

DOMINION MEDICAL MONTHLY

AND ONTARIO MEDICAL JOURNAL

VOL. XV.

TORONTO, AUGUST, 1900.

No. 2.

Original Articles

No paper published, or to be published elsewhere as original, will be accepted in this department.

NOTES FROM CHICAGO CLINICS.*

BY A. F. MCKENZIE, M.D., MONKTON, ONT.

Having recently returned from a visit to Chicago, I thought that an account of some of the things which I there heard and saw would be of more interest to you than anything which I could bring forward from my own practice. Chicago now claims a population of two millions. It will be readily understood, therefore, that in this city there is a vast amount of material which may be used for clinical teaching. There are three institutions for post-graduate study. These are: The Policlinic, the Post-Graduate Medical School and the Chicago Clinical School. Each of these claims to have some special advantages, and I am not in a position to say that any one is superior to the others.

If any of you should decide to visit Chicago, probably your best plan would be to spend a day or two at each, and then choose the one which you consider best suited for your particular case. They all are open the year round, and classes may be joined at any time. I would advise, however, that your visit be so arranged as not to extend beyond the middle of May nor earlier than the first of October. The Policlinic gives each spring a special course lasting three weeks. It was with the purpose of taking this course that I went to Chicago. It was advertised as a special course in surgery, gynecology and skin diseases. It consisted of lectures, clinics, demonstra-

*Read at Huron Medical Association, at Stratford, July 10th, 1900.

tions, and quite a large number of operations. There was, moreover, a special laboratory course, and a course of operative work on the cadaver for those who wished to take these.

There were probably about seventy-five who took this course. Most of them from the Western and Southwestern States. There were two other Canadians besides myself. The large number of students made attendance at some of the operations rather uncomfortable, but to offset this there was the formation of a class spirit which reminded one somewhat of old student days, and helped to make the time pass pleasantly. A feature of this course, which I believe is quite a regular part of it, was the entertainment of the class at dinner by the members of the faculty. When the special course was over, I spent a little over two weeks longer in seeing what I could in the other teaching institutions and hospitals, making the Polyclinic, at the same time, my headquarters on the invitation of the business manager, Mr. Mills, who is an old resident of St. Mary's. I must confess that when I left home I was somewhat doubtful about the wisdom of travelling West in search of knowledge, but in looking back I am more than satisfied with the returns I got for the time and money spent. I think it would repay almost every general practitioner to occasionally spend a holiday in this way.

It is needless for me to speak of the clinical methods and operations which have been introduced since some of us graduated. Many of these operations and procedures, to read about them, appear very mysterious and wonderful, but when we have an opportunity to see them the mystery and strangeness largely disappears and we come home. Although we may not feel like trying to do all that we have seen done by others, we feel in a better position to advise our patients as to whether or not they should submit to these measures. Advanced age in itself should be no bar to the enjoyment of such a course. Some of the most interested members of this class were white-haired veterans, who must have been well on the other side of three-score years. No doubt some of them would be skeptical about the utility of all the elaborate details of aseptic and antiseptic ritual, but I think they would come to the conclusion that on the whole some real progress is being made.

I shall not attempt to give a full account of the methods adopted to prevent septic contamination of the operation wounds. In disinfecting the hands and field of operation, the routine most often employed was (1) thorough washing with green soap and water, (2) washing with alcohol, and (3) the use of a solution of HgCl_2 . I did not see the permanganate of potassium and oxalic acid method employed, and I smelt very little carbolic acid. Quite a few used gauze coverings for the mouth and chin, as well as for the head. No uniformity prevailed regarding the use of gloves. Some

operators, such as Fenger, appeared to employ them in all cases. Others only used them in markedly septic cases, while others appeared to have objections to using them at all. They certainly appeared to me to interfere with the fine tactile touch necessary for some operations. I saw one surgeon discard them during an operation, in order to be better able to feel what he was doing.

With regard to sutures and ligatures, I saw the following used—silk, catgut, horsehair, silkworm gut and bronze-aluminum wire. Fenger uses silk for everything. The great advantage of silk is that it can be readily sterilized by boiling. The disadvantage is that although wounds may heal up by first intention, very often the silk gives rise to abscesses at some time in the future. At the Polyclinic most of the operators use catgut exclusively for ligature of vessels and pedicles.

The method of preparation they employ was new to me, and is as follows :

- (1) Wind the catgut on glass slides or heavy tubing, being careful not to allow it to overlap.
- (2) Soak in 4 per cent. (of the ordinary 40 per cent.) solution of formalin for forty-eight hours.
- (3) Keep under running water for twenty-four hours.
- (4) Boil in water for fifteen to twenty minutes, according to size. Have the water boiling before putting in the catgut. Cut in eighteen inch lengths.
- (5) Preserve in 1-1000 solution of HgCl_2 in alcohol. It is used directly from this solution.

Ochsner, of the Augustana Hospital, considers that the use of strong germicides on the hands of the surgeon are detrimental, as it is most important that the skin be kept smooth and as free as possible from dead epithelial cells. He condemns unnecessary traumatism and handling of wounded parts, and attaches a good deal of importance to sutures not being tied tightly enough to cause pressure necrosis. He considers that although theoretically sutures passing through the skin and the deep tissues underneath are a menace to the patient, because they form a direct communication between the stem containing staphylococci and the deep tissues which are primarily sterile, practically these stitches never cause an infection unless drawn too tightly, in which case the resulting pressure necrosis is the cause of the mischief, because it furnishes these micro-organisms dead tissue to thrive upon.

The wound in the abdominal parietes is closed in different ways, according to the fancy of the operator, although most employ some form of layer suturing. Some reinforce this with through and through silkworm sutures. I do not recollect seeing any cases where this method was alone relied upon, although I notice that at the recent meeting of the American Medical Association it was

strongly advocated by one member. Harris, of the Polyclinic, uses a very pretty method, the different layers being separately sutured with continuous bronze-aluminum wire. The ends of these are left long and folded over the dressings, and left in some cases for two or three weeks. I saw him use this method in a case of operation for the radical cure of hernia. Three weeks after the operation the wound was dressed for the first time and the wires removed. The patient had been going about for some days. The result certainly appeared to be excellent.

I did not see any iodoform or other powder dusted on a clean operation wound. Harris applies silver leaf and a few others colloidion before putting on the dressing of plain sterilized gauze and cotton.

The management of appendicitis cases is always a question of interest to the general practitioner. I saw quite a few cases operated upon during the quiescent stage. In most of these cases the McBurney flap splitting method was used for opening the abdominal wall.

Of course the great advantage of this method is that it is almost impossible for a subsequent hernia to form at the site of operation. I saw only two or three patients operated upon while they were suffering from acute symptoms. If they do not get the chance to operate within the first thirty-six hours, I think most of the operators prefer to have the patient nursed over the acute attack, unless decided indications for operating exist. With regard to the medical treatment of these cases, Ochsner thinks that the main point in the treatment of peritonitis, due to appendicitis, is the withholding of all food from the mouth and feeding the patient by the rectum. He argues that nature's method of curing these cases is for the omentum and surrounding coils of intestine to crowd around the local lesion and shut it off from the general peritoneal cavity. As soon as the smallest amount of food has passed the pylorus, continuous peristaltic motion is at once established in the small intestines, and instead of assisting the omentum in preventing the infection of the general peritoneal cavity, this motion will serve to mechanically distribute any septic material with which the intestines may have come in contact. It does not matter how much or how little, or what kind of food is taken, it will always have the effect of starting peristaltic motion of the small intestine. Even the lightest kind of liquid or predigested food may suffice to produce a sufficient amount of peristaltic action to carry infectious material over the entire peritoneum, and change what would have resulted in a harmless circumscribed abscess to a fatal general peritonitis. In other words, it frequently requires but a very small amount of food to kill an appendicitis case. It does not matter whether the patient suffers from catarrhal appendicitis, with or without a foreign

body in the appendix, or whether the appendix be gangrenous or perforated, he will almost invariably recover if from the beginning of the disease absolutely no food is given by the mouth. This same form of treatment is applicable to peritonitis due to other causes, such as salpingitis, etc. Locally, either hot or cold applications, whichever appear most grateful to the patient, may be used.

Usually the pain subsides very rapidly if food is prohibited, but in case this does not occur, morphine in small doses may be given with safety if no food is given. The patient's strength is maintained by administering non-irritating nutrient enemata every three to six hours, which should not exceed four ounces at a time. Usually water can be given by the mouth, but in case this causes any disturbance, by giving rise to peristalsis or vomiting, it can be administered by enemata. If vomiting persists, gastric lavage after cocaineizing the pharynx usually gives permanent relief. In case the attack of appendicitis has occurred directly after the patient has eaten a large meal, the food will either be compelled to progress upon its way through the alimentary canal, and in doing this cause much distress and increase the severity of the attack, or it may be expelled from the stomach by vomiting, or be removed by gastric lavage. In most cases, if one sees the patient early, the amount of irritation can be reduced by the administration of a large dose of castor oil, which will empty the alimentary canal quickly and with comparative safety, because it does not cause as much peristalsis as other cathartics. In case this is not effectual, he does not give any further cathartics, but if the vomiting persists employs gastric lavage. Many authorities speak of the advisability of withholding food from the mouth during the initial stage of vomiting, but I am not aware of any one who attaches so much importance to this point as does Ochsner. In his paper on this subject he gives the histories of eight successive cases which he treated during the month of January, 1899, one of these getting no nourishment by the mouth for two weeks. As this is a subject of such vast importance, I trust you will not consider me tedious if I quote one or two of these.

CASE 5.—On January 29th, Dr. Johnson, of Harvard, Ill., consulted Ochsner concerning a boy thirteen years old, upon whom he had two days previously performed an operation for a gangrenous appendix, on the fourth day of the attack. He had drained the cavity thoroughly with gauze and rubber drainage tubes. A quantity of pus escaped at the time of the operation and there seemed to be no limitation of the infection. The temperature and pulse decreased during the first twenty-four hours, then the child began to lose ground. His pulse increased to 150 beats per minute. He vomited constantly, and his general appearance indicated that he would die within twenty-four hours. The boy had been well supported with

liquid diet ever since the operation in order to keep up his strength. This was discontinued at once and the usual rectal feeding given instead. The vomiting ceased. The pulse improved and the boy recovered. The doctor has since employed the same method in a number of appendicitis cases, always with the same good results.

CASE 7.—Mrs. L—, 29 years of age, seen January 1st. A week previously she had received an intrauterine treatment. She was about three months pregnant. A miscarriage resulted, and with it an intense infection. She was in a condition of acute sepsis. Pulse 150-160 and temperature 104 F. Her abdomen was enormously swollen. She begged for ice-water incessantly, but would no sooner swallow it than it would be vomited with great force. A vaginal examination demonstrated a loose, flabby uterus. There was but a slight amount of foetid discharge, the vaginal vault was somewhat rigid. The patient belonged to a class which Ochsner would formerly have operated upon as a last resort, with the expectation of losing her within twenty-four hours. She had received various remedies internally, hot fomentations had been applied to the abdomen, and she had been confined to a liquid diet. All food and even water by the mouth was at once prohibited and rectal alimentation substituted. The vomiting stopped within a few hours and the patient's condition improved in every way. The inflammation became circumscribed. Two weeks later Ochsner was able to evacuate a large pelvic abscess per vaginam, and the patient has since recovered completely.

Like many other American surgeons, he says he prefers to operate within the first twelve to thirty-six hours of the attack, when all the surrounding conditions are favorable. In recurrent cases he prefers to operate during the interval.

Multiple operations on the pelvic organs in women are common. Thus I saw Dr. Newman perform all the following operations in succession on one woman, who at the time was menstruating. Dilatation of the cervix, curettement, trachelorrhaphy, perineorrhaphy, abdominal section, resection of ovary, fixation of a retroflexed uterus by reduplication of round ligaments and two ventral fixation sutures, and finally dilatation of the rectum. These multiple operations are said not to materially increase the risk, and probably most of us have cases on our hands where it would be advisable to do all of these if we did anything.

During the course at the Polyclinic there were two operations for extra-uterine pregnancy. Both were only a few weeks advanced. In the first case there had been a slight amount of intraperitoneal hemorrhage, but not enough to cause alarming symptoms. Much to my own disappointment, I was late in seeing the second case, and was only in time to see the abdominal wound closed. I was told, however, that there was so much blood in the abdominal

cavity that the operator scooped it out in handfuls, and the floor of the operating theatre was rather suggestive of a slaughter-house. Both patients were subsequently reported as doing well. Harris operated on two cases of gall stones. In the first case a single stone was found at the juncture of the duct with the duodenum, and in order to remove it, it was necessary to open the duodenum. This patient died a day or two subsequent to the operation. In the second case a number of stones were found in the ducts. These were worked back to the gall-bladder, and removed in this way through a cholecystotomy wound. Patient made a good recovery.

A case of tumor of the cerebellum was diagnosed by Church and operated on by Fenger. The operation proved the diagnosis to have been correct, but the result was fatal.

Senn's clinics, given three times a week at Rush Medical College, constitute one of the most striking features of surgical teaching in Chicago. These clinics generally last for four or five hours or more. The first part of the time is taken up with exhibiting patients who have been previously treated, and in making the diagnosis of fresh cases. A short time before the clinic commences a certain number of students are given cases to examine and diagnose. These students then come before the class along with the patients, read their histories, and give their diagnoses, being questioned and criticized by Dr. Senn, who at the same time makes running comments and remarks to the rest of the class. It struck me as being a very valuable method of clinical instruction.

