, chloroform should be inhaled. The same effect is often as well obtained by chloral.

Chloral is best administered by enema, and 60 grains may thus be given to an adult. If the convulsion is due to Bright's disease not occurring in pregnancy, a  $\frac{1}{2}$  of a grain of pilocarpine may be injected subcutaneously, and repeated in a few minutes if not followed by sweating; or, if this be not at hand, a hot air bath or a steam bath.

Hysterical convulsion requires a different treatment. It is always less sudden than the epileptiform convulsion, is apt to be preceded by some premonitory symptom, such as a sense of suffocation or extreme nervousness, but there is never any danger of the patient biting the tongue. Opisthotonos is usually the characteristic form of convulsion. As regards treatment, electricity in the

shape of the direct galvanic current, occasionally interrupted, or of faradization, is, however, often felt, and will generally cause the convulsion to cease. Douching the patient with cold water will likewise be usually successful.

[Inhalations of nitrite of amyl will usually arrest convulsions, no matter what be their nature, though its use in puerperal convulsions after delivery may prove dangerous by producing flooding.—Ed.]

4. Pulmonary hæmorrhages are in the main confined to tubercular consumption, occur in two different stages of the disease, and have a very different significance. They may occur early, when the blood-vessels in the neighbourhood of a tubercular infiltration, weakened by a tubercular deposit in their walls, yield to a distention from collateral hyperæmia. In such a case the hæmorrhage is rarely large, and, so far from being harmful, is often a relief to a congestion producing dyspnoea and oppression. The greatest danger is the irritation and even inflammation which may be brought about by the presence of small coagula in the bronchioles and their insufflation into still pervious air vesicles. This danger escaped, the hæmorrhage is harmless.

The second form of hæmorrhage is much more serious. It occurs late in the disease, and is due to ulceration through the coats of a blood-vessel of considerable size, the vessel being either in the walls of a cavity or traversing it. Such a hæmorrhage is dangerous, and not infrequently fatal. Prompt measures are, therefore, to be taken to relieve it. The thorax should be kept raised, and absolute quiet should be observed. This is further secured by a full dose of an opiate, if it be well borne by the patient. Of internal remedies, the time-honored one of common salt is of uncertain value; but, in the absence of anything else, may be swallowed, in the dose of a teaspoonful, repeated in a few minutes if the hæmorrhage continues. Gallic acid, in 15-grain doses every ten or fifteen minutes, is a more rational measure, and should be substituted for the salt as soon as it can be obtained. Hypodermic injections of ergotin, in doses of 5 to 10 grains in water, may be given simultaneously, and should be repeated daily or twice daily where the tendency to hæmorrhage continues. Their object is to bring about contraction in the blood-vessels. Other astringents, such acetate of lead, in 3 grain doses, may be used under the same circumstances, as it would not be safe to use this drug in any quantity sufficient to bring about an immediate effect. The application of cold over the bleeding site is especially recommended by German clinicians, but one must be sure first of the situation, which is not easily ascertained. Sometimes the patient is able to indicate it quite precisely, at others not. Sometimes auscultation may discover subcrepita-

tion over the seat of hæmorrhage. Cold should be applied in the shape of ice, in bladders or rubber-bags, so that the clothing shall not become damp, or of cloths wrung out in cold water. A more extreme measure, to be resorted to when others fail, is to throw a ligature around the larger limbs, cutting off the return of blood by the veins, while the outflow through the arteries is still permitted. Such a course will withdraw blood from the lungs and lessen the tendency to hæmorrhage.

5. Hæmorrhage of the stomach and bowels occurs usually in cirrhosis of the liver or typhoid fever. When treatment is required, tannic acid, in doses of 15 grains every ten or fifteen minutes, may be used, though even alum may be used, in the proportion of a teaspoonful to a glass of water, and taken in four doses, at short intervals.

Hæmorrhages from the lower bowel, occurring frequently in typhoid fever, are much more serious. They are to be treated by quiet, cold compression, or ice-bags, to the abdomen, and the use of foods of the most bland and unirritating nature. Tannic acid may be given as in hæmorrhage from the stomach, large doses being much more apt to enter the bowels.

6. Nasal hæmorrhage may be readily treated by snuffing up cold water, or a solution of alum in water, or injecting hot water into the nasal passages, and the use of ice externally. Of course, plugging the nares must be practised when all else fails.

7. The successful treatment of asphyxia depends upon the fact that the heart continues to beat long after respiration ceases, and upon this fact, too, depends the wonderful capacity for resuscitation which exists in those apparently drowned or otherwise apparently dead from suffocation. The first indication is, of course, to supply oxygen, the want of which is responsible for all the symptoms. If there is obstruction of the air-passages by a foreign body, it must be removed, or tracheotomy must be performed. If the action of the muscles of respiration is interfered with, the interfering cause must be removed. If the patient is in an atmosphere of scanty oxygen or of irrespirable gases, he must be removed to fresh open air. In slighter degrees of asphyxia, such as are seen in the new-born infant, slapping the face with the bare hand or with a wet towel, or dashing cold water upon it, will often have the effect of exciting the breathing act and of aerating the blood. If these measures are insufficient, then artificial respiration must be practised by some one of the usual methods, as that of Sylvester or Marshall Hall. In apparent drowning, faradization or galvanism of the phrenic nerve may be used, especially one pole being placed over the nerve as it crosses the scalenus muscle at the root of the neck, and the other at the epigastrium.—*Therap. Gaz.*

## A CONTRIBUTION TO THE STUDY OF EPILEPSY.

Dr. Frank H. Ingram read a paper thus entitled. An analysis of 11,000 epileptic seizures, occurring in 110 patients, showed a predominance of diurnal attacks. The author said that faulty digestion, retained urine, and bad dreams were responsible for the nocturnal fits, and that vascular weaknesses and various so-called functional disturbances could be assigned as the exciting causes of most of the others. Sudden barometric and thermometric changes, particularly the former, were potent in producing epileptic explosions. Reports of three autopsies were given, two of which showed pathological conditions in the brain which would account for the convulsions. In one case, in which the spasms invariably began in the left lower extremity, aneurysmal vessels, subcortical, were found in the leg centre of the right hemisphere of the brain. In a similar case, except that there was also a loss of hearing, there were fibrinous and caseous deposits and pressure degeneration about the leg centre in the right hemisphere, with caseous granules in the sheath of each auditory nerve. The third case showed degeneration in the posterior horns of the lateral ventricles, which, the writer said, was the only case in his experience which had shown degeneration of the so-called epileptogenic zone. The indiscriminate grouping of epileptics was condemned and conservatism in the use of the bromides commended. The writer professed a fixed disbelief in a definite pathology for epilepsy, and cited several cases showing the marked difference in the character and the sequence of the convulsive phenomena.

Dr. Starr thought it interesting to hear of the apparent relation existing between changes of barometric pressure and the frequency of epileptic attacks. There was nothing which tended to produce epileptic seizures so much as variations in arterial tone, a fact which might possibly serve to explain the matter of atmospheric influence. As regarded the pathology of epilepsy, there seemed to be no permanent lesion of the brain, and all such gross changes as had been described by Alexander, Meynert, and others, were not the direct cause of the disease. It was inconsistent with our clinical knowledge of the disorder to seek for visible pathological changes. The treatment of epilepsy differed much in its results in dispensary and in private, practice as in the former the patients were under such bad hygienic conditions. Contrasting the two classes, dispensary patients had six times as many seizures and were in other ways worse than private patients. There was much of value in the character of the aura. Dr. Ingram had reported aura in fifty per cent. of his

cases. Undoubtedly the point of departure in epilepsy was cortical, and the character of the aura gave the seat of the discharge. If the aura was visual, as in many cases, the point of origin was in the visual area. If it was auditory, a rarer phenomenon, it began in the auditory area. Although most epileptic seizures were due to cortical disturbance, such discharge might take place from gray matter anywhere in the nervous system. It was unfortunate to condemn the bromides, for, although often injurious, they gave better results than any other known drugs, when employed under proper regulations.

Dr. Herter agreed with Dr. Starr, that there was no relation between the pathological findings in epilepsy and the disease; but nutritive changes in an unstable cortex were probably the cause, apart from any gross pathological lesions.

Dr. Fisher thought that the bromides did not interfere much with bodily nutrition, as many patients grew fat on them. They seemed to become habituated to them.

Dr. W. W. Skinner described a case in which the cutting off of the bromides had resulted fatally. The patient, a young woman, had been for some time under bromides, when she was sent to an oculist to have her eyes examined. The latter found mixed astigmatism. The bromides were cut off. After three weeks she began to have attacks of *petit mal* very frequently; they became more and more frequent, until finally she sank into coma and died. A grain and a third of morphine, in four doses, hypodermically, made no impression upon the seizures. The fits invariably began upon the right side of the body, with deviation of the head to the left and of the eyes to the right. He thought there had been a cortical hæmorrhage.

