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APOMORPHINE MURIATE.....1-8 gr.	1 10	26
APOMORPHINE MURIATE.....1-12 gr.	85	19
ATROPINE SULPHATE.....1-60 gr.	40	12
ATROPINE SULPHATE.....1-200 gr.	30	10
ATROPINE SULPHATE.....1-150 gr.	30	10
ATROPINE SULPHATE.....1-20 gr.	35	11
ATROPINE SULPHATE.....1-100 gr.	35	11
COCAINE HYDROCHLORATE...1-8 gr.	50	14
COCAINE HYDROCHLORATE...1-4 gr.	90	22
COCAINE HYDROCHLORATE...1-10 gr.	45	13
COCAINE HYDROCHLORATE...1-2 gr.	1 60	36
CODEINE SULPHATE.....1-8 gr.	70	18
CODEINE SULPHATE.....1-4 gr.	1 00	24
CONIINE HYDROBROMATE...1-100 gr.	30	10
CONIINE HYDROBROMATE...1-50 gr.	60	18
CONIINE HYDROBROMATE...1-60 gr.	50	14
DIGITALINE, Pure.....1-100 gr.	30	10
DIGITALINE, Pure.....1-60 gr.	50	14

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DUBOISINE SULPHATE.....1-60 gr.	80	20
ERGOTIN.....1-6 gr.	60	18
ESERINE SULPHATE.....1-60 gr.	80	20
ESERINE SULPHATE.....1-100 gr.	45	13
HYOSCINE HYDROBROMATE....1-100 gr.	75	19
HYOSCYAMINE SULPHATE....1-50 gr.	50	14
HYOSCYAMINE SULPHATE...1-100 gr.	40	12
MERCURY CORROSIVE CHLORIDE.....1-40 gr.	30	10
MERCURY CORROS CHLORIDE.....1-60 gr.	30	
MERCURY CORROS CHLORIDE.....1-50 gr.	30	
MORPHINE BIMECONATE.....1-3 gr.	85	
MORPHINE BIMECONATE.....1-4 gr.	70	
MORPHINE BIMECONATE.....1-6 gr.	45	
MORPHINE BIMECONATE.....1-8 gr.	35	
MORPHINE MURIATE.....1-8 gr.	35	

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MORPHINE MURIATE .....1-4 gr.	50	14
MORPHINE NITRATE .....1-4 gr.	90	22
MORPHINE NITRATE .....1-6 gr.	70	18
MORPHINE NITRATE .....1-8 gr.	55	15
MORPHINE NITRATE .....1-12 gr.	50	14
MORPHINE SULPHATE.....1-8 gr.	30	10
MORPHINE SULPHATE.....1-6 gr.	35	11
MORPHINE SULPHATE.....1-4 gr.	40	12
MORPHINE SULPHATE.....1-3 gr.	50	14
MORPHINE SULPHATE.....1-2 gr.	65	17
MORPHINE and ATROPINE No. 1. (Morphine Sulph. 1-8 gr. / Atropine Sulph. 1-200 gr.)	45	13
MORPHINE and ATROPINE No. 2. (Morphine Sulph. 1-6 gr. / Atropine Sulph. 1-180 gr.)	45	13
MORPHINE and ATROPINE No. 3. (Morphine Sulph. 1-4 gr. / Atropine Sulph. 1-150 gr.)	50	14
MORPHINE and ATROPINE No. 4. (Morphine Sulph. 1-4 gr. / Atropine Sulph. 1-100 gr.)	60	16
MORPHINE and ATROPINE No. 5. (Morphine Sulph. 1-8 gr. / Atropine Sulph. 1-150 gr.)	45	13
MORPHINE and ATROPINE No. 6. (Morphine Sulph. 1-8 gr. / Atropine Sulph. 1-100 gr.)	50	14
MORPHINE and ATROPINE No. 7. (Morphine Sulph. 1-6 gr. / Atropine Sulph. 1-150 gr.)	50	14
MORPHINE and ATROPINE No. 8. (Morphine Sulph. 1-6 gr. / Atropine Sulph. 1-120 gr.)	55	15
MORPHINE and ATROPINE No. 9. (Morphine Sulph. 1-4 gr. / Atropine Sulph. 1-200 gr.)	50	14
MORPHINE and ATROPINE No. 10. (Morphine Sulph. 1-4 gr. / Atropine Sulph. 1-120 gr.)	55	15
MORPHINE and ATROPINE No. 11. (Morphine Sulph. 1-4 gr. / Atropine Sulph. 1-60 gr.)	60	16
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MORPHINE and ATROPINE No. 14. (Morphine Sulph. 1-2 gr. / Atropine Sulph. 1-120 gr.)	75	19
MORPHINE and ATROPINE No. 15. (Morphine Sulph. 1-2 gr. / Atropine Sulph. 1-100 gr.)	75	19
MORPHINE and ATROPINE No. 16. (Morphine Sulph. 1-2 gr. / Atropine Sulph. 1-240 gr.)	75	19
NITROGLYCERIN.....1-50 gr.	40	12
NITROGLYCERIN.....1-150 gr.	40	12
NITROGLYCERIN.....1-100 gr.	40	12
NITROGLYCERIN.....1-200 gr.	40	12
NITROGLYCERIN, 1-100 gr. & STRYCHNINE, 1-50 gr.....	40	12
PHYSOSTIGMINE SULPH., 1-60 gr. (See Eserine Sulph.).....	80	20
*PILOCARPINE MURIATE.....1-5 gr.		
*PILOCARPINE MURIATE.....1-8 gr.		
*PILOCARPINE MURIATE.....1-20 gr.		
*PILOCARPINE NITRATE.....1-20 gr.		
*PILOCARPINE NITRATE.....1-8 gr.		
*PILOCARPINE NITRATE.....1-4 gr.		
SODIUM ARSENIATE.....1-30 gr.	30	10
STRYCHNINE NITRATE.....1-150 gr.	50	14
STRYCHNINE NITRATE.....1-100 gr.	35	11
STRYCHNINE NITRATE.....1-60 gr.	40	12
STRYCHNINE SULPHATE.....1-150 gr.	30	10
STRYCHNINE SULPHATE.....1-120 gr.	30	10
STRYCHNINE SULPHATE.....1-100 gr.	30	10
STRYCHNINE SULPHATE.....1-60 gr.	30	10
STRYCHNINE SULPHATE.....1-20 gr.	40	12
STRYCHNINE SULPHATE.....1-30 gr.	30	10
STRYCHNINE SULPHATE .....1-50 gr.	30	10
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Sacch. Lac. - - gr. x.
Misce et ft. cht. No. x.