The latter part of the time is taken up with operating. The amphitheatre, where the operations are performed, is very large; but Senn describes his operations so graphically as he goes along that one almost imagines he sees details that are scarcely visible to the eye. Senn has rather an unpleasant habit of occasionally raising and lowering the voice, which is at times quite aggravating. He has, however, a good command of clear, vigorous English, and must be possessed of a very robust constitution to stand the strain of operating and lecturing for hours at a time in the manner he does. He still advocates very strongly the treatment of tubercular joint troubles by the injection of an emulsion of iodoform in glycerine, and I should imagine, from what I saw, that this class of cases constitute quite a large share of his hospital practice.

Another man who struck me as being an excellent clinical teacher is Van Hook, of the North-Western. His classes are not very large and he makes no pretensions at oratory, but he has a very clear and pleasant manner of describing his work as he operates. He is probably best known outside of Chicago by his work on the uretus.

Many new methods of diagnosing abdominal troubles have been introduced during the last few years. Among these are more care-

ful palpation, percussion and auscultation, determination of the size and location of the stomach by distention with gas or water, and the use of Turck's gyromele, chemical and bacteriological examination of the gastric juice, etc. The test for HCl, which appears at present to be the most convenient and sufficiently delicate for practical purposes, is a half per cent. alcoholic solution of dimethyl-amidoazobenzol. A few CC. of the filtered gastric juice is poured into a test tube and to this is added a few drops of the solution. In the presence of HCl a rose-red color is developed. The urinary segregator, as used by Harris, is a valuable method of obtaining the secretions from the individual kidneys.

The instrument consists of a double catheter, which is introduced into the bladder, and a lever, which is introduced into the rectum in the male or the vagina in the female. The two parts of the instrument are then approximated in such a way that the floor of the bladder is divided into two parts by a central elevation. This elevation prevents the urine from one ureter mixing with the secretion flowing from the other. Harris gave us a demonstration of the use of this instrument on the male. It was quite successful and apparently less painful than would be imagined. This gentleman also gave a very interesting demonstration of the diagnosis of abdominal tumors. Instead of following the old landmarks, as laid down in Gray's Anatomy, he divides the abdominal cavity into the following regions according to their relations to the colon. 1. Central—all the space surrounded by the colon, including the pelvis. 2. The region above the transverse colon. 3 and 4. The two latero-posterior regions, behind and to the side of the ascending and descending colons. The position of the colon is said to be easily outlined by inflation with air. This is the first time I ever heard of this division, and it struck me as being a very natural one and probably of real benefit in the diagnosis of abdominal troubles. Exploratory incision, however, has still to be frequently resorted to. Thus I saw one surgeon open an abdomen, and before doing so he remarked that the patient had some abdominal trouble. It might be recurring appendicitis, gall-stones, or cancer. After the opening was made it was found to be a case of cancer of the stomach, with secondary involvement of the liver.

Movable kidney is a subject that receives considerable attention at the clinics. Systematic examination shows that it is a very common condition among women. Like deflections of the nasal septum, it has been variously regarded as being of no importance on the one hand, and on the other as being the cause of the most alarming and varied symptoms. Since coming home I have been a little surprised to find it in four or five patients in whom I had not previously suspected it. In scarcely any of these, however, do I feel confident enough that the movable kidney is the

cause of their complaints to advise an operation. Flutterer says that the most alarming symptoms are apt to be present in those cases where the motion is quite limited and small in extent.

This observer is a physician, and may be a little pessimistic in the matter, but claims there are about 80 per cent. of relapses after operation. Some of the surgeons, on the other hand, claim that the relapses amount to only about one-half of the above figure.

On my way home I spent a few hours in the Battle Creek Sanitarium. I was very courteously shown over the institution, and I was surprised at the elaborate arrangements provided for the diagnosis and treatment of disease. A glance at this chart will give you an idea of what is considered necessary in order to make a modern scientific diagnosis of the condition of a patient's digestive apparatus. It struck me, however, possibly partly through prejudice, that the people who were at the head of this concern were faddists. Partly for hygienic and partly for religious reasons, they are opposed to the use of animal proteid substances as food. To supply the place of these they have a great variety of foods prepared from grains and nuts. I did not have the opportunity of indulging in any of these luxuries, and to me they did not appear very appetizing, although, I suppose, as the immortal Abraham Lincoln would have said, "For those who like that sort of thing, why that is just the sort of thing they like." Shied off in one little corner was their drug department, which my courteous conductor told me was occasionally resorted to. There is one drug, however, which they consider is not fit to enter the human organism, and which, under no circumstances, is allowed to be prescribed for a patient. This drug is mercury in all its forms. Their arrangements for the hydrotherapeutic, electrical and gymnastic treatment of disease appeared very thorough, and one could scarcely behold all these appliances, many of which were run by machinery, without thinking that here at least the kingdom of health will be taken by force; and yet, somehow, the only patient I saw who was apparently leaving the institution was going away on crutches. In contrast with all this, I would like to mention a couple of clinics which I attended in Chicago. All the armamentarium employed is an adjustable chair, a pair of scales, a power of persuasion and a suitable kind of patient. The chair is to enable the patient to be put in the reclining position, with the eyes shut and all the muscles relaxed. The operator then proceeds to suggest to the patient that the conscious mind can, through the subconscious mind, influence the animal functions to such an extent as to restore health and vigor to the sick and afflicted. The scales are used to demonstrate to the patient the gain in flesh which he is daily making. Dr. Parkyn, who conducts this clinic, is a graduate of Queen's University, Kingston, and an L.R.C.P., Ontario. He claims to put into scientific appli-

cation the force that is instrumental in accomplishing cures in the hands of Christian Scientists, mental healers, osteopaths, etc. I did not see enough of this method to enable me to come to a conclusion as to how much there is in it. I saw sufficient, however, to make one think that an investigation of the subject is well worthy the attention of the general practitioner.

One old gentleman, who was attending the clinics, confided to me that he had come to Dr. Parkyn for treatment for a broken-down nervous system, due to the strain and anxiety of keeping a store. Besides taking the treatment, he was attending the clinics to learn the business, and had about come to the conclusion that when he was cured he would not go back to the nerve-destroying occupation of selling dry goods and groceries, but would start up a sanitarium for the treatment of the sick. If he were placed for twenty-four hours in the position of the general practitioner, where he would be liable to be called upon to treat anything from a tooth-ache to a placenta praevia, I am inclined to think that he would come to the conclusion that there are a good many conditions where suggestion alone would not work, and that keeping store is not the only trying occupation on the nerves.

THE TREATMENT OF CHRONIC DISEASES OF THE KIDNEYS.*

BY E. T. SNYDER, M.D., BRUSSELS, ONT.

I desire to bring forward for discussion a few questions which relate to the chronic renal diseases, and especially the dietetic treatment of chronic contracted kidneys.

Since the year 1890, when the congress in Germany occupied itself with this theme under the head of Senator and Ziemssen, no essentially new points of view have been suggested.

There has grown up in the meantime in practice a certain plan, according to which the regulations concerning diet are accustomed to be made. This, roughly outlined, is as follows: A moderately rich allowance of albuminous foods, giving the preference to the vegetable albumens, and to the albuminous constituents of milk; a liberal supply of fresh and cooked fruits, and simple and unirritating preparations of vegetable and farinaceous foods in the greatest variety possible.

The entire amount of the fats and carbo-hydrates should depend upon the existing state of the patient's nutrition. In many cases they must be severely restricted; in others liberally allowed.

* Read at Huron Medical Association, Stratford, July 10th.

Among the beverages must be mentioned prominently as especially valuable: milk with its derivatives, sour milk, buttermilk, cream, and sometimes koumiss. Many go so far as to insist that the ingestion of one or two quarts of milk daily is necessary.

One meets less frequently in the therapeutic directions of prominent authors than in practice with long continued systematic milk cures, requiring three to four quarts of milk daily, and with us, indeed, not to an equal extent or frequency as is the case in France.

Alcoholic drinks, as well as tea and coffee, are to be entirely forbidden, or permitted only in small amounts or weak dilutions. Along with these directions come, as a rule, the prescription of some of the weak carbonated alkaline waters, in the quantities of one or two cups each day. One has the choice of many springs for this purpose, and which one is selected depends, unfortunately, more upon the intensity of the pressure with which this or that spring is urged upon public attention than upon any other consideration.

Frequently, one might say year by year more frequently, these prescriptions are expanded into regular drink cures at favorite health resorts.

Before I take up the point in this scheme which shall occupy us specially, I would like to interpolate one critical remark concerning the manner in which, in practice, the regulation of the allowance of albumen is carried out.

In accordance with a correct knowledge of the subject, and in full agreement with the leading hand-books and treatises, as well as with the chemical and experimental researches of the last decade, there is in practice relative to chronic contracted kidneys by no means so much stress laid upon the absolute restriction of albuminous food as in the case of acute nephritis and of the severe forms of parenchymatous nephritis.

If one estimates that which is permitted in the form of milk, eggs, meat and vegetables, the amount of albumen will be found to be above, rather than under, sixteen grains daily, and in no sense to be considered as small. Much more importance is attached by many to the selection of the kinds of flesh foods, and it has become indeed usual for patients with contracted kidneys to be allowed only the white parts of fish, fowl and calves, while the white meat of swine is regarded with distrust. Red or brown meat, whether of slaughtered animals, game or poultry, is strongly condemned by many physicians.

I expressly insist that this rule, in so far as it regards the contracted kidney, has grown up gradually in practice as a result of frequent repetitions, without having been recommended in the writings of prominent authors.

This custom has in practice developed into an abuse which in not a few cases has had injurious effects, for many patients who scrupulously comply with this rule acquire in time such a distaste for white meat that their consumption of meat in general becomes restricted to the smallest amount, the proportion of albumen taken sinks more and more; and because, in consequence, the appetite in general and the entire consumption of food is lessened, there results a disturbance of nutrition and loss of strength.

What particular significance attaches to the prohibition of dark meat is shown by the fact that in such cases, with return to a varied mixed meat diet, the appetite comes up and the lowered strength is increased.

In the last two years several observations of this kind have been made by me. These are from a practical standpoint, but from a scientific point of view I might add the remark that the distinction between the white and dark meats for the nutrition of renal patients has been anything but exactly established, and at the least has been greatly exaggerated. I have not found in all literature a single exact clinico-experimental confirmation of it, though there is no lack of hypothetical assertions concerning the greater contents in dark meats of substances that are irritating to the kidneys, especially nitrogen, containing extractives. As regards these last I might, on the other hand, bring forward the fact that our text-books on physiologic chemistry state that the highest certain values are in the white meat of chickens and rabbits; they exceed in these three or four per cent. per thousand, while in the case of beeves, for example, the same values never reach three per cent. per thousand. The essential difference between white and dark meats is in their content of coloring matter, the chemical constitution of which is not yet known with entire exactness, but we have no ground whatever for classing them among the injurious substances.

To the assertion that there is a special harmfulness in dark meats for renal and also for gouty patients, unsupported by chemical or experimental evidence, and handed down from one treatise to another, I am able to oppose at least one observation, showing that a patient with chronic parenchymatous nephritis in one five-day period under the daily use of one-half pound of chicken excreted exactly the same amount of nitrogen, and even a little more albumen, than in a following five-day period in which, instead of chicken, she received an amount of beef, having the same content of nitrogen.

The second most important question which I would here discuss concerns the allowance of liquids. How shall we regulate this in patients with contracted kidneys?

Eleven years ago H. von Bamberger reported in a short clinical paper that in the treatment of certain special cases of disease he

had come upon the question, whether it were better for patients with chronic Bright's disease to drink much or little water?

Since there were no observations at hand on this subject, he himself in the case of two patients with chronic parenchymatous nephritis made comparative investigations, in one strongly increasing the customary amount of fluid, and in the other greatly diminishing it. The augmentation of the fluids produced an increase of the diuresis, but left the excretion urea and albumen practically unchanged. The diminution of the fluids left the general condition undisturbed, but had as a result a lessening of the urea excretions and indeed a small increase of the albuminuria.

From this one observation, which speaks against the lessening of the fluids, von Bamberger draws the conclusion that in no form of Bright's disease, not even in the contracted kidney, is there even an indication for the restriction of liquids. At the best, he infers that a severe diarrhea might result.

This view, representing von Bamberger, is accepted in part upon his express authority in nearly all the newer works upon the treatment of chronic kidney diseases. Regarding the contracted kidney they either say nothing as to the amount of liquids to be allowed, or recommend liberal portions of them for the better flushing of the kidneys. Contrary expressions are met with, but very exceptionally; for example, W. Camerer describes one chronic renal case with edema, in which, by a decided restriction of the allowance of fluids, the edema quickly disappeared, with a simultaneous increase of diuresis and of the elimination of urea.

This was also a case of parenchymatous nephritis, and this observation teaches that from the unfavorable experience of Bamberger one should not generalize as regards the contracted kidney.