Dr. Leszynsky said that the autopsy in cases of status epilepticus yielded no result. Patients died from heart failure or respiratory failure. He believed he had saved the lives of several such patients by venesection. He had used nitrite of amyl before he knew that it was harmful. Most drugs were of no service, with the exception of chloral, which in forty or fifty-grain doses, *per rectum*, had acted well. The indiscriminate use of the bromides in epilepsy was injurious, but their careful administration was productive of satisfactory results.

Dr. Lyon had employed pilocarpine in a case with epileptic convulsions with excellent results. It produced first a profuse perspiration, after which the patient emerged from his attack. In asylums it was very common to withdraw the bromides, but he had never observed any harm follow. He had used pilocarpine also successfully in case of of hystero-epilepsy.

Dr. Herter thought pilocarpine should always be employed with the greatest caution. He had

seen it produce pulmonary œdema and death in two cases.

The President related the case of a barber who several years ago began to fall asleep when at his work, and was consequently discharged. The somnolent attacks had continued. He would fall asleep while walking or while riding on the platform of a car, and had frequent falls in the street, into gutters, on to the stove and etc., none of these things waking him up. There was no convulsion, nothing that one might call epileptic. Ten years ago he had weighed 150 pounds, now he weighed 270 pounds. Curiously enough, he was a sufferer from isomina, not being able to sleep continuously at night for more than half an hour. Were these epileptic attacks? Was there any connection between them and the corpulence?

Dr. C. L. Dana had reported a case of epileptic morbid somnolence in a young woman several years ago. She had had at first only somnolent attacks, but afterward real epilepsy. He believed these somnolent seizures to be a form of *petit mal*. He had had a case similar to Dr. Jacoby's in conjunction with Dr. Hammond. The patient walked about while asleep, but did not hurt himself, and could be roused. The pupils were contracted as in normal sleep, and not dilated as in epilepsy. The trouble might be allied to narcolepsy.

Dr. Ingram said that his routine treatment of status epilepticus had been sixty grains of chloral *per rectum* every two hours, and this had been very successful in the majority of cases. He had also seen good results and no injury from use of pilocarpine.—*Med Record*.

#### SACCHARIN AS A MEANS OF ACIDIFYING THE URINE.

The mineral acids when taken into the stomach are chiefly eliminated by the intestinal mucous membrane, and the only way in which they affect the reaction of the urine is by liberating from their bases the organic acids which in the form of salts they may chance to meet in their passage through the system. The organic acids thus liberated may or may not find their way through the kidneys. As a matter of fact, they generally do not succeed in running the gauntlet. Indeed so slight is their chance of doing so that in practice, in prescribing a salt of an organic acid, we leave the acid entirely out of consideration.

The only acid heretofore employed with any degree of confidence that it would get beyond the kidneys, was benzoic acid. Even this does not reach the urine in its original form, but is converted into hippuric acid by the way. Nevertheless, it is in some degree useful in rendering the urine acid, but its action is not as certain nor as constant as might be desired.

When saccharin was first announced, it was mentioned among its properties that it was unaffected by the digestive fluids, and was eliminated unchanged in the urine. Sometime later, having had occasion to manipulate somewhat with this substance, I was struck with its strongly acid property, and it occurred to me that so decided an acid, of such a stable composition as to resist decomposition in the system and electing the kidneys as its way of exit from the body, would supply exactly the agent required for acidifying the urine.

An opportunity to put this idea to the test was afforded by a patient in my wards at the Presbyterian Hospital. This was a boy suffering with transverse myelitis, whose urine, which required to be drawn with the catheter, was ammoniacal and very offensive. A few grains of saccharin administered three times a day promptly changed the reaction of the urine to acid, and did away completely with the offensive odor. Not only so, but the irritation of the bladder became less, and the formation of pus was diminished.

Shortly after this I was in attendance upon a case of subacute meningitis in a child twenty months old. The urine which dribbled constantly into the diaper, was alkaline, and its odor though not ammoniacal, was peculiarly sickening. Every effort was made in the way of cleanliness, but the atmosphere about the bed was extremely disagreeable. Small doses of saccharin were prescribed, and immediately removed the fetor, to the great relief of the parents and attendants.

On beginning my service at the hospital, on Oct. 4th of this year, I found a young woman, aged eighteen, in the ward, who was suffering from acute cystitis, apparently induced by suppression of the catamenia and the absence of an evacuation of the bowels for seven days.

She had then been ten days in hospital. On admission, three weeks after the onset of her illness, the urine was alkaline, and contained a large amount ofropy mucous and pus. An attempt to wash out the bladder was abandoned, on account of the severe tenesmus excited. The contact of the catheter with the wall of the bladder caused hæmorrhage.

Citrate of potassa was ordered, but gave no relief. When I came on duty I found the patient in so much distress that I suspected she had introduced some foreign body into the bladder. October 13th, finding the urine very alkaline, I directed the administration of five grains of saccharin three times a day. The following day the urine was neutral, and in four days more it was acid, and contained no mucus and but very little pus. October 23rd, the urine was entirely normal, the symptoms had disappeared completely, and the patient was discharged cured.

It is probable that a part of the efficacy of saccharin in these cases is due to its being a powerful

antiseptic in addition to its acid property.—A. H. Smith, M.D., in *Med. Record*.

## THE HEREDITARY FACTOR IN ALCOHOLISM.

To the thoughtful medical man, who is at the same time engaged in philanthropic work, it must often be a source of encouragement when he reflects that few if any of our schemes for ameliorating the condition of our fellow men do more than touch the surface of the evil attacked, leaving their obscure and deep-seated causes to go on producing a like train of ills entirely uninfluenced by our efforts. Someone asked Dr. Oliver Wendell Holmes if it were not the fact that every disease could be cured if the doctors were called early enough? "Yes," he replied, "but early enough would commonly be two hundred years in advance." That Moorish doctor spoke like a philosopher when he prayed: "Oh God, be kind to the wicked! Thou hast been sufficiently kind to the good in making them good." We must all have sometime wished that the human race could be propagated with as much care as breeders bestow upon horses and cattle; and no thinking man of our profession can contemplate without pain the marriage of consumptives, syphilitics, neurotics, or drunkards. Especially terrible appears from recent researches, is the part played by alcoholism in heredity.

The *Progres Medical* has done the medical profession at large good service by publishing M. Paul Sollier's Aubanel Prize Essay on the "Role of Heredity in Alcoholism." A more suggestive study for the physician, and a more saddening one for the philanthropist, it would be difficult to imagine. Here is original sin in terms of modern science, and the punishment threatened in the decalogue to the "third and fourth generation" is exhibited at work in perhaps its most terrible form. By abundant and well arranged statistics M. Sollier traces the afflictions of the idiot, the epileptic, the imbecile, the hydrocephalic, the choreic and the mentally debilitated, up to the alcoholic father, mother or grandparent, in so many and such clearly marked instances that it is quite impossible to deny his conclusions from the data he gives. "Conception in a state of drunkenness of the father or the mother devotes the individual conceived to a condition so profound (idiocy, complicated frequently by epilepsy, hydrocephaly, microcephaly, etc.), so that it is condemned in general to a very short existence." An alcoholic subject runs a terrible risk of conferring upon his descendants either insanity or tendency to vice or suicide or hysteria, the milder nervous disorders. The legacy of evil may miss a generation, and then appear in the next like gout.

It will generally manifest itself, if it appear in the form of dipsomania, in a taste for the same liquor as that preferred by the ancestor, and in its mildest form it will tend so to predispose the unhappy descendant to the evil of ebriety that he will find the freedom of his will in that direction seriously imperilled. The menopause more even than pregnancy seems with women a determining cause of alcoholism. Or its terrible influence may first be manifested after some nervous shock, in sickness, or with advancing age. Hereditary alcoholism has a certain likeness to dipsomania, and it is a fair ground for question whether such a proved condition does not constitute irresponsibility.—Ed. *Brit. Med. Jour.*

### SOME PRACTICAL POINTS IN THE TREATMENT OF SYPHILIS.

The author is not one of those who commence specific treatment as soon as the character of the initial lesion is made out. According to him, "syphilis is not mature until the date of secondary manifestations, when the newly-formed, young, round, infecting cells are proliferated in vast quantities and are thrown into the general circulation, and by it carried throughout the body. When this has occurred, I think syphilis may be said to be 'ripe'; then, and not till then, we have something tangible to treat. At this time mercury introduced into the organism can exert its marvellous powers in destroying this, then, young, nascent, infectious material, and in causing its absorption."

He thinks we are unable to abort the disease in its first stage.