Sig.—One every 4 hours.

℞ Aqua Calcis - - - f ℥ ij.
Spts. Lavand. Comp.
Syr. Rhei. Arom. - aa f ℥
Tr. Opii. . - - - gtt. x.

Misce—Sig.—A teaspoonful every 2 to 4 hrs.

In inflammatory affections INGLUVIN is combined with Subnitrate of Bismuth, equal parts, and oleaginous mixtures with Oi. Terebinth, instead of Aqua Calcis. Should the evacuation be suddenly arrested, and Tympanitis supervene, follow with a dose of oil or magnesia, or injections. In many cases of sick headache and indigestion the most happy results follow from the combining of INGLUVIN with Pv. Nuc. Vomica, the one-twentieth to one-tenth grain.

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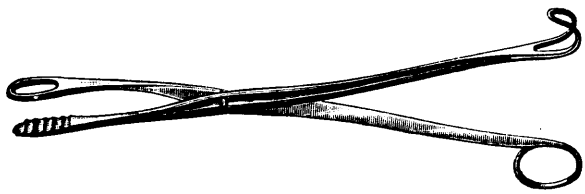

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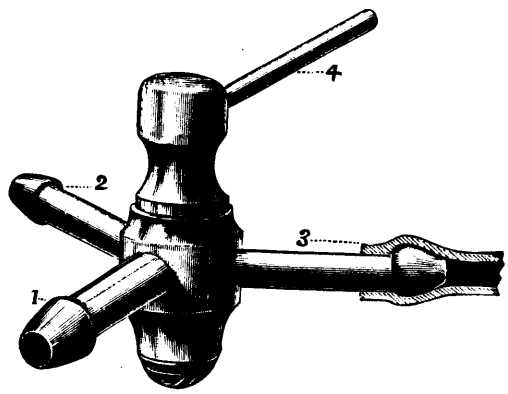

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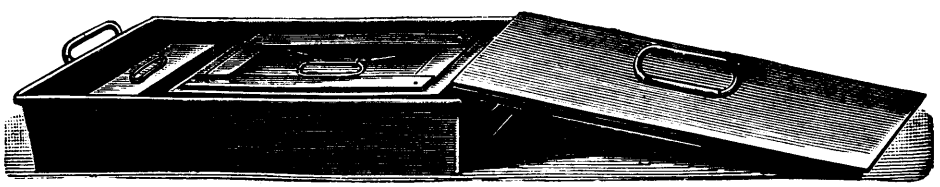

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ORIGINAL ARTICLES AND COMMUNICATIONS.

SOME POINTS IN ABDOMINAL SURGERY RELATING TO INTESTINAL OBSTRUCTIONS.