Dr. von Noorden pointed out two years ago, in a discussion of the indications which are afforded by the combination of the contracted kidney and diabetes, that these diabetics find themselves in the long run better off when they are permitted little liquids. By the restriction of fluids we spare the heart, and thereby guard against the most important danger which threatens renal patients, and especially the diabetics, with kidney disease, to wit, paralysis of the heart.

In the recently published hand-book of Nutritional Therapy, Herr Von Ziemssen also assumes the same position, as I read with satisfaction. He requires with patients with contracted kidney a limitation of fluids, especially in those cases in which there are at the same time distinct signs of arterio-sclerosis.

I have now for some six years been devoting careful study of the question, how persons with contracted kidney far- with a large and again with a moderate allowance of fluids, and have to declare as a result of my observations that very often patients with con-

tracted kidneys can be extraordinarily helped by restriction of their consumption of fluids. I shall give here only a brief resume of these observations.

The most favorable and likewise most striking effect of the restriction of liquids is seen in the advanced stages of the contracted kidney, in which attacks of cardiac asthma have already appeared, and the objective examination reveals, besides hypertrophy of the left ventricle, a considerable dilatation. Digitalis is a sovereign remedy in these conditions, and, in fact, it often succeeds in restoring an endurable state until new exacerbations develop.

At every shortening interval we have recourse to digitalis and similar medicines, till finally the patients sink into a lasting severe, agonizing condition, in the clinical picture of which now the phenomena of chronic heart weakness and again those of chronic uremia predominate.

It is seldom that after an outbreak of the first threatening appearances of the heart failure, that the patient lives longer than a few months.

In this stage of the chronic contracted kidney, which is ripe for the digitalis treatment, with cardiac asthmatic oppression already present, partly in consequence of the preceding attacks of stenocardia and of edema of the lungs, partly from the distinctly recognizable and very considerable dilatation of the heart, the restriction of the fluids even without any other treatment showed itself decidedly important and conspicuously useful, when by a conscientious following of the directions, a good result is possible of attainment, and this has hitherto occurred in more than twenty cases. The good effects have shown themselves in a prompt lessening of the at once tormenting and alarming cardiac embarrassments, restoration of good sleep, a profuse diuresis proportional to the amount of fluid taken, and above all, an indubitable recession of the dilated heart.

The relatively favorable condition to which the patients return after their former threatening experiences may continue in many of them for a number of months, or even for a year. Naturally the result was not so favorable with all the patients who were treated by means of restriction of fluids, for many came under treatment so miserable and with so many disturbances that no kind of therapy could be of any use; but even these desperate cases I had for the most part the impression that the limitation of liquids produced at least a temporary betterment. Not all of those even who were apparently improved, and for a long time afterward continued better, are still living. The nature of the disease explains this sufficiently, but sometimes shorter, sometimes longer periods of euphoria and perhaps also a prolongation of life was nevertheless achieved.

Out of the number of observations I take one sketching it briefly, in order to show the therapeutic results of a restriction of fluids.

One of my earliest observations concerns a gentleman now forty-five years old, who consulted me two and one-half years ago. He knew then that he already had diseased kidneys for at least five years, but until the last months, however, no serious difficulties had appeared, but in the last months he had suffered in increasing measure from difficulty of breathing and a painful pressure feeling in the heart. In the last weeks he awoke every few nights with a strong feeling of oppression, and was obliged to remain for hours at a time out of bed; twice these attacks were accompanied with a frothy, bloody expectoration.

The examination revealed, among other things, considerable dilatation of the left heart. His customary allowance, as ordered by his physician, amounted to between three and one-half to four quarts; included in this was one and one-half quarts of milk. My only important prescription in this case consisted in the limitation of the fluids to, at the outside, one and one-quarter quarts daily, and it was left to the patient to choose, within these limits, milk, water, soups, fruit juices or even a small glass of light wine. The result was that within a few days the cardiac dyspnea abated, and up to the present time the patient still follows conscientiously the directions given at that time; he has been free from any steno-cardiac embarrassment. As a curious experience I have to relate that this patient, having fallen ill with a slight digestive disturbance while away on a journey, received from the physician who attended him the assurance that he would die within a short time, unless he returned as soon as possible to a milk diet. I saw the patient last about six months ago, and found the cardiac apex some two fingers further inward than two years ago. The albuminurica naturally continued in the same old way.

I scarcely need to mention, especially in the earlier stages of the contracted kidney, that is, so long as the kidney disease is well compensated by cardiac hypertrophy, large amounts of liquids, whether taken in the usual daily routine or at spas, produce no immediate apparent harm. This is exactly as it is in the case of heart disease. The prohibition of flooding the system with fluids is at this time of importance only as an assurance against the future; yet I have had direct proof in a few cases that large unaccustomed amounts of fluids worked immediate injury to the patients with contracted kidneys who up to that time had seemed to rejoice in unimpaired cardiac power. One of these was the result of a milk cure of several weeks' duration, the other of an exaggerated and unsuitable mineral water cure. In both cases the flooding with liquids produced dilatation of the heart and cardiac weakness, of which there had been no signs before.

I believe it my duty to add a few clinical and experimental investigations. They concern above all the determination as to how far the elimination of the products of tissue metamorphosis in the contracted kidney is independent of the injection of water, if perchance it should be found that urea, uric acid and urinary salts are less freely and less perfectly excreted upon the small allowance of water than after flooding of the system with water, then that should serve as a warning, since we do not dare to favor the accumulation of these products in the body. In fact, the custom of prescribing for such patients milk and water and sending them to regular drink cures and renowned springs, has resulted from the notion that a large use of water favors the elimination of the products of tissue changes in every form of nephritis.

I have here to communicate as the entirely justified conclusion, that in the cases of patients with contracted kidneys, neither in the stage of relative euphoria nor in the stage of beginning cardiac weakness, nor indeed in chronic uremic phenomena, is the elimination of the most import, products of tissue metamorphosis, ever impaired through lessening of the liquids to one and one-quarter quarts daily. Not in a single observation was this the case, though in a few instances there was the contrary result, that is, the elimination of nitrogen and urinary salts increased with lessening of the fluids.

As concerns the excretion of albumin, the absolute daily amount was not essentially influenced through diminishing the allowance of water. The percentage of albumin increased only when, with a smaller injection of fluids, the amount of urine fell off, since in practice the proportion of albumin is exclusively and erroneously considered. It is important to know this fact, otherwise one might be led, through a lessening of the liquids, to the wrong opinion that the albumin had been greatly increased.

FRACTURE OF BASE OF SKULL.

BY J. G. LAMONT, M.D., BRANTFORD, CANADA.

Since 1895 I have treated nine cases of this condition. Three were associated with depressed or stellate fracture of the vault. Three extended to the anterior fossa. One to the posterior fossa, and five to the middle fossa. Seven terminated fatally and two recovered. Both of these were men in middle life, and the fracture in both cases was of the middle fossa. Following is a report of recent cases:

CASE 1.—Mrs. T., age 68. While crossing a street was knocked down and trampled upon by a runaway team of horses. Her head was dashed against a telephone pole, striking upon left temporal region and external angular process. Examination a few moments later as follows: Patient semi-comatose, but apparently suffering intense pain when moved. Blood and cerebro-spinal fluid exuding from nostrils. Fracture of humerus at junction of upper with middle third; fracture of clavicle. Patient was removed in ambulance to her home and treated with restoratives. Stupor gradually increased and irregularity of pupils developed, the left widely dilated and right contracted, with paralysis of ocular muscles on left side. Subconjunctival ecchymosis developed early on left side. Pulse slow and full, and breathing stertorous. Condition became rapidly worse and death resulted 16 hours after injury. The age of patient and concomitant injuries rendered the shock very severe. No post mortem was obtainable.

CASE 2.—On July 9th, 1900, D—Y—, age 35, a lineman in the employ of the Brantford Street Railway, while attaching a wire at a height of 22 feet, received a shock of 550 volts from a live wire, and fell to the ground, striking upon his left shoulder, his head coming in contact with a projecting curbstone. Early examination revealed crepitation at shoulder-joint, blood oozing from left ear, and also from mouth and nose. Semi-conscious. Removed in ambulance to city hospital. Found a fracture of lip of acromion process with dislocation of acromial end of clavicle. Point of cranial injury just above and behind the mastoid process about the junction of the mastoid with the parietal. Line of force was downward, inwards and forwards, in direction of petrous bone. Hemorrhage from ear, bright red, profuse. No cerebro-spinal exudate. Pulse 55, full and of low tension. During the night he remained unconscious. Vomited several times blood which he had swallowed. Following day the aural hemorrhage continued. Pupils slightly contracted but not irregular. On careful examina-

tion could detect no evidence of depression at seat of injury. Applied ice coil to head and strapped the arm upwards and across the chest, with a firm pad in axilla and another over dislocated end of clavicle. The latter condition proved very difficult to be kept in proper position as patient subsequently became very restless. Ordered careful disinfection of external ear and nose and throat with borolyptol. During the following week the patient remained much in the same condition, refusing food and medicine. Pupils always slightly contracted—never irregular. Hemorrhage from left ear persisted for a period of six days, commencing after any exertion or violent respiratory effort. Pulse generally slow and full, varying between 55 and 70. Temperature after first day 101° and gradually becoming reduced to normal at end of week. It was found necessary to give nutrient enemata, with an occasional dram of bromide, per rectum. In the second week consciousness partially returned and fluid nourishment could be administered.

On 14th day he developed paresis of left eyelids and later some irregularity of pupils, the left being dilated. No strabismus. Ophthalmoscopic examination showed indications of optic neuritis on nasal side of each. Eye symptoms improved throughout third week.

Examinations at date of writing, 22 days after injury, gives following particulars: Pulse 70. Temperature normal. Appetite and general nutrition good. Excreta normal. Clavicle—acromial end can with difficulty be retained in position. Motion of shoulder good and function unimpaired. Paresis of lids and irregularity of pupils have almost disappeared, though both pupils react sluggishly to light. Mental condition much improved. He converses rationally with friends. Remembers nothing of the accident and can not recall any events of the past three weeks. Is completely deaf on the left side. Sleeps well and is apparently on the way to rapid recovery.

With regard to diagnosis of fractures of the middle fossa, a distinguished American writer has said: "Long continued bleeding or, still more, a continuous discharge of watery fluid from the ear, if abundant, and especially if it is affected by the position of the head and is increased by any violent expiratory effort. . . . is almost positive evidence of such fracture . . . Deafness and facial palsy are very significant of fracture of the petrous bone, and if either or both of these accompany discharge of fluid from the ear, the diagnosis is a *sured*."

Reports of Societies

MARITIME MEDICAL ASSOCIATION.

The Maritime Medical Association held its tenth annual session in the assembly rooms of the Mechanics' Institute, St. John, N.B., July 17th and 18th, 1900. Dr. Jas. Christie presided, and on the platform with him were Mayor Daniel and Dr. Bayard, of St. John, and Dr. E. Farrell, of Halifax.

Among the outside physicians present were : Drs. M. Chisholm, C. D. Murray, T. W. Walsh, T. J. F. Murphy, Thos. Trenaman, N. E. MacKay, E. A. Kirkpatrick, Edward Farrell, M. A. Curry, G. M. Campbell, A. E. Forbes, of Halifax ; W. S. Muir, Truro ; J. T. Lewis, Hillsboro ; J. B. Benson, Chatham ; R. L. Botsford, Moncton ; B. S. Thorne, Havelock ; T. H. Wetmore, Hampton ; C. McLean, Sussex ; C. T. Purdy, Moncton ; W. B. Moore, Kentville ; A. A. McLellan, Souris, P.E.I. ; S. C. Murray, Albert ; M. G. Archibald, Halifax ; Arthur Birt, W. N. Hand, Woodstock.

The secretary read letters from Dr. R. McNeill, Charlottetown ; from Dr. H. D. Johnson, Charlottetown ; from Dr. Armstrong, Montreal ; Dr. Cushing, Boston, and Dr. Weeks and Dr. Gordon, Portland ; also a letter from Dr. Roddick, thanking the society for the resolution passed last year. Dr. McNeill advocated in his letter a resolution to strengthen the hands of Dr. Roddick in his efforts for interprovincial registration. It was moved that the letters be received, placed on the table and taken up later under the head of new business.

The following nominating committee was appointed : E. Farrell, M. A. Curry, W. B. Moore, of Nova Scotia ; J. W. Daniel, M. MacLaren, F. H. Wetmore, of New Brunswick ; P. Conroy, S. R. Jenkins, A. A. McLellan, of P.E.I.

Dr. James Christie, as president, then welcomed the delegates. He was exceedingly sorry he had not been present at Charlottetown, but he esteemed it a particularly high honor that in his absence he had been appointed to the position which he now held. He thanked the association for that honor. First, he would extend to one and all a hearty greeting and welcome. He hoped that they would take away such pleasant recollections of the city that they would wish to return on future occasions. There were two objects in holding these conventions. First, benefit to themselves and afterwards benefit to others. It was often thrown up at medical men that they were selfish. A great effort should be made by all in the profession to live this fallacious idea down. He was glad to know that local societies were being generally established and

accomplishing tangible results. In conclusion, he introduced Mayor Daniel.