Ignoring the expectant and the spasmodic or interrupted method of treatment, the author advocates the continuous and tonic treatment of the disease. He favors the internal use of the green iodide in doses of from a  $\frac{1}{4}$  to  $\frac{1}{2}$  a grain three times a day in pill form, or from  $\frac{1}{2}$  to 1 grain doses of the tannate of mercury, the dosage of either remedy depending on the age and robustness of the patient.

The general health of the patient must be kept at the very highest point, the soundness of the mouth, pharynx, and stomach being an object of especial anxiety.

He favors inunctions at times as a change, and particularly when cutaneous lesions are present, having satisfied himself that the local action of the remedy is salutary.

He remits treatment occasionally when a lull in virulent manifestations occurs, lengthening the intervals in the second year, when he combines his remedy with some iodide of potassium.

He believes that at times there is an advantage in bringing the application near the lesion, hence

he frequently uses inunctions over or hypodermatic injections about indolent glandular enlargements, inunctions about the neck and jaws, temple and occiput, in early and late meningial and cerebral disease, and after cleansing antiseptically mucous patches, and condylomata, he dusts them with calomel.

In some cases where rapid action is necessary, when the lesions are on the face, neck, hands, etc., the author resorts to the subcutaneous employment of the drug, but he is wisely conservative in this use of the remedy, and countenances only the employment of a soluble preparation in this way.—R. W. TAYLOR, M.D., in *Med. News.*

### MEDICAL NOTES.

Many young children are irritable and cry because they have *intestinal flatus*. Instead of using opiates, which are the basis of most of the soothing syrups, Prof. Bartholow gives the following as a valuable remedy:—

R—Misturæ asafœtidæ, . . . f ʒ j.  
Sodii bromid., . . . gr. iij. v.—M.

This is a dose for a child from one to four months old.

The amount of *alcohol* the average individual can digest and convert into force in twenty-four hours is three ounces. Its equivalent in other spirituous liquors can be calculated, whisky having 50 per cent., brandy 45 to 55 per cent., red and white wine 10 per cent. alcoholic strength. All above this quantity is injurious, and is excreted unchanged.—Prof. Bartholow.

For the immediate relief of *acute laryngitis*, as in public speakers and singers, Dr. Jurist recommends a drug that will produce anæsthesia of the vocal cords, lessening their sensibility to the air. He has had good results from potassium bromidum, gr. xj, and between each act a wineglassful of wine of coca; during the day, frequent inhalations of steam from the following:—

R—Tinct. benzoin. comp., . . . f ʒ j.  
Aquæ bullient., . . . f ʒ viij.—M.

To reduce the very high fever of *typhoid fever*, Prof. DaCosta advises the free use of whisky or brandy, and ice to the head and back of the head; sponge the patient with cold water (or, if more agreeable to patient, tepid water) three times a day. If this should not succeed, then—

R—Antipyrin, . . . gr. v.  
Quininæ sulph., . . . gr. j.—M.

Fiat. charta, I.

To be given every hour until the temperature is reduced, only two doses being required. The object of adding the quinine to the antipyrin is to prevent any depression.

Prof. Brinton strongly advises against dressing a fracture of the shaft of the humerus, as directed in many of the books, with four short humeral splints. His objection is that, if so dressed, non-union often results. The method preferred by him is the application of the internal angular splint, well padded, and assisted by three short humeral splints, the latter fastened after the internal angular splint and one at a time. A large handkerchief sling, entirely covering in hand and elbow, the hand elevated a little higher than the elbow. No primary roller to be used unless there be violent muscular action.

To dissolve the membrane of diphtheria, in persons with sufficient intelligence to help you, use a freshly-prepared paste of trypsin and apply with a brush; or, if unable to do this, make a solution of it, using bicarbonate of soda to help dissolve it, this solution to be used as a spray. When once made into paste or solution, trypsin rapidly deteriorates, hence always make it up fresh.

In nasal diphtheria the following, as a spray, is directed:—

R.—Sodii hyposulphitis, . . . . . ʒ ij.  
 Glycerini,  
 Aquæ, . . . . . āā . f ʒ ij.—M.  
 Sig.—Spray.

—Coll. and Clin. Rec.

ACETATE OF LEAD IN PNEUMONIA.—Prof. Crocq, of Brussels, has found that a remedy which was formerly a good deal employed in pneumonia, but which has long fallen into complete disuse—viz., acetate of lead—is in many cases of great value. This remedy was prescribed, combined with opium, by Ritscher, and afterwards by Strecht, Leudet and others. Nothnagel and Rossbach mention it in their handbook, but consider that it is useless in ordinary cases, though they recommend it where there is œdema of the lung and in the hæmorrhagic form of the disease. Prof. Crocq, having prescribed the lead salt in a large number of cases, is convinced that it frequently reduces the heart beats as much as ten or fifteen per minute in a single day, and that it exerts an equally marked effect upon the temperature, the sputum, too, becoming less in quantity, and less deeply tinged. Instead of producing constipation, it is far more likely to open the bowels; but notwithstanding this action there is no objection to prescribing it with a little opium in cases where diarrhoea is present, or, if preferred, trisnitrate of bismuth may be added instead of opium. Small doses are of very little use, the minimum quantity that should be ordered for an adult per diem being six grains, and this may sometimes be increased with advantage to as much as fifteen grains. This treatment may be continued for a fortnight with-

out any symptoms of lead-poisoning presenting themselves. Prof. Crocq remarks that it may be given at all stages of the disease, but at the beginning in strong subjects, and when the pain is severe, its action is but slight, and so antimonials are to be preferred at that time. Where, however, resolution is delayed, where there is but little fever, where the patient is very weak, where there is enteritis or diarrhoea, and especially where the digestive organs will not tolerate antimony, acetate of lead is very valuable. Again, when the pneumonia is secondary to some other serious disease, and when the heart is acting insufficiently so that the pulmonary circulation is interfered with as in Bright's disease, in organic affections of the heart, in drunkards and in old people, acetate of the lead will sometimes work wonders; indeed, he considers that it is most valuable in serious cases. Of course, it must sometimes be combined with alcohol.—London Lancet.

PUERPERAL ECLAMPSIA.—Let me point out the position, not by any means unassailable I admit, which I think best sums up the pathology and treatment of the disease called puerperal eclampsia, or the convulsions of reproduction.

First. That it is an acute motor-neurosis arising from inflammatory action about the vaso-motor centre—the convulsions being the symptom, the inflammatory action the disease; and that the cause of this inflammation most frequently, but not invariably, also suffices to produce a renal hyperæmia.

Second. Where no albuminuria is present, the case is explained by the existence of the vaso-motor center-itis alone.

Third. That the convulsions are neither hysterical, epileptic, apoplectic nor anæmic, but entirely sui generis; and that temperature forms an important factor in their diagnosis.

Fourth. That the treatment from which the most successful results have, as yet, been obtained, and on which I would rely, is—

(Operative) *Accouchement aidé*, counter-irritation to neck and loins, and bleeding which might be had recourse to in "sthénic" cases with full pulse, but I would not abstract (122 ounces) one hundred and twenty-two ounces of blood in seventeen hours, as Lever tells us he did from "a large muscular Irish woman."

(Medicinal) Nitro-glycerine, chloral hydrate, morphia, aconite, and veratrum viride are the agents which have been shown to be the most efficacious, either as supplemental to the operative treatment above mentioned, or otherwise.

The general lesson conveyed by the series of cases which I have presented, that the mechanical albuminuria of gestation is a curable affection at little risk when properly treated; that hysteria and epilepsy stand in similar positions to those

diseases in the non-pregnant condition; but that puerperal eclampsia, or the convulsions of reproduction, is a disease, provisionally so named, of the most formidable nature and difficulty of treatment—the pathology and treatment of which cannot yet be said to stand on an altogether satisfactory and rational footing—the logical “sufficient reason” not yet being found—and will not, in my opinion, be so, until (if ever) the mysterious movements of nerve molecules and atoms be, to some wondering observer, revealed. Regarding it, however, from the nearer and coarser point of view, as an inflammation of a part of the central nervous system, we shall, I believe, become more and more able to rescue its victims from its terrible grasp.—Dr. A. D. Macdonald, in *Lond. Med. Press*.