Mayor Daniel said that three years ago, when this association met in this city, he was presiding officer. To-day he had the exceptional pleasure of welcoming the association in the capacity of mayor of the city. The fact that he also was a member of the medical profession made the occasion one of double interest to him. He had always felt that the medical profession had never received due official recognition. Medical experience and knowledge was continually being offered up on the altar of public benefit, and medical men were continually tendering their offices to the poor of the cities. On all these accounts he affirmed the medical man should receive official recognition on every possible occasion. Touching upon the war in South Africa, he referred to the death of Lieut. Borden, a medical student, the son of a member of the profession. He met death in the way a soldier should meet it, and he felt that the association ought to pass a resolution of sympathy for Dr. Borden and his family. He offered a resolution to that effect, and asked Dr. Farrell, of Halifax, to second it.

Dr. Farrell said he seconded the resolution with feelings of great sorrow and sympathy. It seemed very hard that this death should have come at such a late period, when peace was coming into sight. He thought it eminently fitting that such a resolution should be passed.

The resolution was carried unanimously by a standing vote.

The president then appointed Dr. Daniel, Dr. Farrell and Dr. McLellan, of Souris, a committee to draft a suitable resolution.

A telegram from Dr. J. F. Teed, of Dorchester, regretting unavoidable absence, was read.

The secretary also announced that the Union Club and the Golf Club had extended their hospitality to the delegates. The latter organization will entertain the delegates at afternoon tea on Thursday.

The president then introduced Dr. William Bayard, whose attainments and skill had brought such honor to the medical profession of the province. He congratulated Dr. Bayard upon the honor conferred upon him at the centennial of the University of New Brunswick. It had come late in life, it was true, but was richly deserved. Dr. Bayard was the father of the medical profession in St. John. The hope of all his associates was that he would long be spared to them.

Dr. Bayard was given an enthusiastic reception. His address, which dealt with preventive medicine, was listened to with the closest attention. It dealt especially with the prevention of the spread of tuberculosis, a subject with which Dr. Bayard is more than ordinarily capable of dealing.

Dr. Trenaman, of Halifax, moved a vote of thanks to Dr. Bayard, and Dr. Farrell seconded it. Both mover and seconder added their tribute to the importance of this matter of the proper control of tuberculosis.

Dr. A. Laphorne Smith, of Montreal, Dr. Boyle Travers, of St. John, Dr. F. H. Wetmore, of Hampton, and Dr. R. L. Botsford, of Moncton, also discussed Dr. Bayard's paper. Adjournment was made until 2 o'clock.

At the afternoon session Dr. J. H. Morrison read an admirable paper on "Radical Treatment of Chronic Otorrhea and Aural Polypi." Dr. Morrison had two patients present whom he had treated, and their presence made the paper even more interesting. Dr. Birt discussed the subject at the conclusion of the paper.

Dr. E. A. Kirkpatrick read a paper on the "Injurious Effects of Tobacco," with special reference to tobacco amblyopia. At the conclusion of this adjournment was made, in order that the delegates might attend the excursion to Partridge Island on the *Flushing*.

A meeting of McGill graduates in medicine was held in the morning in the Medical Society rooms, Dr. J. H. Scammell presiding. On resolution, it was decided to form a Maritime Graduates' Society of McGill University in lieu of the provincial societies now existing. The following officers were elected: W. H. Hattie, Halifax, president; J. H. Scammell, St. John, 1st vice-president; J. D. Johnson, Charlottetown, 2nd vice; Hugh Ross, Stellarton, 3rd vice; G. G. Corbett, Musquash, secretary-treasurer; F. H. Wetmore, Hampton, C. M. McLean, of Sussex, J. G. McDougall, of Amherst, Rev. Robt. Laing, of Halifax, St. C. J. Gallant, of Charlottetown, executive committee.

The next meeting will be held at Halifax on the day previous to the meeting of the Maritime Association.

Most of the delegates took in the excursion to Partridge Island. While there the new quarantine buildings were inspected, and lunch put up by Lang was partaken of. Different toasts called out speeches by His Worship Mayor Daniel, Dr. James Christie, Dr. Farrell, of Halifax, and Drs. Laphorne Smith and Armstrong, of Montreal. The party returned in the *Dirigo* for the evening session, at which Dr. Geo. A. Hetherington presided.

A discussion in surgery, subject, "Spinal Deformities," was opened by Dr. Farrell, of Halifax, and was spoken to by Dr. W. Christie, Dr. N. E. MacKay, of Halifax, and Dr. Armstrong, of Montreal.

Dr. MacKay presented a paper on "Case Reports." (a) "Caesarian Section," (b) "Gastrostomy."

A paper on "Gall Bladder Surgery" was read by Dr. Geo. Armstrong, of Montreal, after which the session adjourned.

The outside physicians who registered in the afternoon and evening were: Drs. R. Ross, Albert; E. B. Chandler, Moncton; J. McDonald, Petitcodiac; S. Jenkins, Charlottetown; A. McD. Morton, Bedford; J. Burnett, Sussex; N. F. Cunningham, Dartmouth; A. B. Atherton, Fredericton; G. D. Farish, Yarmouth; H. L. Dickey, Charlottetown; H. P. Reynolds, Lepreaux; E. H. Mullin, St. Mary's; E. B. Fisher, Marysville; F. P. Patterson, Westfield; J. A. Caswell, Gagetown; P. Conroy, Charlottetown; J. S. MacKay, Earltown; J. E. Nugent, Briggs' Corner.

Dr. Atherton, of Fredericton, opened this morning's proceedings by exhibiting a large number of gall stones which he had taken from patients. He explained the various cases and his treatment of them. Referring to Dr. Armstrong's paper of the previous evening, he wished to thank Dr. Armstrong for his valuable information, but wished that the doctor had gone more fully into the diagnosis of cases.

Dr. W. S. Muir, of Truro, who followed, expressed the same wish. He then went on to speak of cases which had come under his attention.

Dr. Murray MacLaren wished to add his word of gratitude to Dr. Armstrong. He also cited some phases of cases that had come under his professional care.

Dr. T. D. Walker and Dr. Skinner asked for information about cases.

As the demand for information seemed very general, Dr. Armstrong continued his subject, paying particular attention to the questions asked.

The nominating committee reported as follows: Dr. W. S. Muir, Truro, president; Dr. Thos. Trenaman, Halifax, vice-president for Nova Scotia; Dr. Ross, vice-president for Prince Edward Island; Dr. Inches, vice-president for New Brunswick; Dr. G. M. Campbell, honorary secretary; Dr. T. D. Walker, honorary treasurer; Drs. Farrell, Wickwire, Curry, Kirkpatrick, Tobin and C. D. Murray, local committee.

The report was received, taken up by sections, and adopted.

A number of accounts were ordered paid.

Dr. T. D. Walker, treasurer, reported a balance on hand of \$191.85. The expenditure during the year was \$44.75.

Dr. McNeill's letter was then taken up and discussed.

Dr. Farrell, speaking on the matter, said they had to look at the matter of interprovincial registration as it stood. Dr. Roddick's bill to Parliament had never yet seen the light. Whether it would become law he could not say. The medical councils had never yet met in conference on the matter. It would be easy for these councils to take up the question, as it came legitimately under their control and they had funds for such purposes.

Dr. Armstrong said he understood from Dr. Roddick that he had thought it wiser to wait another year before pushing his bill.

Dr. Farrell, seconded by Dr. S. Jenkins, offered the following resolution: "That this meeting desires to express its sense of obligation to Dr. Roddick for his unceasing efforts to obtain Dominion registration, and to assure him of the continued support of the Maritime Association."

The sum of \$5 was voted to the janitor of the institute for his services.

On motion, it was decided to send a telegram of sympathy to Dr. McLeod, of Charlottetown, who is seriously ill. Dr. Muir and Dr. Conroy were appointed a committee to prepare the telegram. A message of sympathy and best wishes for speedy recovery was sent.

Dr. C. D. Murray, of Halifax, opened a discussion on arteriosclerosis, presenting a very carefully prepared paper on the subject.

Dr. Stewart Skinner and Dr. T. W. Walsh, Halifax, also discussed this subject.

The following telegram, submitted by the committee appointed, was sent to Hon. Dr. Borden:

"Hon. Minister of Militia, Ottawa:

"Resolved, That your fellow members of the medical profession at the meeting of the Maritime Medical Association, now being held in St. John, desire to express to you their sincere sympathy in the loss of your soldier son, Lieut. Borden. We honor our patriot dead."

Dr. Melvin next presented a most interesting paper on skin diseases. He exhibited four cases of diseases, which he made particular reference to in his paper.

Dr. James Ross, of Halifax, followed Dr. Melvin, and discussed further certain forms of skin disease.

On motion, the meeting adjourned until 2.30 p.m.

At the afternoon session there was a discussion on gynecology—subject, "Retro-Displacement." The debate was opened by Dr. Conroy, of Charlottetown. Dr. Atherton, Fredericton, and Dr. Murphy, Halifax, spoke on the subject.

Dr. James Ross read a paper on improvements in urethral instruments.

Reports of Caesarian Section were presented by Dr. T. D. Walker.

After the adjournment some of the members were entertained at the Golf Club, Mount Pleasant.

Dr. Stewart, Halifax, opened the evening session by the reading of his paper on movable kidney.

A paper on appendicitis was read by Dr. Chisholm, of Halifax.

Dr. J. E. March read a paper on the bubonic plague.

A treatise on pelvic abscess was read by Dr. Murray McLaren, and discussed by Dr. Smith and Dr. Armstrong, of Montreal.

After the meeting an enjoyable smoker was held. The programme consisted of solos by Messrs. J. N. Sutherland, J. T. Hartt, Ralph March, A. H. Lindsay and A. Massey. Music was rendered by Harrison's orchestra. The mayor, Dr. Daniel, presided at the festivities.

HURON MEDICAL ASSOCIATION.

The regular quarterly meeting of the Huron Medical Association was held in the City Hall, Stratford, on Tuesday, July 10th, 1900, when the following members were present: Dr. Graham, Clinton, president; Dr. Shaw, Clinton, secretary-treasurer; Drs. Smith and Armstrong, Mitchell; Dr. Gunn, Clinton; Dr. Stanbury, Bayfield; Dr. Steele, Tavistock; Dr. Whiteman, Shakespeare; Dr. Paul, Sebringville; Dr. Nichol, Sebringville; Dr. Snider, Brussels; Dr. McKenzie, Monkton; Dr. Lang, Granton; Dr. Irving, St. Mary's; Drs. Deacon, Devlin, J. A. Robertson, W. N. Robertson, Rankin, Monteith, Dunsmore, Stratford; Dr. Parke, Woodstock.

Dr. Snider, of Brussels, read an interesting paper on "Diet in Bright's Disease," which elicited much discussion.

The Association was driven to the chief places of interest of the city by the Stratford members, and then entertained at luncheon at Dr. J. A. Robertson's handsome residence.

After adjournment Dr. Paul presented a case in practice.

Dr. McKenzie read a paper on "Chicago Clinics," which was much enjoyed by the members, as well as proving profitable. Then followed a discussion on Dr. Shaw's paper, which was read at the last meeting.

Dr. Dunsmore then entertained the members with a general talk on medical matters.

After routine business the meeting adjourned.

ROENTGEN SOCIETY OF THE UNITED STATES.

The Roentgen Society of the United States will meet in New York City, December 13th and 14th, 1900, at the Academy of Medicine. Papers have been promised by eminent men abroad and here, and a very successful scientific meeting is assured.

There will be offered advantages to the visiting members for

instruction in X-ray work that cannot be had under any other conditions. It is especially desired that all hospitals using X-ray apparatus, X-ray studios, physicians, surgeons and dentists doing X-ray work, scientific investigators, manufacturers and dealers in X-ray apparatus of all kinds throughout the United States, should at once send their names and addresses to the chairman of the committee of arrangements, Dr. S. H. Monell, 43 East 42nd Street, New York City, N.Y., so that they may be sent important notices regarding the meeting.

This society is the only one of its kind in America, national in character, and for scientific purposes only.

Yours very truly,

J. RUDIS JICINSKY, M.D.,
Secretary.

P.S.—All those wishing to become members, or read a paper before the Society, may communicate with the secretary.

THE AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNECOLOGISTS.

The American Association of Obstetricians and Gynecologists will hold its thirteenth annual meeting in the Assembly room of the Galt House, Louisville, Ky., Tuesday, Wednesday and Thursday, September 18, 19 and 20, 1900, under the presidency of Dr. Rufus Bartlett Hall, of Cincinnati, O.

The following-named papers have been offered :

1. President's address, R. B. Hall, Cincinnati.
2. Ovarian fibroma—case with microscopical report—L. H. Laidley, St. Louis.
3. Cholelithiasis—with report of cases—H. E. Hayd, Buffalo.
4. Appendicitis during pregnancy, Charles G. Cumston, Boston.
5. Diagnosis of ectopic pregnancy before rupture, based on ten cases, J. F. Baldwin, Columbus.
6. Three cases of extrauterine pregnancy, with specimens, W. B. Dorsett, St. Louis.
7. The private hospital, Joseph Price, Philadelphia.
8. Paper (Title undetermined), E. F. Fish, Milwaukee.
9. Paper (Title undetermined), C. C. Frederick, Buffalo.
10. Extirpation of the rectum and sigmoid per vaginam, John B. Murphy, Chicago.
11. Paper (Title undetermined), H. O. Pantzer, Indianapolis.
12. Paper (Title undetermined), J. H. Carstens, Detroit.
13. The hymen—of what significance is its presence or absence in determining virginity, John Milton Duff, Pittsburg.

14. Paper (Title undetermined), W. P. Manton, Detroit.
15. Paper (Title undetermined), F. Blume, Pittsburg.
16. A satisfactory method for suspension of the uterus, Robert T. Morris, New York.
17. Paper (Title undetermined), H. W. Longyear, Detroit.
18. Some points regarding surgery of the gall-bladder, A. Vander Veer, Albany.
19. Surgery of the liver and bile ducts, W. G. Macdonald, Albany.
20. Observations respecting malignant disease of pelvic organs, Augustus P. Clarke, Cambridge.
21. Paper (Title undetermined), M. Rosenwasser, Cleveland.
22. Bilateral celiotomy and shortening of the round ligaments for complicated retroversion of the uterus, A. Goldspohn, Chicago.
23. Paper (Title undetermined), W. B. Chase, New York City.
24. Paper (Title undetermined), Charles A. L. Reed, Cincinnati.
25. Round ligament ventrosuspension of the uterus, D. Tod Gilliam, Columbus.
26. Paper (Title undetermined), L. S. McMurtry, Louisville.

The titles of papers are announced in the order of their reception. The permanent programme will be classified and issued about August 25, after which date no further titles can be added or changes made in the printed programme.

A cordial invitation is extended to the medical profession to attend the several scientific sessions of the association.

Special Selections.

INEBRIATE CRIMINALS AND THEIR TREATMENT.

By T. D. CROTHERS, M.D., Hartford, Conn.
Superintendent Walnut Lodge Hospital.

This class of inebriates is quite numerous in all the large cities and manufacturing towns, and is also prominent in seaports, and on the frontier of civilization, and yet, as a class, it has never been studied. It forms a conspicuous element of the great understratum of the dangerous classes and permeates all ranks of society, from the hovel to the palace. It occupies an uncertain and anomalous position in the estimation of the public, and is either regarded as debased criminals and paupers, requiring severe punishment, or as insane, and totally irresponsible.

A careful study of the literature of inebriety reveals the startling fact that many of the theories and deductions of inebriety are based on the superficial observations of criminal drunkards.

To illustrate: The superintendent of an insane asylum who has a number of this class under treatment, finding the alcoholic symptoms disappearing, and the criminality prominent, denies the disease-theory of inebriety. In the same way, the penitentiary and almshouse physician, finding only vicious symptoms in the inebriates under his care reaches the same conclusion. The judge on the bench, the lawyer in court, and the daily press, each forms a theory of inebriety which he puts forth with confidence, and thus the public has the most complex and erroneous views. Up to this time, no general study of inebriety has been made which includes all classes, hence this confusion of both theory and treatment.

In much the same way the student of any phase of insanity, who has seen many cases of melancholy, or dementia, and who builds up a theory of cause, pathology, and treatment based on these cases, announcing authoritatively that it comprehended them all, would be in error. In this way, much of the literature of inebriety is based on the imperfect studies of particular classes, and especially the classes we are to consider in this paper.

What we need is a comprehensive study of the whole subject from a higher standpoint. The great underlying laws and principles governing this disorder are yet to be discovered. In a study of this class, two divisions naturally present themselves, with distinctive causes, which, although they run parallel, yet are quite different in many respects.

The first class are the inebriate criminals, which becomes so by

the conditions of surroundings and accident, and from special external predisposing causes. Sometimes an inherited neurosis is present.

The second class always begins with physical degeneration of the brain and nerve centres—either arrested development, or general perversion of function and structure. They are born criminals or inebriates. In the latter class, the criminal and insane diathesis is always present; in the former, the neurosis is not marked, but is frequently masked for a long time, then breaks out suddenly.

It will help us to note some of the general symptoms which appear to the ordinary observer. As a class, they are the "fast men," such as gamblers, travelling men, showmen, patent-right swindlers, dealers in alcohols and tobacco, etc. Lower down they are bar-room loafers, hack-drivers, low workmen, street-tramps and beggars, etc. As criminals, they commit crimes against property, and rarely against persons; always acting under a diseased impulse, which ignores everything but the selfish gratification of the body. As inebriates, they drink impulsively, without any special exciting cause, or remain sober an indefinite time without special reason or purpose. Frequently they have strong mental and physical capacities, coupled with great defects, and with more or less power of concealment. Hence, they often take advantage of those who come in contact with them. As a rule, they are treacherous, cowardly, and sensitive, full of impulsive delusions, and governed by no motives except the lowest, and these of the present moment. Audacity is another common symptom; cupidity, and strong dislike for work, and general disgust for regular living. Improvidence is also prominent in nearly all conditions.

As patients coming to inebriate asylums, they are almost always very much reduced in mind and body, either having had delirium tremens, or are on the verge of it. At first, they are extremely penitent and give much promise of permanent recovery. But in a few days all is changed; they lapse, becoming low intriguers, exhibiting a wilful cunning and disregard for the rights of others that is deplorable—abuse all privileges, drink and procure spirits for others, and respect nothing but force, and are most difficult and troublesome patients. Such are some of the general facts of the symptomatology.

To inquire more particularly into the history and causes, we shall find the first group quite prominent: Namely, those cases in which the inebriety seems to spring from conditions of surroundings or accident, and from special external predisposing causes; always associated with criminality and often an inherited insane neurosis.

One of this family group may be illustrated in the following case: C. D., born and reared in a very careful manner by strong-

mindful and exemplary parents, surrounded by every good influence which wealth and social standing could bring. His father was a banker and speculator, leading a life of more or less excitement, although perfectly temperate. His mother was neuralgic, and of a sensitive, excitable disposition. He was in no way different from other boys up to sixteen years of age, when his parents both died within a year, and he came into possession of a large amount of property. He fell into the hands of some sharpers, who rushed him through a short career of dissipation, both robbing and entangling him with a gang of gamblers and thieves.

From this time he became an accomplice of gamblers and thieves and three-card monte men, alternately drinking and associating with the lowest of this class. At twenty-two, he served two years in prison for burglary. At twenty-six, twenty-nine and thirty years of age, he served short sentences for swindling and drunkenness.

Then his friends placed him in an inebriate asylum, as a periodical inebriate. He did well until he regained physical strength, when he displayed the most audacious criminality. Reasoning and acting from the lowest motives, bringing in spirits and becoming intoxicated for the purpose of committing violence; when the drink craving was over, exhibiting great penitence, and all the time stealing and appropriating whatever he could find. All sense of right and wrong seemed absent. His entire study seemed to be to procure the fullest gratification of every emotion and passion. He drank constantly, and when restrained became revengeful, and was the centre of intrigue, defying all efforts to control him unless by physical force. He was not passionate, or very irritable, but fawning and penitent, and at the same time taking advantage of every opportunity to both drink and steal. He was discharged, and went back to his old circle of surroundings, and is now serving a sentence of five years for larceny.

This is a strongly marked case, where accident of conditions and surroundings produced a criminal inebriate from an organization with large passions, and only average moral and mental powers. He may have inherited a weak, impulsive, nervous system from his parents; this, with bad surroundings at a very susceptible period of life, would only follow a natural law in developing this way.

Another case with more marked predisposing influences, has fallen under my observation. H. O.—father a clergyman, and very eccentric; mother very irritable and passionate, sometimes doing violence; the grandfather on his mother's side was drunken; some of his father's family were of doubtful reputation. Both parents dying when he was five years of age, he was taken by an exemplary farmer, and brought up in excellent surroundings and

influences, and was in many respects a model young man ; a member of a church, with a quiet manner, and easy disposition, inclined to melancholy. At eighteen he went to the city to a large house. Here he fell into bad company, and drank, and finally proved to be a defaulter, and was sent one year to prison. On coming out he went back to the city and became a bar-keeper, leading an irregular life of drinking and general dissipation. From this time he became an accomplice of thieves, receiver of stolen goods, and travelled about the country in the interest of criminals, and apparently with no business. At length he was convicted of bank robbery and sentenced for five years. After serving this sentence, he was employed as an auction clerk and runner. Sometimes he would remain sober for months, then drink very hard, commit some violence, be arrested, and serve a short sentence. He was brought to an inebriate asylum, suffering from delirium tremens. Recovery was slow, and he seemed very penitent, giving much promise of permanent recovery. A few weeks later he was caught surreptitiously selling liquor to patients, which he had stolen from the railroad freight depot. All disguise was thrown off, and he boldly defied all authority, stole, and planned all sorts of means to procure spirit and money, rarely drinking himself so that it could be noticed. He submitted to restraint, when it was sustained by force, without opposition, seemed to possess no delusions except to gratify a malicious spirit and the lowest cravings of his nature. He was expelled, and on his way to New York was arrested for highway robbery, and sent to prison, where he died of consumption a few months later.

This case was more positively the result of inheritance than the first. Had he remained on the farm he would probably have lived a correct life, and been a good citizen ; but a change of circumstances and conditions made him a criminal inebriate. The diathesis was present, and its peculiar train of exciting causes developed it.

The conditions and surroundings which develop inebriate criminals exist in all our large cities. They are, bad sanitary conditions, with irregular, unhealthy living, sleeping in bedrooms insufficiently lighted and ventilated, and living on bad, innutritious food, also in a bad mental atmosphere. Add to this the continued indulgence of all the impulses and passions, in surroundings full of the contagions of bad examples, and the result is inevitable. There is a constantly widening perversion from the natural standard of mental and physical health. Exhaustion and drinking begin early, followed by degeneration, which affects the entire organism. Ambition dies out except for the most selfish gratification. Criminality grows out of these surroundings as naturally as weeds spring up in a neglected garden. The evils they suffer from perpetuate

themselves, and grow more and more rank. All effort to rise to better conditions of living and acting involve the exercise of powers which are either wanting or are feebly developed, or long ago crushed out by the predominance of other elements. As criminals, they always lack the boldness of experts; usually they are followers acting under the guidance of others, and are sneak thieves, petty swindlers, gamblers—ready to engage in any scheme that will furnish sources of gratification to their passions, without much danger or special labor. As inebriates, they drink insanely for a time, governed by circumstances and conditions. If we examine this class more minutely we shall find that they divide again into two groups, and as such may be studied practically in our asylums.

The first class come from bar-rooms, and low haunts of every character; they are usually without any fixed employment, and have been reared in idleness.

Originating in the middle and wealthy classes, or in those inheriting large amounts of property, they have grown up without any fixed purpose in life. Not infrequently they have squandered their patrimony, and been placed in positions where all efforts to help themselves have more or less resulted in failures.

They are ordinarily marked by their weak mind and unbalanced judgment, suffering from neurosal and mental troubles, and filled with delusions of oppression and wrong at the hands of others. Conscious that society is at war with them, and its methods antagonize the full play of their passions, they accept the situation and never seek to change or vary the conditions. But they rapidly become beggars, criminal paupers, robbing their relatives and friends; also lapsing into communists, full of all the small vices, ready at any moment to aid in crime, or take advantage of any weakness, licentious and drunken at all times, and resorting to the lowest devices to gratify their impulses. Syphilis and general degeneration are common—improvidence, fawning and audacity are marked. In many cases they possess an average or superior brain power, probably coupled with a defective moral force, and general want of control. From accident of surroundings all the lower elements of nature are developed. They are more prominent as inebriates than as criminals, and often do criminal acts under the cover of apparent drunkenness. This class are the skeletons haunting their friends continually for money and support, rarely committing noted crimes, but always in centres of low dissipation.

This second group is made up of clerks, travelling men, peddlers, gamblers and swindlers of all kinds. They are higher up than the last class, and possess a degree of activity which is evidence of a more active brain power. Quack doctors, police, lawyers, defaulters, and

patent swindlers are of this class. They most frequently inherit an unbalanced organism, a distinct or obscure diathesis; and have family history of insanity, epilepsy, inebriety, syphilis, criminality, cancer and consumption.

Like the first class, they are largely the outgrowth of the surroundings, originating in bad sanitary and moral influences in early life. The worst phases of this class are seen on the frontier, as miners, speculators, and gamblers, or in business centres of large cities, as brokers, agents, and middle men, who are ready, with any excitement or excuse, to defy law and order. As communists and railroad rioters they have attracted much attention for some time. Frequently they are filled with delusions of wealth and power, are superstitious of fate and chance, and alternate between hope and despair. Failure follows in nearly all circumstances of life, and is attributed to others, and the wrongs they suffer at their hands. While complaining bitterly of the dishonesty of others, they continue to cheat and drink in an aimless, impulsive way. Not infrequently they use alcohol to conceal the real motive, and to shield them from the consequences of crime. Recently they have appeared in the temperance work in great numbers, and have been noted as defaulters in coffee-house enterprises and as lecturers recounting their experience, and soliciting help to build up again, etc. With a degree of sharpness and low cunning that is rarely obscured by drink, they have found the various temperance movements of the day a field for the fullest play of all their talents, which they are not slow to occupy. They may be truthfully called the temperance tramps of the day. As inebriates they are noted for their marked periods of sobriety, and the unexpected insane-like relapse, which seems to be partially under the control of the will. After the fullest gratification of the disordered impulses, they stop short and seem to recover. They commit crime in this impulsive, unreasoning way, confusing courts and juries as to the motive present. In asylums and in prisons they are always the most hopeful, and are sure to create sympathy, and gather about them friends which they sooner or later victimize.