**REMOVAL OF RENAL CALCULI BY TOXIC DOSES OF BELLADONNA.**—In the *Providence Med. Journal*, Dr. Murray states that, in his experience, belladonna is more beneficial than opium in relieving the pain of renal colic. In cases of renal colic, moreover, the author contends that if the drug is pushed sufficiently long, and in large enough doses, the entire removal of the calculus—first from the pelvis of the kidney to the bladder, and then from the bladder *per urethram*—often follows. Some cases are quoted illustrating this assertion. One patient had suffered for several months from repeated attacks of renal colic, during the last of which he was seen by the author, who gave belladonna until its physiological action on the eye and throat was evident, and then it was pushed further, so that in a few hours a lithic acid calculus was passed as large as an almond. In another case a youth suffered so severely from renal pain that it was decided to operate, but, before consenting, the parents consulted Dr. Murray; he ordered twenty drops of tincture of belladonna every hour, and at the end of five hours a round, rough calculus was passed. The special point to be remembered in these cases is to push the drug to its toxic stage, and keep up its action after the pain has been relieved, until a fair time has been allowed for the expulsion of the stone. You may begin with forty minims of the tincture, and repeat it every two hours, increasing or diminishing the dose according to its effect on the pain.—*Lond. Med. Rec.*

**CODEINE IN OVARIAN PAIN.**—Dr. Freund, of Strasburg, has recently used codeine in a large number of cases of abdominal pain from various causes, with the view of testing the assertions of Dr. Brunton, that the drug is of especial use in intestinal or pelvic pain. His results seem to indicate that Brunton's views are somewhat exaggerated. Pain from acute uterine affections, such as dysmenorrhœa, Freund found, was not as

quickly relieved with codeine as with morphine, and the relief was of shorter duration. In pain from pelvic exudates and tubal disease, the drug was also of little value. In ovarian pain, however, whether from prolapse, oöphoritis, perioöphoritis, or neuralgia, the relief afforded by codeine was prompt, unmistakable, and more or less permanent even when small doses were given. The amount usually administered was about half a grain three times daily in pill form, and in but few cases was it necessary to increase this quantity. His experience coincides with Brunton's, that no disagreeable or harmful effects follow the use of the drug. It does not stupefy, diminish the appetite, nor constipate. He prescribes the pill for one month after an attack of ovarian pain, and warmly recommends the drug for the above conditions.—*Therapeutische Monatshefte*.

**ENTERITIS AND ENTERO-COLITIS.**—Catarrh of the stomach and catarrh of the bowels, acute and chronic, constitute the principal factors in infantile mortality during the summer months.

The successful therapeutics of enteritis includes, first, saline purgatives, preferably Rochelle salts given freely, next oleaginous purges. Whenever purges are omitted as an initial treatment in enteritis, a very bad start has been made, which will necessitate a return to it later with less positive advantages.

R—Sulph. magnesia, . . . . . ʒ ss.  
 Inf. rosarum co. U.S.P., . . . . . ʒ iv.  
 Tr. opii., . . . . . ℥ viij.—M.

Ft. Sig.—Take a teaspoonful every two hours. For an infant of one or two years.

If further treatment be necessary, the following is successful in the largest number of cases:

R—Acid nitrosi, . . . . . ʒ ss.  
 Tr. opii., . . . . . ℥ xx.  
 Syr. zingiberis, . . . . . ʒ j.  
 Aquæ camph., . . . . . ʒ iij.—M.

Ft. Sig.—Teaspoonful every two hours.

As soon as the disease assumes the chronic form without fever, which it will not do if treated as above, nitrate of silver as follows is invariably the best treatment:

R—Argent. nitratis, . . . . . gr. ij.  
 Tr. opii camph., . . . . . ʒ ij.  
 Syr. acaciæ, . . . . . ʒ j.  
 Aquæ camph., . . . . . ʒ ij.—M.  
 (black bottle)

Ft. Sig.—Teaspoonful every two hours.

For attacks accompanied by gastric symptoms, properly called gastro-enteritis, with the characteristic mal-odorous stools, carbolic acid with chlorate of potassium in distilled water is a wonderfully good prescription, also salol in two to five grain doses; beta-naphthol and small and fre-

quently repeated doses of calomel, or a solution of bi-chloride of mercury in very small doses, from  $\frac{1}{4}$  to  $\frac{1}{10}$  grain, also very dilute solution of the biniodide in solution, the latter often acts like a charm in  $\frac{1}{8}$  grain dose.—*N. E. Med. Mo.*

**ALBUMINURIA.**—For a number of years I have been accustomed to prescribe the following mixture as a routine practice in albuminuria :

R.—Potass. acetatis . . . . . ʒj.  
 Chloroformi . . . . . ʒss.  
 Acid. benzoic . . . . . ʒss.  
 Aquæ . . . . . q. s. ad ʒ viij.

M.—S. f ʒss every four hours.

This combination has proved available, but sometimes fails; and in that case I have not found it easy to find a better. Quite recently I was attending a four-year-old boy, with albuminuria which appeared without any discernible cause. At intervals the anasarca became extreme; the whole body being swollen to the utmost extent, with the concomitant discomfort and suffering. Then the swelling would gradually subside, and the child become comparatively comfortable, though the albumen never entirely disappeared. When, at the height of a new attack of anasarca, the prescription given above failed to give any tangible benefit, I then substituted the following :

R.—Potass. acetatis . . . . . ʒij.  
 Acid. benzoic . . . . . gr. xx.  
 Sacch. lactis . . . . . ʒiv.  
 Aquæ . . . . . q. s. ad ʒiij.

M.—S. f ʒi every two hours.

The result was that within two days the dropsy almost completely vanished, leaving the child in excellent condition, and free from all traces of albumen in his urine. This did not prove permanent; but in view of the difficulty of securing relief, the rapid and decided action of the lactose deserves attention.—*Waugh, Times and Reg.*

**NEW VARIETY OF BALANITIS.**—M. Cordier calls attention to a fact which has long been known that when tincture of iodine, or iodine ointment, is applied to a surface which has previously been rubbed with mercurial ointment, a severe irritation is set up; this is so severe as to produce vesication at times, and the effects will be observed even if the mercurial inunction has been made some days previously. This explains, partially, the origin of the new variety of balanitis, to which he calls attention in the *Lyon Medical*. It is observed in individuals who are taking iodide of potassium and who make applications of calomel to the glans and prepuce. A severe balanitis generally results. It is very probable that vulvitis, in women, is also often provoked by the same means, so that whenever external applications to the genitalia of men or women are about to be ordered, care should be

taken to ascertain whether they are taking iodide of potassium or not. If the former is the case, calomel should be avoided as a dressing. M. Cordier claims that the circumstances alluded to above are a much more frequent cause of balanitis than is generally supposed.

**LASSAR'S CURE FOR BALDNESS.**—Baldness, so important a subject to every one affected, has thus far been provokingly obstinate to treatment and we accordingly recommend a trial of the plan of treatment strongly advocated by Dr. Lassar :

1. The scalp must be well lathered with a very strong tar soap for ten minutes.
2. The lather is removed, first with luke-warm, followed with colder, water in abundance; after which the scalp is thoroughly dried.
3. The scalp is then rubbed with the following solution :

R.—Hydrarg. bichlor. corr. . . . . 1 part.  
 Glycerin . . . . . 200 parts.  
 Spirit. or cologne . . . . . āā 300 "

M.—Sig. Ext.

4. The scalp is rubbed dry with a solution of ;  
 R.—Beta naphthol . . . . . 0.5  
 Absol. alcohol . . . . . 100.00

Mix.

5. After this, the scalp is thoroughly anointed with a liberal application of the following preparation :

R.—Acidi salicylici . . . . . 2.00  
 Tr. benzoin . . . . . 3.00  
 Neat's-foot oil . . . . . 100.00

Mix.

This procedure must be kept up for six to eight weeks, and be repeated every day.—*Times and Reg.*

**THE INFLUENCE OF COLD IN PNEUMONIC INFECTION.**—Dr. G. Lipari of Palermo in his recent experiments on the infectious nature of fibrinous pneumonia, essentially confirms what is known of Fraenkel's pneumonococcus, and has also succeeded in proving the influence of cold as a factor in the origin of fibrinous pneumonia. The endo-tracheal injection of pneumonic sputa or pleuritic exudation of animals which had died from pneumonococci gave a negative result, but when the author, before or after the endo tracheal injection, exposed the animals to cold, the result was very different. Of eight animals so treated six died with clearly established pneumonic infiltration. The author supposes that the cold paralyses the ciliated epithelium of the bronchi, and at the same time causes their mucous membrane to swell, both of which pathological processes favour the descent of the infectious material into the alveoli. These experiments were doubtless undertaken with a view to harmonise the old and



new teaching upon the origin of this prevalent disease.—*Lancet*.

**TREATMENT OF INTESTINAL OCCLUSION.**—Dr. Kollman mentions in the *Münchener Medicinische Wochenschrift* a case of occlusion of the small intestine in an old woman, who, after opiates and morphia injections had been unsuccessfully given in order to arrest the violent vomiting, showed signs of such extreme weakness that operative measures were out of the question. He therefore determined to act on the lower part of the bowel by means of glycerine injections, while keeping the upper part of the intestinal tract quiet by the administration of ice and by ice-cold applications over the stomach. In this way the peristaltic action of the gut below the spot where the obstruction existed was stimulated while the part above this was kept at rest. The result was satisfactory, for on the second day a motion was passed and the patient recovered.—*Lancet*.