In both of these groups the surroundings and predisposition to criminality and inebriety are about equally developed; sometimes one predominates over the other, and in some cases they exhibit much skill in concealing the one or the other; chronic suspension or enfeeblement of the will and moral power is present in all cases. They never realize anything but the fullest gratification of all their faculties as the ideal of life, and criminality and inebriety are the best means to this end. Like all the other classes, they suffer from neurosis disorders, such as exhaustion and chronic disease. In the second general division, most of the cases inherit a special degeneration of the nerve centres. Either from a non-development or a

general perversion of functions and structure, they are both born inebriates and criminals.

This class is usually marked in every community; their irregularities of living and mental peculiarities, as well as physiognomy, can not be mistaken. They appear as inebriates in all grades of crime, and are seen in prisons, hospitals, and work-houses all over the world; although they are not so commonly seen in inebriate asylums as the first class, yet they are frequently studied in courts of law and insane asylums, as types of inebriates. Not infrequently they are moral imbeciles, that drift up and down the world like ships without a rudder. In a study of the general symptomatology, the irregularities of life and want of physical development. They are commonly noted by a large, coarse frame, or an overgrown head and imperfectly developed body; angular projection of the face, such as the eyes, nose, and mouth, out of all proportion; the presence of moles or freckles, the hair thick and coarse, or thin and straggling, etc. The entire body seems to be stamped with the signs of imperfect development and degeneration. In some cases all these external signs are wanting. This class of men are found in the lowest stratum of society performing the most menial work, or higher up, they are soldiers, sailors, bar-keepers, and adventurers, highwaymen, burglars, etc., following civilization like parasites, the most lawless and dangerous of men. They are also seen along the line of rivers, canals, and on the sea-boards, etc. They are committed for crime against both person and property, and constitute over 60 per cent. of all the inmates of prisons and jails. Not infrequently they occupy places of trust high up in society, and when tempted, fall precipitately, and puzzle experts and judges to determine between insanity and criminality, and the measure of responsibility.

The inheritance of disease is more marked in this class than in all others. Dr. Stevenson remarks: "There can be no question but that heredity exists in the mental as well as the physical world, and that the diminished stability of organism and perversion of physical function are transmitted with as much certainty as the germs of disease; that brain structures receive certain tendencies from inheritance, which bind it down or control its future, or that it has a certain capacity for impressions and energy of organism which goes with it always after."

This expresses clearly the doctrine of heredity which is now accepted as a well established fact. The inebriety of this class is of the same order of neurosis as insanity, and depends upon some molecular change of nerve tissues, which coming down from parent to child fixes the moral and physical character with much certainty. In other words it is a symptom of physical degeneration of the nerve centres, an outward expression of an inner condition

of development like that which generates low and vulgar ideas, having their counterpart in brutal instincts and words; always connected more or less with diseased and undeveloped nerve structures. All this is confirmed by clinical histories of numerous families, where for generations the criminal insane and inebriate neurosis has developed in one or more of the family.

Such persons possess a distinct neurosis, which manifests itself either in inebriety, insanity, epilepsy, criminality or pauperism; or, very commonly, two or more combined in one.

This degeneration may not be tangible to any physical examination, but later the autopsy and microscope often indicate distinct cell changes. Many of these cases are purely psychological, marked only by special symptoms which are often in themselves very obscure and sometimes associated with much intellectual vigor and genius, and display of great strength and weakness. The impairment or loss of the higher moral faculties, leaving the intellect clear, is a field of much obscurity, and beyond the fact that such is the case, little is known.

With this statement of the general facts, which seem to indicate the condition of organism and origin of these cases, we shall pass to a special consideration of some of the groups. First are those in which the inebriety seems more prominent than the criminality. They are seen quite frequently at inebriate asylums. Usually suffering from general exhaustion, they recover slowly, and entertain delusions amounting to delirium at times. They are very penitent during this time, and exhibit a humility and determination to reform that is almost abject. On recovery, they become sensitive, assuming, and boastful, and all the low criminal tendencies come out prominently. They interfere and meddle with a malicious spirit, creating trouble everywhere—are extremely slanderous and boastful, delighting in low stories, and low thoughts, complain bitterly of deprivation of their liberty, find fault with everything, and are changeable in disposition and insolent beyond measure. They are untruthful to an extreme degree and have no respect for their word, or for the judgment of others. They drink at all times and places, using all kinds of intrigue to accomplish this end. They will steal anything from their best friends, such as articles of clothing, furniture, and even food from their families and children to procure drink. Nothing can exceed the degradation and suffering which they relentlessly inflict on their nearest relations to gratify this one object.

In an asylum they are always running away, drinking and bringing liquor for others, stealing articles for the pawn-shop, and often not drinking to intoxication, but aiding others beyond that point. They are often agents for more designing men, who take advantage of their situation when drinking to stimulate them to

crime, which they are ever ready to engage in. In all situations they are continuously criminal in thought and act; and inebriates with every opportunity. After a wretched life from the station-house to the jail, or prison, and the low haunts of large cities, always hunted down like beasts of the chase, they become exhausted and suicidal, either dying by their own hands, or going into the insane asylum.

The second class is more prominent as criminals than inebriates. They are cool and calculating, totally destitute of any moral sense; drink at times very hard, then remain sober under the press of circumstances for a long time. As an illustration: One of this class drank nothing for over two years, although in centres of great temptation, that he might get in a position to accomplish a crime. When this was over, he was very intemperate. Often they are victims of vicious, uncontrollable passions and impulses, over which they are powerless. Epilepsy, insanity, and pauperism are common phases. They are wanting in pity or lasting kindly sentiment. Have little or no natural reason to check them, and never seem to realize the evil which follows their acts, or the suffering they cause others. Turning against their best friends on the slightest pretext, they have no affection for anyone except the most selfish—when this is broken, treat all as enemies.

Prudence is wanting in nearly every one of this class, and is only stimulated and controlled by selfish interest or fear of punishment. In some cases violent passions, such as hatred and revenge, seem to control or be the motive-power in drinking. In the asylum, nothing but force with locks and bars will make any impression. Sometimes they remain sober for a long time and seem to recover, but the criminal cunning of their nature and want of kindly sentiment are always apparent. Often they cloak all their diseased impulses to accomplish some purpose, and exhibit great skill—appearing in the role of reformed men, gathering about them a wide circle of influences and credulous friends, then, all unexpectedly, victimizing them all, and relapsing as both a criminal and drunkard. They are, in many cases, on the borderland of insanity, and both talk and act like the most insane men—are unaccountably vicious and drunken; these extremes seem to follow each other with startling rapidity. Audacity is one of the most prominent mental traits of this class, and is always of a low grade—usually the blind impulse of a low, unreasoning man. These cases are usually the result of certain conditions of inheritance, from which the recovery is difficult. They are sooner or later crushed out in the march of events.

There is another class not so prominent, but more familiar to managers of inebriate asylums, which combine many of the symptoms of both of these classes. Inheriting the unbalanced organism,

and frequently the special criminality of the last class, they are like the first class, creatures of the surroundings, and moulded by conditions of life and success. Always combinations of great ambition and weakness, impulsive and unreasonable at times, full of great expectations and constant failures. At one time drinking hard or committing some petty crime, thoroughly discouraged and reckless, then buoyant with hope and daring schemes for the future. Without judgment or prudence they always fail, then resort to stimulants to drown their feelings, or in reaction from the change. They are sober men in the high tide of expectation, when all is clear and the path is smooth, but from the first obstacle or discouragement drink precipitately. When they come to the asylum they are melancholy, and rave against fate, and after a time have high expectations of getting well, but never work for it, trusting it all into the hands of their friends. Although planning for the future they seem to be governed by the knowledge of their past failures and relapse on the slightest temptation or source of irritation. After a few weeks' residence in an asylum, they clamor to be released, and make all their surroundings very disagreeable, often relapse and get turned away, and go to another asylum, and react the same scenes over. In the meantime try various methods for cure, keeping their friends buoyed up with hope that is never realized. At one time they are plunged into the deepest melancholy, and not infrequently commit suicide. If they commit crime, it is of a petty character and against property. They are usually filled with delusions that they can do what others cannot, and will escape where others fail.

These cases come from good families and surroundings generally; and are often sporting men, and politicians and followers of new movements and new creeds of religion, or active patrons of lotteries and games of chance, buyers of chances in Wall Street and pools at a horse race. If they win anything they drink in elation, and when drunken for a time grow melancholic, and want someone to help them get well. These cases end often in paralysis, epilepsy, and suicide. Such are some of the most prominent facts which a study of these classes reveal.

We come now to the practical consideration of treatment. Here we find the management of inebriates passing through the same stages as that of insanity. The care of the insane was for many years without system and classification, and this was one of the greatest obstacles in the successful treatment of this class. The testimony of writers and observers is unanimous in condemning the system which places all classes of insane together. The effect on the mind, by contact with others of a different form of disease, is not infrequently the starting point of a condition more or less chronic. The general want expressed by all observers is facilities.

for a more perfect classification, so that the surroundings shall aid and not present any obstacles in recovery.

In an examination made some years ago of the Alms Houses in New York State, the fact was demonstrated that a large per cent. of the inmates were born and bred in those places. From want of proper classifications, conditions of surroundings had sprung up which produced annually a large number of paupers, or so infected others that they could never rise from their surroundings. If this is true of pauper homes and asylums, where the lowest grades of mental and physical development are gathered; where the higher moral forces are blunted, and the susceptibility to surroundings lessened; if this is true of insane asylums, where the cloudy and distorted reason, and the confused intelligence and consciousness of the present and past exist only in part, realizing its conditions and surroundings, what may we not expect in inebriate asylums, where the acute, sensitive brain and the impulsive reason responds to the conditions of surroundings as the needle follows the magnet?

If classification is the indispensable condition of the successful management of these institutions, how much more so in inebriate asylums? Here our patients suffer from both a physical and psychological disorder, requiring more than locked wards or agreeable rooms.

We must all add to our physical treatment and forced abstinence, protection from contagious moral forces that intensify and destroy all healthy growth towards the higher levels of life. The want of this proper classification diminishes the practical results of all our asylums, and gives credence to diverse theories and deductions. Our authenticated statistics of thirty-three per cent. as permanently cured should be doubled, and the public should recognize in inebriate asylums the most practical charities of the age.

In our struggle against skepticism and credulity of an ignorant public, we are prevented from making proper classification by want of facilities and means. The acute and chronic cases are forced upon us, and we can make but little division except from some pecuniary standard. Our asylums must be self-supporting, and we cannot discriminate between the patients of a state institution or an endowed asylum. Hence the acute, chronic, criminal, insane, epileptic, and pauper inebriates are seen side by side in all our institutions.

All the bad effects of contagion and the perils of temptation, with the difficulties of management, are increased to a high degree.

We are confirmed in this statement by the experience of all observers, that every asylum in this country is suffering, more or

less, from the presence of this criminal class. The liberty of these asylums, and the kindly appeals to the higher moral nature of the patient which they often do not possess, or have feebly developed, make no impression, but rather gives opportunity for more easy deception and imposition on the good will of those about them. Appeals to religious sentiment of this class not infrequently gives them a kind of education which they are quick to take advantage of in the future, developing religious imposters who never fail to use this power to their advantage.

If the restraints are imperfect, we lose the confidence and co-operation of the patient, and stimulate his mind into opposition and constant endeavors to thwart and destroy its effects. Unless our discipline is thorough and stimulating in all its parts, and rigorously enforced, we are educating these men into methods of intrigue, and building up contagious forces, increasing the difficulties of management, and lowering our reputation in the public estimation.

In 1873, I concluded a paper on the management of inebriety in the Albany Penitentiary, as follows: "The sharp discipline of prison life filling the mind with new duties and ambitions, employing the energies in physical labors, is particularly fitted to strengthen and develop the feeble impulses, and to control the diseased longings—this is the basis of reform. Military discipline and occupation of both mind and body, indicates the most hopeful promise for the future."

These statements were based on the observation of criminal inebriates, and are correct, but do not apply to the management of all inebriates. If we admit patients of this class, we must have means to enforce obedience, and make relapse almost impossible. They must be separated from others, and placed under a rigid military discipline, which will have care of all their habits and surroundings, punishing all violations with certainty and exactness, and under no circumstances relaxing the military surroundings in less than from two to four years.

As in an insane asylum, the acute maniacs who are violent and destructive need special care and watching, while the harmless and demented need but little more than shelter and food, so the criminal inebriate must have enforced conditions of living and surroundings, while inebriates of other classes need, besides the physical treatment, the direction and guidance of an asylum.

There is another class of patients called repeaters, who are compounds of criminals and pauper inebriates, although quite frequently wealthy or having wealthy friends. They go from one asylum to another, like tramps, and bring odium on all, disobey the rules, are a source of infection and annoyance to the management, and are often taken as the types of all others. Without

facilities for classification, or means to enforce long residence or total abstinence, we are throwing away time and opportunity in all efforts to help or reform this class of inebriate criminals. There would be more hope for criminals in the present system of punishment in jails and penitentiaries, if the sentences were made for years instead of months. The English prison reports indicate a number recovered from inebriety, among those of this class, sentenced for a period of years. The danger of the present system is that short sentences intensify and fix their condition, isolating and building up a dangerous class, from which recovery is rare. This is owing to the imperfect system of classification, by which all are treated alike, and without regard to marked difference of intellect, development and character.