**HERPES ZOSTER.**—The first case was a young man with an eruption on his neck. In herpes zoster there is a change along the neurilemma of the nerves, and it is from this nerve trouble that it arises. The lesions are vesicles grouped around each other in patches along the course of one or a group of nerves; these vesicles dry up, leave a crust and a peculiar stain on the skin. Before the eruption appears there is severe pain, and to relieve this give at one dose hypodermatically:

R.—Morphinæ sulph. . . . . gr.  $\frac{1}{4}$   
Atropinæ sulph. . . . . gr.  $\frac{1}{80}$ .—M.

Galvanism along the course of the nerves is often efficacious. This is a case of herpes zoster cervicis. Locally he was directed to use:

R.—Plumbi carbonatis, . . . . .  $\bar{3}$  ij.  
Camphoræ, . . . . . gr. v.  
Acidi carbolic, . . . . . gr. ij.  
Ung. zinci benzoati, . . . . .  $\bar{3}$  j.

Misce, fiat unguentum, et sig.: use locally as a soothing agent.

R.—Ferri pyrophosphatis, . . . . . gr. xl.  
Acidi arseniosi, . . . . . gr. j.  
Extracti ignatiæ, . . . . . gr. ij.  
Extracti belladonnæ, . . . . . gr. ij.

Misce, fiat pilula no. xx., et sig.: take one pill three times a day.

—Shoemaker, in *Times and Reg.*

**BORIC ACID AND ALCOHOL FOR ACNE.**—Dr. Sarah E. Post (*Med. News*): The face is bathed at night in hot water containing a few drops of ammonia; no soap is used; it is then rinsed in cold water and dried. The solution is then applied, being sopped on with the corner of the handkerchief, or soft, clean rag. In the morning the solution is again applied without washing the face,

and several times during the day if the skin becomes moist. In very bad cases apply a little ether and remove the comedones with the extractor at the time of the visit. Within a week great improvement may be obtained. The solution consists of half an ounce of boric acid in eight ounces of alcohol, to which a little perfume may be added, if desired. Unlike most applications to the skin, this forms an elegant toilet preparation.—*Weekly Med. Rev.*

**IODINE IN VOMITING.**—Dr. Frederick Taylor, in a letter apropos of the use of iodine to check vomiting, says he has often found it of the greatest service in the vomiting of Bright's disease, in cerebral vomiting, in the vomiting of migrainé and after chloroform and in gastric disease. The value of iodine in this respect was pointed out as far back as 1883, by Dr. Gaunt, of New York, and it was the perusal of this article that induced Dr. Taylor to give it a trial. There are of course, cases in which it does not succeed, but it may nevertheless prove a valuable addition to our means of treating cases of this kind. The dose is from three to five minims of the compound tincture of iodine given at intervals of fifteen minutes.—*Med. Press and Cir.*

**MENORRHAGIA.**—

R.—Fl. ext. ergot, . . . . .  $\bar{3}$  ss.  
Tr. catechu, . . . . .  $\bar{3}$  iss.—M.

Sig.—Teaspoonful in sweetened water every one to three hours, as needful.

If undue irritability exist, causing uterine pain and febrile action:

R.—Pulv. opii, . . . . . gr. v.  
Plumbi. acet., . . . . . gr. xx.—M.

Ft. ch. No. x. Sig.—One to be given every second to fourth hour with preceding.

After a long experience with catechu, I place more dependence upon it in these uterine flows than any other astringent.—Dr. Purviance, in *Med. Summary*.

A NEW expansion trocar has recently been invented by R. E. J. Durdin, L. K. Q. C. P. I. &c., which we think will serve a useful purpose in many cases. It is illustrated by a drawing in the *Lancet*, London, Eng., and described as follows: It is sharp-pointed like a trocar, with an opening near the point. The body of the instrument is hollow, and is introduced into a swelling with the blades closed. Should there be fluid or pus there, it will enter the opening near the point, run down the hollow portion of the instrument, and come out at the opening near the hinge. In this way an abscess may be tapped or any fluid removed. If an extra opening is required, the blades may be divaricated, and thus cutting and loss of blood avoided.

# THE CANADA LANCET.

**A Monthly Journal of Medical and Surgical Science  
Criticism and News.**

*Communications solicited on all Medical and Scientific subjects, and also Reports of Cases occurring in practice.*  
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TORONTO, APRIL, 1890.

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*The LANCET has the largest circulation of any  
Medical Journal in Canada.*

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## MEDICAL EDUCATION IN ONTARIO.

We give below a few extracts from letters received on the subject of Medical Education. The writers give their views with all clearness. The first extract is from one of the best known and most intelligent medical men in the eastern part of Ontario: "I think the position is the right one, that all Medical Colleges in Ontario should be treated exactly alike as regards giving them financial aid of any sort or kind—whether in the way of erecting buildings for medical classes, or of supplying these buildings with such scientific apparatus as may be needed. And also that Government should be scrupulously careful not to give any color to the complaint, that any one of these more than another has an undue share of Government help or favor bestowed on it. This position will be taken by every one, except those personally interested in Toronto University Medical School. So long as the Royal College at Kingston, Trinity Medical College in Toronto, and the London Medical College are doing the very same work, and doing it just as well as the University School, it seems absurd, unjust, and altogether unjustifiable that the Government should allow any of the public funds of the Province, either openly, or in a roundabout way, to be used to aid *Medical* teaching in that Institution. Every Medical School doing the same work should be on precisely the same footing with regard to the Government. Neither the Toronto Univer-

sity Medical College, nor any other similar institution should receive any advantage from the Government, which is not granted to every other Medical School. After all, the 'Toronto University Medical Faculty' is only the old 'Toronto School of Medicine' under another name. Holding these views very strongly indeed, does not prevent me from expressing my very deep grief at the loss sustained by the Arts and Science Departments of the University by the late fire, and my satisfaction that the Legislature has given a good sum to help in rebuilding. But as it has been long proved by the flourishing condition of all our Ontario Medical Schools, and by the high stand their students take at examinations at home and abroad, that in Ontario, Medical Schools can abundantly well be self-supporting. I do hope the Legislature will see that not one dollar of the money it has voted is applied to medical teaching uses."

The next extract is from a medical man in central Ontario, who has evidently been studying the subject he writes about:—

"When I visited Toronto, at the formal opening of the Biological Department of the University, to which the most of Ontario's doctors were invited, I thought that Government was rather lavish in permitting so large an outlay of public money for a building largely under the control of the teachers of a single Medical College. As a graduate of one of the other Colleges, I know that such financial favors are not distributed, but that my institution had had to pay for its own laboratories and scientific instruments, and I was so impressed with the one-sided nature of what I saw that I mentioned the subject to more than one of my friends in Toronto, and at home on my return. I was told by some of the University men in Toronto, that the building belonged entirely to the Arts Department, and that therefore any cost incurred in its erection and furnishing was all right and proper. But appearances were all against this being true.

"When I got home I took the trouble to look over the University Medical Calendar and saw a cut of the building there. On page 17 I read this: 'The lectures and demonstrations in Biology, Physiology, Chemistry, Physics, Pathology, and Bacteriology will be given in the lecture rooms and laboratories of the new building of the Biological Department, and the School of Practical

Science.' And on page 25 I found under the names of the teachers in the Department of Biology and Physiology: 'The teaching in this Department will follow closely the requirements of the College of Physicians and Surgeons, and will, in addition, comply with the regulations of the University of Toronto.'

"When I read these it was plain to me that the new building costing many thousands of dollars of public money, was used in large measure, and was also fitted up so as to be used, for the teaching of a large number of medical subjects, and I could not help thinking it singular that all this should be done by Government for one Medical Faculty, while nothing at all was being done for any other, although all the others are just as deserving, and are turning out just as well-taught students; and I at once wrote to the local member for my county and pointed out to him the great injustice."

We might give more extracts from other letters before us, but these show the feeling that exists throughout the country under the policy adopted, let us hope unwittingly, by the Ontario Government, in its recent action in connection with medical education. Had public laboratories been erected and furnished by the Government, and the Assembly thought them necessary, and had they been placed under the control of teachers entirely unconnected with any teaching Medical College, so that they would have been truly provincial and open to all the medical students of the Province on equal terms, no objection could have been offered; but to erect and furnish these, and place them under the control of one of the Medical Colleges which the University had adopted as its Medical Faculty, is a flagrant wrong, not to be endured by the profession or the public of Ontario.

This sort of monopoly has been tried before, and it came to grief, and we are inclined to think as certainly as anything can be, the same result will happen again.

The Toronto correspondent of the *Montreal Witness* under date March 15th, referring to this matter, writes as follows:—"Another matter that came in for a good deal of ventilation was the relation of the University to Professional Schools. The so-called Biology Building was erected mainly for Arts purposes, but also for the purpose of enabling medical students to take advantage of

the arts lectures in biology and chemistry. In view of this fact it is misleading to say that the University has not spent a dollar in promoting professional education. A less elaborate provision for teaching biology would have sufficed for the ordinary Arts Course, and some much needed improvements might then have been made in other departments. One of the two schools of medicine formerly existing in Toronto surrendered its corporate existence to become the Medical Faculty of the University, while the other continues to flourish as an independent institution. The situation is thus complicated, for anything like unfair treatment by the University of the independent school should cause an appeal to be made to the Legislature."

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#### A SUBSTITUTE FOR PREMATURE DELIVERY.

There are few general practitioners who have not found it necessary to bring in premature labor in cases of moderately narrowed pelvis. The idea of never being able to bear a living child is one that weighs heavily upon the unhappy subject of such malformation as will prevent the proper fruition of the marriage contract. The stigma attached to such incompetency is felt keenly by all right minded women, and the attending physician is oftentimes worried by both wife and husband to bring on premature labor, and yet try to so gauge the time that a viable child may be born to them. This is a proceeding which, though often necessary, can never be undertaken without some hesitancy on the part of the attendant. Cæsarian section is as yet, notwithstanding the freedom displayed by laparotomists in exploring the abdomen, too dangerous a procedure to tempt either parent or surgeon to permit gestation to go on to full term, knowing that a living child cannot be born by the natural outlet. We have noticed from time to time methods pursued, in the feeding of parturient women with the avowed object of rendering the bony structures of the child more yielding, so that the head would be more easily moulded and expelled. Not much attention has been paid to such measures in this country, and indeed to the ordinary medical mind the idea seems rather far fetched, and not exactly scientific.

Lately, however, some attention has been paid to this subject in Germany. T. Prochownik, of Hamburg, has been working in this line and now lays down (*Deutsch. Med. Zeit.*) a dietary for such cases. His idea is that the child should be as free as possible from adipose tissue, yet still strong and well developed. By this method he has been able to bring to a successful termination, at full term, three pregnancies, although the pelvis was in each case very narrow. The children were strong and fully matured, but of very light weight. We regret that the actual measurements of the pelvis spoken of are not given. It seems certain, however, that ordinary children could not have been born in either of the three cases

The diet which was carried out for about six weeks preceding the time of the expected confinement, was as follows: Breakfast—a small cup of coffee, with a one ounce roll: Dinner—any kind of meat, eggs, fish with but little sauce, a little "greens," cheese: Supper—about the same list as for dinner, with the addition of one and one-half to two ounces of bread, with butter as desired.

The following are forbidden: Water, soup, potatoes, starchy foods, sugar and beer. For drink the patient is allowed from ten to fourteen ounces of red or moselle wine daily. In this manner, which demands only a little strength of will on the part of the mother, the author hopes to attain mature, healthy children, possessing some stock of resistance, in cases where the induction of premature labor would be otherwise unavoidable. Besides the general lack of adipose tissue in the three children mentioned, it was found that the cranial bones were more easily compressible beneath the thin and wrinkled scalp, and on this account the progress of the labor was rendered more favorable both for mother and child. After birth the emaciated appearance of the children was rapidly dissipated by the formation of the normal layer of fat.

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#### ADVERTISEMENTS IN MEDICAL JOURNALS.

How often do we hear of this or that Medical Journal, "It is mostly made up of advertisements." In a vast majority of cases such remarks are not only entirely uncalled for, but absolutely unjust. Does the individual who makes the re-

mark ever notice that, let the "ads" be few or many, the number of pages of reading matter are just the same? and that he has nothing to complain of except the increased bulk of his journal, owing to the additional pages of advertising matter? There are certain things that one always thinks he can do better than any one else, mending the fire is one, bringing up children is another, and running a newspaper is another. It is a remarkable fact, however, that a man's confidence in his ability to do these things superhumanly well, usually diminishes, in direct proportion to the experience he has of them. Men who have children, and men who have had experience in conducting journals, know more and say less about how these things should be done, than bachelors and critics of other people's work in journalism are wont to do. It would be wise for some of the chronic grumblers to glance at the advertising pages of, say the London *Lancet*. Do they imagine for a moment that the vast amount of matter found there is allowed to trench upon the regular reading matter of the journal? These remarks may seem foolish to some of our readers, and yet we have heard medical men, honestly complain of the amount of such advertising matter, although the same number of pages of reading matter were therein, in their hands at the moment, as had always appeared in that journal. The patrons of a medical journal do not always consider where the means to pay the necessary running expenses are to come from. If there were no "ads" then current medical literature would cost them nearly twice as much as it does under the present system, and judging from experience, that would not be complacently borne. It may be accepted, almost as a maxim that the popularity and value of a journal may be gauged by the quality and quantity of its advertisements. No class of men are more alive to the necessity of doing business with a responsible and scientific journal, than are advertisers of medical and surgical goods. They even place the professional status of a journal, above its circulation, in deciding as to its value as an advertising medium.

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SALIX NIGRA AS A SEXUAL SEDATIVE.—The fluid extract of salix nigra in doses of from half a drachm to a drachm three times a day, is said to be an efficient sexual sedative.

## MEDICAL EXAMINATIONS.

WOMEN'S MEDICAL COLLEGE, TORONTO.—Miss S. P. Boyle, Toronto, first-class honors and first prize.

Miss A. Gifford, Meaford, third year prize in therapeutics.

*Second Year*—Miss G. R. Gray and Miss J. Gray, Toronto, second-class honors.

*First Year*—Miss M. E. Macdonald, Stratford; Miss E. J. Ryan, Trafalgar, first-class honors; Miss N. Rodger, Belwood, second-class honors; Miss M. A. Fleming, Toronto; Miss J. Hill, Bondhead; Miss E. G. Lennox, Toronto, third-class honors.

WESTERN UNIVERSITY LONDON.—*First Year*.—W. S. McDonald, J. J. Wilson, G. R. Pogue, P. B. Wood, H. Sanderson, with honors. J. W. Nixon, J. McIntosh, F. Guillemont, F. Hoag, B. Lees, passed.

*Second Year*.—H. F. McDonald, T. J. Gowan, W. H. McEwen, T. J. McBlain, R. W. Shaw, with honors. J. Parker, O. H. Patrick, J. MacGregor, G. H. Cook, R. M. Gubbins, J. Halliday, W. T. Banting, passed.

*Third year*—J. B. Kennedy, R. Ferguson, D. G. McNeil, T. P. McLaughlin, F. McCrimmon, with honours. M. Sharp, J. W. Leininger, W. O. Murray, L. N. Arpiel, H. Wilson, passed.

*Fourth year*—A. N. Hayes, E. M. Copeland, A. T. Hobbs, D. K. Stenten, D. Smith, E. Macklin, G. Gibson, R. Ferguson, with honours. J. A. McEwen, F. Gust, J. H. Shoebottom, S. E. Hooper, W. Baker, passed.

The first year scholarship was won by W. S. McDonald, second year, H. F. McDonald; third year (one year's residence in the hospital), J. P. Kennedy.

*Silver medal*, fourth year, E. M. Copeland; gold medal, A. N. Hayes.

PHARMACEUTICAL INCOMPATIBLES.—The following useful table of incompatibles is given, (*Med. Phar.*):

*Acacia*—Incompatible with alcohol, alcoholic and ethereal tinctures; \* borax; iron chloride; lead salts.

*Acids, in General*.—Incompatible with alkalies, alkaline solutions; metallic oxides.

*Acid, arsenious*.—Incompatible with iron oxide; magnesia; lime water.

*Acid, salicylic*.—Incompatible with iron compounds; potassium iodide; \* lime water.

*Acid, tannic*.—Incompatible with alkalies, carbonates and bicarbonates; lime water; chlorine water; albumen; gelatin.

*Bismuth, subnitrate*.—Incompatible with calomel; sulphur; tannin; soda bicarb.

*Chloral hydrate*.—Incompatible with alkalies, carbonates, \* ammonium and mercury compounds; potassium, bromide and alcohol.

*Iodine*.—Incompatible with ammonia; \* alkalies, carbonates; chloral; metallic salts; starch.\*

*Lead, acetate*.—Incompatible with acacia; acid hydrochloric; acid sulphuric and sulphates; ammon. chloride; carbonates; lime water; iodine; potassium iodide; tannin.

*Mercury, bichloride*.—Incompatible with potassium iodide; \* salts, carbonates; tannin.

*Mercury, mild chloride (calomel)*.—Incompatible with acids, acid salts; alkalies, carbonates; ammon. chloride; iodine; potassium iodide; iron chloride; iodide; sulphur.