We repeat, the inebriate criminal must be classified and treated by distinct methods. He must be separated from the ordinary patients of an asylum; and only by this means can we show the public the true value of our work.

The time has arrived when we must be estimated by different standards than those set by the self-important lunacy specialists, or the superintendents of insane asylums, based on superficial studies of the pauper and criminal inebriate; or the authoritative dictum of the judge, founded on scientific quotations from books more or less obsolete; or perhaps the imperfect study of some case of a chronic character. The public must realize that inebriety cannot be understood and managed successfully except by continuous study in asylums, in the hands of competent men. The key which shall unlock the mystery of many of the widespread disorders growing out of the use of alcohol will be found only after a long study of the entire subject.

We stop here, only adding that our work is a pioneer one, and that, stretching out in every direction, are divisions and topics of this subject which we must study and understand before we can build up model asylums, and manage them with the success that it is possible to attain.

A *resumé* of what we wish to make prominent is included in the following:

1. This class of inebriate criminals is numerous, and is generally studied as types of all others; and, unfortunately, they furnish the basis upon which much of the literature of inebriety is founded.
2. They are composed of several classes, more or less distinct, requiring a comprehensive study of conditions and surroundings.
3. As patients in inebriate asylums they are extremely difficult to manage, often bringing odium upon the asylum, and receiving little benefit from it.
4. In the treatment they should be classified and put under a strict military discipline, in which labor is a part of the treatment, and this continued for months and years.

5. A removal of this class in our asylums will increase the per cent. of recoveries largely ; also a more thorough study of the different classes of inebriety will reveal many facts, and clear away much of the confusion at present existing.—*The Alienist and Neurologist*.

WHY I USE PEPTO-MANGAN "GUDE." AN EXPERIMENTAL DEMONSTRATION.*

BY WM. KRAUSS, PH.G., M.D., MEMPHIS,

Director of the Microscopic Laboratories, Memphis Medical College ; Pathologist and Visiting Physician to St. Joseph's Hospital, e.c., etc.

Some five years ago I wrote a paper for the *Memphis Medical Monthly*, giving a *résumé* of the evolution of the iron compounds, and appended a report of cases giving blood counts, etc. The manufacturers of the preparation I preferred saw fit to reproduce the case reports in their pamphlets, but said nothing about the reasons that induced me to prefer their product.

At a recent joint meeting of physicians and pharmacists I was criticised for opposing the use of ready-made compounds, while still advocating the use of Pepto-Mangan "Gude," which is a proprietary preparation. I hesitated considerably about bringing the matter up again, because I dislike to build up a reputation as an endorser, and have never in any other instance written an article endorsing a proprietary preparation.

I hope, however, to show you this evening that there is no pharmacopeial preparation that meets the requirements of an ideal iron compound, and, until this is found, I intend to continue to use what has never disappointed me, and is not based upon mere faith. The work of Bunge is too well known to be now quoted, and I will only make a few experiments before you this evening and show the reasons for the faith that is in me. There may be other proprietary iron compounds, and doubtless there are, that will come up to the same requirements, but I see no advantage in swapping the devil for the witch.

It is not necessary to repeat all the tests with all the official iron preparations, because they are divisible into groups, all the salts of one group behaving very much alike toward the gastric and intestinal juices.

An ingenious theory recently put forward regarding the action of the mineral salts of iron is, that they decompose the substances in the intestinal tract which precipitate the *food iron* so that it may

*Read before the Memphis Medical Society.

be absorbed. This is the only rational explanation of the fact that we do occasionally get results from them. On the other hand, it is far more rational to use an iron compound that can be, and is, absorbed, for then we are reckoning with known quantities, instead of blundering along, giving more iron at a dose than is contained in the entire body, and incidentally deranging the digestive functions by precipitating the gastric, pancreatic and intestinal juices, and producing constipation by reason of the very astringent nature of some of the iron salts.

Beginning with the organic double salts, of which the scale salts are representatives, we notice upon the addition of this gastric juice, that a precipitate is formed; the double salt is decomposed and ferric salt remains, which is insoluble, both in gastric and intestinal juice.

The tincture of ferric chloride will precipitate some of the gastric constituents, though most of the iron will remain in solution in the hydrochloric acid; the iron still in solution will not be absorbed, because its non-diffusibility is taken advantage of in the manufacture of *dialysed iron*, the acid passing through the animal membrane; when the iron finally reaches the intestine, the alkaline carbonates promptly precipitate it. Ferrous sulphate behaves similarly. In both instances, as you see, the very insoluble ferric oxide is finally formed. If you have ever tried to remove iron stains from your water pitcher, you have some idea how insoluble it is.

The insoluble compounds, like reduced iron, or Vallet's mass, only serve to render inert the arsenic with which they are usually prescribed; if dissolved at all in the stomach, they are reprecipitated in the intestine.

Taking now Gude's preparation, we find it soluble, not only in all these reagents, but also in a mixture of them. Potassium ferrocyanid readily gives the iron reaction, excess of ammonia will separate it, redissolving the manganese, which is then recognized by the color of its sulphide; the alkaline copper solution gives the reaction for peptone, showing that it is what the label says. It mixes with arsenious acid, forming a perfect solution, thus giving us a most useful hematopoietic agent. The soluble alkaloids are perfectly soluble in it, as is also mercuric chloride. Being a peptone, it is readily diffusible by osmosis.

The only disturbing agent in the intestinal tract is hydrogen sulphide; this will precipitate it, but presumably much of the iron must have been absorbed before it encounters this gas; if not, appropriate agents should be used for its elimination.

Therapeutically, it does not nauseate, constipate, discolor the teeth, precipitate the digestive agents, nor become inert from contact with them. As to the clinical results, I need not add anything to the many reports already on record.

MONTHLY REPORT.

Issued by the Provincial Board of Health of Ontario for July, 1900. Showing the deaths from all causes and from Contagious Diseases in the Province, as reported to the Registrar-General by the Division Registrars throughout the Province.

Issued Aug. 15, 1900.
P. H. BRUCE, M.A., M.D., Secretary.

YEAR.	MONTH.	Total population of province, 2,253,182	Total population reporting, 1,712,416 76%	Total deaths from all causes, 1,710	Rate per 1,000 from all causes, 12.	Scarlatina.	Rate per 1,000, 0	Diphtheria.	Rate per 1,000, 0.2	Measles.	Rate per 1,000, 0	Whooping cough.	Rate per 1,000, 7	Typhoid.	Rate per 1,000, 13	Whooping cough.	Rate per 1,000, 0.05	Tuberculosis (Consumption).	Rate per 1,000, 171	Rate per 1,000, 1.2
1900	July	2,237,800 98%	720 92%	2,162	11.1	8	0.04	27	0.1	13	0.07	8	0.04	15	0.07	230	0.1	230	1.2	
1900	June	2,151,000 95%	715 92%	1,752	10.	6	0.03	30	0.1	1	0.03	7	0.01	11	0.05	200	0.05	200	1.0	
1899	July	2,103,115 95%	670 86%	1,643	9.5	7	0.04	20	0.1	4	0.02	6	0.03	15	0.03	173	0.03	173	1.0	
1899	June	2,103,666 92%	675 88%	1,521	9.	12	0.07	22	0.	5	0.03	4	0.02	13	0.07	1	0.02	1	0.9	
1899	May	2,218,263 97%	720 92%	1,767	10.	17	0.09	18	0.09	3	0.01	7	0.03	18	0.09	230	0.03	230	1.2	

N.B.—Division Registrars will please make their returns on or before the 5th of each month, thus enabling the Department to have the monthly report compiled much earlier than heretofore.

DOMINION MEDICAL MONTHLY

AND ONTARIO MEDICAL JOURNAL

EDITOR:

BEATTIE NESBITT, B.A., M.D., F.C.S.

Address all communications to DOMINION MEDICAL MONTHLY, 71 Grosvenor St., Toronto, Canada.

VOL. XV.

TORONTO, AUGUST, 1900.

No. 2.

INFANT FEEDING.

The mortuary returns of the summer months in infantile life prove that the subject of infant feeding has not as yet reached perfection. Take, for instance, our neighboring city of Montreal, with barely a total population of 300,000; the records show that in two recent weeks the deaths amongst infants amounted to 116 and 107, respectively. It is a melancholy fact that at the end of the nineteenth century, a period which boasts such rapid progress and development in civilization, and undoubted advancement in all branches of medical science, that one-third of all infants born die before they have attained the completion of their third year, and this largely due to improper feeding methods. While we have undoubtedly made substantial progress in this particular branch of sanitary science, that progress is, in the main, mostly theoretical and not practical. We are not as yet able to supply a synthetic breast milk exact with the normal product. There may be probably too eager a desire on the maternal side of the problem to entirely cease from nursing where the natural product fails, or is failing, instead of endeavoring to supplement the deficiency by other methods, which have now practically fallen into disuse. The physician who conserves the energies of his patient in the direction of due and proper encouragement to continue the baby at the breast, be the pabulum never so little, will in the long run reap better rewards than they who abandon this entirely for the various diversified proprietary foods of which the times are prolific. Even when the breast has to be abandoned entirely, and substitute feeding commenced, much will be accomplished by him who bolsters up the all too meagre knowledge of the mother for her bottle-fed baby. The mother is generally imbued with the idea that the bottle-fed baby requires less attention than the breast-fed one, and that any one can supply this attention as well as herself. This

certainly is false teaching, and needs early correction. Into these mothers' hands are thrust scores of fat babies' pictures, which serve the purpose of exploiting infant commercial dietaries, and by their simplicity of preparation appeal to the laziness of the mother. What a different tale would be told if the victims of this commercial instinct could only be placed side by side in photographic array with their more fortunate brothers. For the sake of the helpless infants who succumb in countless armies every summer, what a pity it is that parents cannot be brought to a proper conception of their duty towards their offspring. The constant and regular supervision of the family physician over these little ones, training the mother in the proper care and feeding of her child, would, we think, go far toward lessening the frightful mortality recorded in all large cities during the summer months; and to that extent a fraternal organization for the infants alone, of a health and sick benefit nature, with a physician attached, making regular and stated visits upon his charges, might go far towards solving this problem of infant feeding, which is intimately associated with that of infant mortality. The state herself cannot afford to have citizens brought up in the world without the "milk of human kindness" which, some one asserts, is to a good extent absent in most bottle-fed babies. What we require for success in this direction is some very simple plan of modifying cows' milk (not cow's milk), as all are agreed that milk taken from a number of cows is better than that from a single cow. So far, we think that this has not been accomplished, as authorities now agree that the vast majority of these modifications have proved failures, and until such times come when we have a plain, simple rule to go by and to instruct mothers with, we may expect that they will not take kindly to our efforts to inculcate proper methods of feeding amongst their numbers.

APPENDICITIS AS A SYMPTOM OF TYPHOID FEVER

We have been long looking for an authoritative pronouncement upon this subject; and in the issue of the *Medical News* of July 21st, H. A. Hare deals with it explicitly, if not exhaustively. One or two of these cases has occurred in our own practice, and they are sufficiently mystifying to demand a careful study of their differential diagnostic features. One of these which we can call to mind occurred in a young woman 22 years of age, who for two or three weeks had been suffering from general malaise and some indefinite abdominal pains. The appendiceal symptoms were so pronounced that the surgeon was called in to operate on the second day. He decided that it was not true appendicitis. Then another

physician on the hospital staff was summoned ; his diagnosis was flat against typhoid fever. A week or two later the case developed into typhoid fever. Here, no doubt, was one of the cases Dr. Hare thinks by no means so uncommon, where there was at first very marked typhoidal infection of the appendix by the typhoid bacillus. Dr. Hare mentions three interesting points in connection with these cases: First, it is of interest to note that in a certain proportion of these cases that the illness is ushered in by symptoms which are decidedly marked in the right lower quadrant of the abdomen; second, the interesting question arises as to the condition of the appendix and caput coli under these conditions; and third, as regards whether operative interference is necessary in these cases; then, finally, whether there are any specific conditions present to diagnose a distinct local lesion from a general infection by the typhoid bacillus. In the differential diagnosis he holds that much is to be gained; in fact almost everything of importance, from the results to be ascertained, from an examination of the blood. Now, in the ordinary cases of appendicitis, from what we know of leucocytosis, the white-blood corpuscles will be considerably increased, but in the typhoid cases they are not increased. Typhoidal ulceration in the neighborhood of the caput coli, or in the appendix itself, which is abundantly supplied with lymphoid tissue, might produce subjective or objective symptoms sufficient to cause a diagnosis of appendicitis to be given, but the blood would not show the distinct changes of leucocytosis. The subject is one that needs much further elucidation; and perplexing as these cases are to the diagnostician, there is logic in the wisdom of waiting for decisive symptoms in order to make clear the diagnosis.

THE MEDICAL EDITOR ON THE STAFF OF THE DAILY PRESS.