*Potassium, iodide*.—Incompatible with acids, acid salts; alkaloids; iron; lead and mercury salts; potassium chlorate; silver nitrate; chlorine water.

*Potassium permanganate*.—Incompatible with ammonia salts; alcohol; glycerin; ethereal oils; organic substances.

*Sodium, bicarbonate*.—Incompatible with acids, acid salts; acid tannic; alkaloids; metallic salts.

*Sodium, bromide*.—Incompatible with acids, mineral; chlorine water; mercury compounds.

*Silver, nitrate*.—Incompatible with acids, acetic, hydrochloric, hydrocyanic, sulphuric, tartaric, and their salts; alkalies, carbonates; iodine; potassium iodide, bromide; sulphur; cocaine.

\*Sometimes directed to be compounded.

CAUSES OF EXTRA-UTERINE PREGNANCY—Dr. Zinke in the *Am. Jour. of Obstetrics* gives the causes of extra-uterine pregnancy as follows:

1. *Terror and shock* coinciding with time of fecundation.
2. *Blows* upon the abdomen a short time after fruitful coition. Both of these are looked upon as doubtful, since it will never be proved whether or not they can produce a dislocation of the ovum.
3. *Malformation of the tube*; *paralysis* or spasm of the same; *defective or excessive length* of the tube; *engorgement, swelling and ulceration* of its mucous membrane; *hardening and retraction* of the fimbriated extremity, as well as obliteration of the tube within the uterus; all are quoted by Tarnier as observed by himself, Smellie, De Ferre, Mayor, Schmidt, Menier, and Gaide.
4. *False passages leading to Fallopian*

*tube or ovary.*—Tarnier cites the experiments of Gartner, of Copenhagen, who discovered a number of canals leading to the oviduct, in the hog, cow, etc., which offered passages to the spermatozoa. Dr. Blainville, who searched for these canals in women, found none. But Tarnier thinks it probable, from analogy, especially on account of the cases reported by M. Baudelocque, 1826, Dulaurens, De Graaf, and Mme. Boivin. All of these authors claim to have observed division and bifurcation of the Fallopian tube within the uterine wall, a drawing of which may be found in the American edition of Cazeaux and Tarnier, 1836. The same author refers also to M. S. Richards' anomalous case of supernumerary pavilions. 5. *Inflammatory processes* within the pelvic cavity, and *pressure* upon the tube created by swelling or morbid growths, may so obstruct the lumen of the tube as to make the passage of the ovum impossible after a certain time. 6. *Desquamative salpingitis* (Virchow and Tait) is an exceedingly ingenious as well as plausible theory, and may not be an infrequent cause of the arrest of the ovum.

TENTH INTERNATIONAL MEDICAL CONGRESS, BERLIN, 1890.—In connection with the Tenth International Medical Congress, to be held in Berlin, August 4th to 9th, 1890, there will be an International Medico-Scientific Exhibition.

The undersigned Committee of Organization has been authorized, by the representatives of the medical Faculties and leading medical Societies of the German Empire, to make the preliminary arrangements. We therefore cordially invite all who may wish to exhibit or participate in the above Exhibition. All exhibits, however, to be of a scientific nature.

The exhibits expected will be as follows:—1. New or improved Scientific Instruments for Biological and Special Medical Purposes, including apparatus for Photography and Spectral Analysis pertaining to medicine. 2. New Pharmacological Chemical Substances and Preparations. 3. New Pharmaceutical Substances and Preparations. 4. New Food Preparations. 5. New or improved Instruments for internal and external medicine, and allied specialties, including Electrotherapy. 6. Plans and Models (new) of Hospitals; Houses for convalescents, disinfection, and general Bath-houses. 7. New Appliances, such as pertain to

nursing the sick, including the methods of transportation, and baths for the sick. 8. Apparatus (new) for Hygienic Purposes.

For applications for exhibits, and information, please address Dr. O. Lassar, Secretary-General, Bureau of the Tenth International Medical Congress, Berlin, N. W. Carlstrasse, No. 19.

Please designate all mail matter relating to the Exhibition, "Exhibition Affairs," and also enclose a visiting card or card of the firm, on which the name and residence is plainly written or printed. The Bureau is open for the present from 5 to 7 o'clock p.m.

Dr. Rudolf Virchow, President; Dr. E. von Bergmann, Dr. E. Leyden, Dr. W. Waldeyer, Vice Presidents; Dr. O. Lassar, Secretary-General.

A SEDATIVE AND EXPECTORANT MIXTURE.—J. B. Johnson, M.D., in *The Southern Clinic*, says, I have found it a fact in my experience that no class of medicines is so suitable for the treatment of the inflammatory affections of the mucous membrane of the air passages, as alkalies. They not only relieve inflammatory action of the mucous membrane, but render its secretions more liquid, and, therefore, more easily expectorated. I always rely for success in the treatment of inflammation of the air passages upon alkalies, whether the case be one of pneumonia, acute bronchitis, or influenza. I find the following prescription to suit me better than any other combination.

R—Pulv. muriate of ammonia . . .  
 Iodide of potassium . . . . .  
 Pulv. chlorate of potassium . . . aa ʒj  
 Tinct. digitalis . . . . . ʒij  
 Tinct. squill . . . . . ʒiij  
 Simple syrup . . . . . ʒij  
 Aqua destil . . . . . ʒiv

M.S.—Shake well. Dose, a tablespoonful every two hours.

Should the cough be very troublesome and the inflammation not very great, two or three drops of the fluid extract of opium may be added to each dose. In the treatment of inflammation of the air passages, I rarely omit to apply daily ten or fifteen dry cups to the back over the lungs. This expedient I find to be of great avail in all such cases. Under proper conditions the free and rapid administration of alkalies has never disappointed me in overcoming that hyperinosis which always

presents itself in a maximum amount in pneumonia.

**THE REFLEXES IN DIAGNOSIS.**—If a student, or a junior practitioner who has not forgotten his physiological lore, says *The Hosp. Gaz.*, were asked what would be the effect upon the patellar reflex of severing the spinal cord high up, he would unhesitatingly reply that, according to Kirke, it would be exaggerated. In fact, the idea of the jerk which would result from tickling the sole of a man whose spinal cord had been crushed, has been firmly grafted on one's mind. Well, it seems that after all it is nothing of the kind. According to Dr. Bastian, exaggerated reflexes negate the assumption of a total transverse lesion of the cord, the effect of which he has peremptorily established to be the abolition of the deep reflexes. In this view he was ably seconded by Dr. Hughlings Jackson and Mr. Bowlby, both of whom had facts to adduce in support of the views advocated by him. This is not merely a recondite point in physiology but is possessed of a highly practical bearing in the diagnosis of, and prognosis in, cases of injury to, or disease of, the spinal cord; hitherto exaggerated reflexes have been taken to indicate total cessation of communication between the lumbar reflexes and the brain, now they will have to be interpreted to mean just the opposite. In all cases of total severance of the cord, verified by *post mortem* examination, the reflexes have been persistently abolished, and in no case of exaggerated reflexes has the lesion been demonstrated to be totally transverse. The deduction was an erroneous inference from experiments on the lower animals, in which the relationship of the higher and lower centres is not the same as in man.

**COMMON SALT IN FACIAL NEURALGIA.**—Mr. George Hesler (*Ed. Med. Jour.*) says that a great many cases of facial neuralgia, as also neuralgia, headache, toothache, and earache may be cured by using powdered sodium chloride as a snuff, a pinch being taken into the nostrils of the affected side, or applied by means of an insufflator. On examination of cases which Mr. Leslie reports, three of facial neuralgia, three of nervous headache, one of neuralgia following herpes, one of neuralgia accompanying glossitis, cephalgia accompanying tonsillitis, and one of bronchial asthma, it would ap-

pear that chloride of sodium possesses wonderful properties for the relief of all pains in the head. We fancy many of our readers will take this statement *cum grand salis*, but the experiment is worth trying.

**EXALGINE.**—Fraser (*Brit. Med. Jour.*), in the following table, gives the results obtained from exalgine, administered with a view to its analgesic effect. This, he says, is not very powerful; but the drug has the enormous advantage of freedom from the disadvantages pertaining to most other remedies of this class.