In a well prepared paper on this subject, read before the Academy of Medicine in June last, Dr. Walter L. Pile, of Philadelphia, advocated the appointment of such member on the staff of the daily newspapers, which we would heartily endorse as a move in the right direction. In citing an example for this, the essayist referred to an article recently appearing in the *New York Herald* on "Sleep Cure for Nervous Diseases," abstracts of which go to show the need of having a medical man to act as a sort of corrective to this class of literature, which is now a constant and ever-growing ingredient of the daily press. In the article mentioned, the cure was stated to consist of "eight grams of bromine every two hours in a glass half full of water." "Rest—absolute pro-

longed rest—was the one thing which persons suffering from nervous disorders stood most in need of, and they could obtain the rest through the agency of bromine better than in any other way," was additional gratuitous advice, which, if followed out to the letter, would certainly produce absolute and prolonged rest.

The medical editor on the staff of the daily press would, we think, prove satisfactory to the profession and also to the lay public. All obnoxious articles, obscene advertisements, advertisements in the shape of brilliant operations, foolhardy and deadly advice of the character above quoted, the proper education of the public to the need of sanitation, quarantine and the dangers of contagious and infectious diseases, together with exercising a strict censorship over all things medical, destined for the public eye, would be sufficient argument to create such a department in every "daily" which carried any weight with the public generally.

How is it that newspapers, edited by men of intelligence and unusual capacity, almost invariably make themselves ridiculous where medical news is concerned? Simply because of the fact that very young novices in education and in reporting are deputed to gather in this news. This "kid" reporting is responsible for the mistakes, and, laughable as it is to the medical man, it may be a serious matter sometimes if any person should happen to profit by the advice so freely sent broadcast. The medical items in the daily press have developed at an enormous rate within recent years. The public like this sort of reading; their tastes and desires must be gratified; but if it is to be given them, by all means cater it in wholesomeness and in decency. There seems no better way, then, to accomplish this than by appointing the medical editor on the staffs of the large dailies in the great centres, whence emanate the thoughts and doings which pattern the manners and the customs of the people. A great authority on matters medical in England has spoken of the arrival of the time when the prophylaxis of disease will be the true aim of the physician. It would almost seem as though the dawn of that time were fast breaking. The medical man sees life exactly as it is, and as a component part of the power of the press his influence would be felt, and would be great in what is and will be the two great problems of the twentieth century—the prophylaxis of disease and the prevention of poverty.

MEDICAL DEPARTMENTS OF STATE UNIVERSITIES.

Being an editorial in the issue of July 21st of *The Journal of the American Medical Association*.

Not a few of our State Universities have more or less prosperous departments of medicine, as, for instance, the Universities of

Michigan, Minnesota and Iowa. The number of medical students in these and other institutions of similar character is large ; in some cases undoubtedly larger than the facilities for proper clinical instruction warrant, so that actual overcrowding has resulted. Difficulties in securing sufficient material for adequate clinical teaching of the large classes has risen from time to time. Gradually these shortcomings are being more or less satisfactorily met by the erection of State or University hospitals, under the management of the medical faculties.

Undoubtedly one potent reason for the large number of students in medical schools of this character is the relatively small fees demanded. Presumably on the theory that the State should furnish its citizens with opportunities to secure medical education at as reasonable cost as possible, the medical fees have been kept at comparatively low figures. At the same time, the requirements for entrance and for graduation have not, as a rule, been higher in the medical departments of State Universities than in schools without state support. We doubt whether it may be claimed with justice that the State Universities have taken a conspicuous lead in the gradual advancement in the requirements for entering the profession of medicine, that is such a conspicuous and gratifying feature in the recent medical history of this country. We do not wish to discuss at this time the advisability of the state giving its citizens fairly good opportunities for acquiring professional knowledge at small cost. There is much to be said both for and against this policy. But it is surely not unreasonable to look to the State Universities to take an active and decided lead in bringing to a high standard the requirements for entering medical study and the quality of education given.

The medical departments of State Universities surely ought to be wholly independent of the number of students in attendance upon their courses. Numbers and commercialism should not have a decisive influence upon the general educational policy of a State University. Numbers are wholly unnecessary in order to have State Medical Schools. They are unnecessary in order to have a University in the true sense. Excessive numbers of students seriously hamper the real work of all schools so afflicted. It may be a potent argument with parsimonious legislators and regents to point to continued increase in the number of students in the professional schools of a State University when asking for increased appropriations—in fact, it may be the only argument that will carry the necessary weight with men enslaved by the commercial spirit of our times. In the true interests of medical education, however, it is hoped that the governing bodies of State Universities may yield to better reasons than the argument of numbers when it comes to the setting aside of public money for the proper building up of

medical and other professional departments; and the more so when it is recalled that the increasing number of students not infrequently largely depends upon insignificant fees and liberal, not to say mediocre, requirements for entrance and for graduation.

News Items.

A PROVINCIAL Medical Society is contemplated in British Columbia.

DR. A. ORR HASTINGS and wife are taking a trip down the Saguenay.

QUARANTINE against smallpox was raised in Montreal on the 2nd instant.

DR. JOHN MALLOCH and wife are spending a two weeks' holiday in Quebec City.

DR. D. J. GIBB WISHART and family are on the doctor's Island in the Georgian Bay.

THE fight over lodge practice continues in Victoria. Dr. Hall has set forth his opinions in the daily press.

DR. GEORGE A. BINGHAM and wife have gone to the Thousand Islands and Saratoga Springs for a holiday.

DR. OGILVY, of Montreal, has been appointed house surgeon to the Civic Hospital, Blackwell's Island, New York.

THE Medical Health Officer of Montreal has gone to Paris to attend the Exposition and pick up ideas *re* the sanitary governance of large cities.

DR. HIGGINS, of Montreal, has been appointed bacteriologist at Williamshead. He will also act as assistant to the quarantine officer there.

DR. J. ALEXANDER HUTCHINSON, Montreal, has been appointed surgeon-in-chief of the Grand Trunk lines west of the Detroit and St. Clair rivers.

MONTREAL is again having a terrible experience with infant mortality. One week claimed 116, and another 107. The normal death rate of the city is 125.

DR. J. N. E. BROWN has been appointed Secretary of the Gold Territory at a handsome salary. We congratulate Dr. Brown upon his success in the Yukon.

DR. A. D. STEWART, late of the house staff of the Toronto General Hospital, has been appointed surgeon on the C.P.R.'s palace steamer *Empress of Japan*.

DR. W. LASH MILLER, of Toronto University Department of Chemistry, has been offered and will accept a position on the staff of Cornell University, at Ithica, N.Y.

TWO members of the profession have recently met an untimely end through drowning, one a practising physician of Montreal and the other a house surgeon of the Kingston General Hospital.

THE Inland Revenue Department will collect samples of baking powders again in December, and a vigorous campaign will be instituted against the manufacturers of alum baking powders.

DR. GEORGE STIRLING RYERSON, Canadian Red Cross Commissioner in South Africa, has returned, and his Toronto friends are more than pleased to see him looking so hale and hearty.

SMALLPOX is said to have broken out at Dawson, and Dr. Montizambert, who went West a short time ago to inspect quarantine arrangements on the Pacific Coast, will investigate the Dawson outbreak.

THE Board of Health of the town of Woodstock, Ont., has decided to compel bakers to give up the present bread ticket system, thinking that these small tickets may contribute to disease.

DR. CHESTNUT, Superintendent of the Winnipeg General Hospital, has gone to Europe for one year's course of study. During his absence the affairs of the Hospital will be administered by Dr. Trick.

THE following have been appointed resident physicians at the Montreal General Hospital: Drs. E. R. Secord, C. K. P. Henry, W. G. Turner, J. W. T. Patton, W. H. P. Hill, L. M. Murray, W. E. Rowley, A. R. Hall and H. R. D. Gray.

THE *Patent Record* is responsible for the statement that a self-propelled invalid's chair is the latest development of the electro-mobile. It was designed by a Toronto physician, and has a capacity for a fifteen-mile run at a rate of four and a half miles an hour.

AT the centenary meeting of the Royal College of Physicians and Surgeons, we were pleased to see that Sir William Hingston, Dr. T. G. Roddick, M.P., and Mr. Irving H. Cameron, amongst leading lights in medicine the world over, were presented with diplomas of fellowship.

WE congratulate Dr. W. S. Muir, of Truro, N.S., upon his election to the position of President of the Maritime Medical Association. The doctor is also Secretary of the Medical Society of Nova Scotia, President of his native County Medical Society, and one of the Committee on Dr. Roddick's bill.

SOME American journals have been discussing the advisability of forming an International Medical Association. It is understood that the present President of the American Medical Association, Dr. Reid, of Cincinnati, is favorable to the admission of Canadian practitioners to membership in his Association.

MCGILL conferred four diplomas in public health this year. This is the first instance of the kind on this continent. The recipients were Drs. W. W. Ford, J. E. Laberge, H. S. Shaw and J. E. Williams. The outside instruction was given under the supervision of the Medical Health Officer of Montreal, Dr. Laberge, and the inside was attended to by Dr. Wyatt Johnston.

WORK is progressing very favorably on the addition to the Medical Faculty Buildings at McGill; and most of the new class rooms will be ready for use in October. The old lecture amphitheatre and the department devoted to pathology have been demolished entirely; and upon the sites they once occupied the additions are arising. The cost of these buildings will approach \$60,000.

THE coming meeting of the Canadian Medical Association in Ottawa promises to be a huge success. We understand from an Ottawa physician that the members of the profession in that city will eclipse Toronto in their endeavors to make the entertainment of the visiting members at the Capital City happy, thorough and complete. No doubt a large delegation will go from Toronto and the western part of the Province.

AN unusual kind of adulteration in drugs has recently come to the attention of the Chief Dominion Analyst. It consists in the substitution of sodium nitrate for saltpetre, and seems to be very prevalent amongst grocers and general dealers, and even in drug shops. Particular attention will be paid to cessation of this practice in the drug trade. Samples of saltpetre are now being collected, and we may expect prosecutions to follow in case the practice is not abandoned.

Physicians' Library

Fractures.—By Carl Beck, M.D., Visiting Surgeon to St. Mark's Hospital and to the New York German Poliklinik; formerly Professor of Surgery, New York School of Clinical Medicine; Consulting Surgeon, Sheltering Guardian Society Orphan Asylum, etc. With an appendix on the practical use of the Roentgen rays. 178 illustrations. Philadelphia: W. B. Saunders & Co. Canadian Agents, J. A. Carveth & Co. Price, \$3.50.

In the present volume, the author has given us the results accruing to surgery, more especially to fractures, by the discovery and introduction of the X or Roentgen rays into the domain of practical surgery. The book is profusely illustrated with skiagrams mostly original, depicting cases coming directly under the author's own observation. An effort has been made to systematize the various and important essentials of the different publications on the subject of the Roentgen ray as adapted and applied to surgery, and in the attempt the writer has been most successful. As to the part played by the publishers, the book itself is a model of perfection in that art. The writer is a well-known surgeon, and his work will be sure to meet with pronounced approval.

Diseases of the Eye.—By EDWARD NETTLESHIP, F.R.C.S., Ophthalmic Surgeon at St. Thomas' Hospital, London; Surgeon to the Royal London Ophthalmic Hospital, etc. New (6th) American from the sixth English edition, thoroughly revised by WILLIAM CAMPBELL POSEY, M.D. With a supplement on the detection of color blindness by WILLIAM THOMSON, M.D., Professor of Ophthalmology in the Jefferson Medical College, Philadelphia. Just ready. In one 12mo. volume of 562 pages, with 192 illustrations. Selections from Snellen's test-types and formulæ, and 5 colored plates. Cloth, \$2.25, net. Lea Brothers & Co., Philadelphia and New York.

"Nettleship" has come to mean the standard book on the eye almost as much as "Gray" means Anatomy. Twelve editions have been demanded on the two sides of the ocean, six on each. This new American edition is certain to increase the popularity of the book. For the first time it has been edited by an American ophthalmologist. He has revised it thoroughly to date, adapting it particularly to the needs of American practitioners and students

on those points where the views and practice of this country differ from those abroad. Especial attention has been given to methods of examination and therapeutic measures which have recently been largely employed here. Professor William Thomson has again revised his chapters on testing for color sense and acuity of vision and hearing, now the standard accepted by the railroads, and the Editor, Dr. Posey, has added the government tests for admission to the public service, army, navy and merchant marine, as well as the tests adopted by certain cities for school children. Sheets of test-types, colors and other means for detecting defects are also included. The book is a wonderfully compact and practical manual on the eye, serviceable for every practitioner, student and specialist. It is fully illustrated and priced extremely low.

Atlas and Epitome of Special Pathologic Histology.—By Doцент DR. HERMANN DURCK, Assistant in the Pathologic Institute, Prosector to the Municipal Hospital, L.I., in Munich. Authorized translation from the German. Edited by LUDVIG HEKTOEN, M.D., Professor of Pathology in Rush Medical College, Chicago. With 62 colored plates. Price, \$3.00. Philadelphia: W. B. Saunders & Co. Canadian Agents, J. A. Carveth & Co.

This work, which in the introductory volume deals with the circulatory organs, respiratory organs and gastro-intestinal tract, is to embrace three volumes. The high standing of the author and editor alike would almost seem sufficient to establish the value of the Atlas; and to the vast army of medical students in America it will prove a boon indeed. That the work will have a liberal and wide-spread patronage goes without saying.