	Number of Observations.	Number Successful.	Number Unsuccessful or Doubtful.
Facial neuralgia.....	8	8	—
Sciatica.....	10	9	1
Herpetic neuralgia.....	10	9	1
Neuralgia of arm, in hemiplegia.....	11	11	—
Locomotor ataxy, 1st case....	2	2	—
“ “ 2nd case....	1	1	—
Toothache, 1st case.....	2	2	—
“ 2nd case.....	2	2	—
“ 3rd case.....	2	2	—
“ 4th case.....	2	—	2
Cardiac angina.....	2	2	—
Pleuritic pain, 1st case.....	1	—	1
“ “ 2nd case.....	4	4	—
Rheumatic synovitis.....	4	4	—
Blenorrhagic rheumatism....	2	1	1
Gastric pain, cancer.....	2	3	—
“ “ catarrh and cicatrized ulcer..	4	2	2
Cancer in abdomen.....	10	6	4
Carcinoma of liver.....	2	—	2
Aneurysm of aorta.....	4	—	4
Lumbar abscess.....	3	—	3
	88	67	21

**PARASITICIDE OINTMENT.**—The following is recommended by *L'Union Med.*:

- Salicylate of mercury, . . . 16 grains.
- Vaseline, . . . . . 1 ounce.—M.

This makes not only an excellent ointment against the parasitic skin diseases, but against eczema, pityriasis, and syphilitic vegetations.

**INFANTILE MORTALITY.**—In a paper on the “Causation and Restriction of Infantile Mortality,” Dr. Vaughn (*Jour. Am. Med. Assoc.*) states that: 1. One-fourth of the children born in the United States die before they reach the end of the fifth year of life. 2. Derangements of digestion cause more than 50 per cent. of these deaths. This class of diseases may be restricted by proper attention to the food. 3. Infectious diseases are

serious in their effects upon infantile mortality. They may be restricted by isolating the sick and disinfecting clothing and rooms. 4. About three-eighths of the total deaths from pneumonia occur among those under five years of age. Proper clothing and lessened exposure to extremes of temperature will do much to protect against this disease.

**OPEN ABDOMINAL WOUNDS.**—A singular plan of treating open abdominal wounds has been described by Dr. R. E. Hadra. The treatment is employed in severe septic peritonitis.

He makes an incision about twelve or fourteen inches long in the median line of the abdomen. The bowels protrude and are carefully held to one side of the wound while the clean hands of the operator are passed into the cavity and the adherent intestines loosened. The patient is then turned on his side and the bowels thoroughly flushed, sponged dry and returned. A strip of gutta-percha tissue is fastened to the skin and folded over the intestines, iodoform plugs are introduced deep in the cavity before it is closed with the gutta percha. Gauze and absorbent cotton are then applied in the usual way, a support of some kind is placed over the abdomen to keep clothes from pressing on the wound or bowels that protrude through the open wound. It is claimed that the distended bowels will gradually return to their normal calibre and then return slowly into the cavity of the peritoneum. When this is accomplished without pressure, the abdomen is closed in the usual way.

**THE TIME FOR SURGICAL INTERFERENCE IN ACUTE INTESTINAL OBSTRUCTION.**—In the paper on intestinal obstruction in this month's issue, Dr. Keene insists on the necessity for earlier surgical interference than has usually been practised, especially in country districts. Dr. Richardson, (*Br. Med. Jour.*), summarizes his views on this subject as follows :

1. In all cases the use of milder measures, such as purgatives, enemata and massage, may be safely carried out until the supervention of fæcal vomiting. 2. As soon as this is established an exploratory incision into the abdomen should be made without delay. 3. Obscurity of diagnosis in presence of this symptom ought not to stand in the

way of an operation. 4. Clinical experience has taught that there is very little chance of recovery when once stercoraceous vomiting has begun, unless an operation be performed. 5. Symptoms of collapse are not a contraindication to operative interference.

**NON-OPERATIVE TREATMENT OF ANAL FISTULA.**—Professor Grayon lately read a paper (Paris correspondent *Jour. Am. Med. Assoc.*) before the Société de Chirurgie on the non-operative treatment of anal fistula. The author advises that fistulæ which do not give rise to distressing symptoms ought not to be operated upon. The non-operative treatment consists in rendering the stools soft and regular, and in insisting upon scrupulous cleanliness. The constitutional treatment consists in the administration of iron associated with the bromides, and he recommends the following formula Potassii bromid, 10 grams; fer. ammon. cit., 50 centigrams; syrup-aurant. 100 grams. One tablespoonful to be taken twice a day. After each motion one of the following suppositories should be introduced into the rectum: Iodoform, 10 centigrams; ext. belladon., 2 centigrams; ol. theobrom., 180 centigrams.

**NEW TREATMENT OF URETHRAL STRICTURE.**—Dr. Gueterback, of Germany, recommends the introduction of a small bougie in cases of stricture. A filiform bougie may be used if a larger one cannot be easily introduced. The instrument should be small enough to allow the urine to escape at its sides, and should be retained in position for two days. It is claimed that at the end of two days the cicatricial tissue will be softened by means of the continued localized irritation. The treatment is not applicable to very close strictures, nor to strictures accompanied by purulent condition of the urine. The treatment is simple and easily accomplished, and may be good in selected cases.

**ONTARIO MEDICAL ELECTIONS.**—Of the representatives to the Ontario Medical Council the following gentlemen were elected by acclamation:—Dr. Bray, Chatham; Dr. Ruttan, Napanee; Dr. Orr, Maple; Dr. Day, Trenton; Dr. Williams, Ingersoll; Dr. Phillip, Brantford; Dr. Bergin, M.P., Cornwall, and Dr. Henry, Orangeville. In the other divisions, elections took place, resulting in the return of, Dr. Rogers, Arnprior; Dr. A. J.



Johnston, Toronto, and Dr. Russell, Hamilton. Dr. W. Britton, Toronto, was elected to represent Toronto University, and Dr. W. B. Geikie, Trinity Medical College. The returns for the other representatives are not to hand at the time of our going to press.

WE are pleased to note that Dr. C. W. Covernton has been unanimously elected an honorary member of the Society of Medical Officers of Health, England, "as a tribute to his past services in the cause of public health." This recognition of services ably and conscientiously performed during a long period of time, will, we are sure, be gratifying, not only to the numerous personal friends of Dr. Covernton, but to all the members of the profession in Canada to whom his name is as a household word, in all that pertains to sanitation.

BRITISH DIPLOMAS, L.R.C.P., LOND.—The following Canadians were admitted Licentiate of the Royal College of Physicians, of London, Jan. 30th, J. M. Cochrane, W. A. Dixon, R. H. Palmer, and I. A. Woodruff.

TO DETECT THE MORPHIA HABIT.—It is said that the addition of a few drops of tincture of the perchloride of iron to the patient's urine will cause a characteristic blue tinge to appear if he be a morphine user.

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### Books and Pamphlets.

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DISEASES OF WOMEN AND ABDOMINAL SURGERY. By Lawson Tait, F.R.C.S., Edin. and Eng.; Professor of Gynæcology in Queen's College, Birmingham.

The above work is in two volumes, 600 pages each, the first of which is to hand from the publishing house of Lea Bros. & Co., Philadelphia. This announcement will be hailed with pleasure by the many admirers of the author. He repeats what we prefaced to a small work on the same subject which appeared thirteen years ago, viz.: "Accurate or satisfying knowledge of the special diseases of women is so much in its infancy that any new effort to extend our acquaintance with these ailments deserves at least to be received with patience"; at the same time he sets out with the expectation of encountering free criticism. While

some of his conclusions will be questioned, the general tone of the work is consistent with candour, and a disposition to acknowledge imperfection, and the readers will admire the courage of the author's honest convictions. The general plan in each subject is to set out with the anatomy and physiological functions of the organs involved, and thence by gradual steps to reach the pathological changes and their remedies. A large number of cases are cited in support of the line of practice inculcated. The illustrations are numerous and well executed; the work is attractive in style, and no physician will regret having added it to his library.

THE STUDENT'S SURGERY—A *multum in parvo*. By Frederick James Gant, F.R.C.S., senior surgeon to the Royal Free Hospital; pp. 817. Philadelphia: Lea Bros. & Co. Toronto: Van-  
nevar & Co. 1890.

The author of this work for students, has succeeded admirably in his endeavor to present to the beginner his material in such a way that he may "acquire a sound matter-of-fact knowledge of injuries and surgical diseases, in their various forms, and of their diagnosis and treatment—including surgical operations; the knowledge of which, as divested of all theory, may be said to constitute positive surgery." The work is, of course, not as exhaustive as larger and more ambitious ones, but will prove a great boon to the student who may want to get the kernel without much husk. The author is concise and pointed in his style, and we heartily recommend the work to the student of surgery.

ESSENTIALS OF GYNECOLOGY, arranged in the form of questions and answers, for Students of Medicine. By Edwin B. Cragin, M.D., attending Gynæcologist at the Roosevelt Hospital, New York. With 58 illustrations. Philadelphia: W. B. Saunders. Toronto: Carveth & Co. 1890.

This little work will prove invaluable to the student. It will take the place of his note-book in preparing for examination, and will possess the advantage of being well-arranged and complete, which notes taken at lectures can never be. It gives all the important and latest points in condensed form. It is one of an excellent series of guides which should be in the hand of every student of medicine.