BY H. HOWITT, M.D., M.R.C.S. ENG., GUELPH, ONT.

A paper read before the Trinity Medical College Alumni Association in April, 1898.

To me the time appears amazingly brief to look backwards twenty-five years to the day when I received my degree from the medical department of Trinity College; yet in less than that period what marvellous advances have taken place in every branch of medicine. In regard to surgery, it may truly be said that the history of its modern methods does not carry us far into the past. Nevertheless, in the friendly though intensely earnest race between it and the other divisions of our profession for the alleviation of suffering and the prolongation of life, if it does not actually lead, it is second to none. It has frequently encroached upon the domain of medicine, and threatens further depredations in the future. In no region of the human body has this feature been more marked than in regard to maladies peculiar to the abdominal cavity. To-day the abnormalities which pertain to the abdomen that are considered by us as surgical are numerous.

The departure from the ways of the past, few will deny, has been brought about mainly by the efforts of Lord Lister, who first prepared the means for the present astonishing epoch, not only in abdominal, but also in every department of surgery. The truths made accessible by the genius of this great man have stirred, as it were, the whole structure of medicine to its foundation, and have given it an impulse that will continue to bear fruit for the afflicted long after his dust has returned to the mother earth.

Formerly, even in regard to uncomplicated ovarian cysts, there were many who doubted the advisability of active measures, and any invasion of the peritoneal cavity was seldom undertaken except in the large centres of population and by men of wide experience; many of these, as a rule, put off the operation till death was plainly a near alternative. With the best workers the mortality rate had much to be desired in the line of improvement.

How different to-day! Not only is the ovarian cyst without almost

any distrust as to success early or later in its development at once submitted to the knife for radical cure, but a number of other conditions of more or less grave import of the uterus, uterine appendages, the appendix, the gall-bladder, and of the other organs and structures of the region, have been compelled to surrender many a mortgage on life. The majority of the operations for the serious maladies implied above in the hands of competent men now prove less dangerous than did the most trivial intra-peritoneal before the advent of aseptic methods.

Notwithstanding the state of perfection to which abdominal surgery has through the aid of aseptic methods reached, there are still, in reference to operative work for the relief of intestinal obstruction when distention of the abdomen is a marked factor, three or four points not directly connected with asepsis, but rather with the technique of the operation that are not generally known to the profession. Some writers mention one or more of them, but all have failed, in my opinion, to emphasize their great importance.

In the majority of cases of obstruction the situation of the trouble is low in the bowel, and, consequently, before reverse peristalsis leads to vomiting considerable accumulation of fæcal matter takes place. The arrested fæcal current shortly leads from stasis and other causes to the more or less rapid formation of gas which distends the intestines, and by causing tension of the coats arrests the normal function of the bowel. The tension is the chief factor in producing nature's signal of alarm-pain. When the obstruction is at the sigmoid flexure or low in the descending colon, gas, as a rule, does not form so rapidly, though the amount of fæcal matter present may be large; and in consequence of the gradual development the distention of the abdomen may be simply enormous before the powers of life begin to fag. It is truly wonderful how long life is maintained. To my own knowledge, a middle-aged woman lived almost a month with this condition of affairs, had only a moderate amount of pain and rarely vomited. This is the more remarkable from the fact that her medical attendant gave her half-drachm doses of calomel, large ones of croton oil and mag. sulph., and injections galore. What is really astonishing after this heroic treatment, she had her abdomen opened by an able surgeon, who broke down some adhesions near the cæcum. The wound healed kindly, but no relief followed. Two weeks later he again operated and located an annular stricture in the sigmoid. The anæsthetic—which was chloroform—proved too much for the patient, and she suddenly expired just as the last suture was introduced. But to return to the subject.

The higher the constriction—other things being equal—the more acute the symptoms and the less the amount of abdominal distention.

Besides the position of obstruction in the bowel, some idiosyncrasies of the patient influence very much the rapidity with which the tympanites and other alarming symptoms develop. To a greater extent, probably, does also the method of treatment adopted by the attending physician.

The ordinary causes of obstruction are familiar to all. There is one that is not generally recognized, which, when it exists, the obstruction is generally acute, and the case requires prompt measures in order to

avoid a fatal termination. I refer to acute flexure without either adhesions or inflammation of the adjacent peritoneum. That there is such a form of *surgical* obstruction there can be no reasonable doubt. It may follow shock, intestinal peripheral irritation, or anything that will disturb the normal gastro-intestinal function and favor fermentation.

When flatus is quickly produced it not only enlarges the calibre, but it also increases the length of the portion of gut involved. It thus disturbs to a considerable extent the proper relation of the parts, and leads to circumstances favorable to the formation of a flexure. This is aided very much, too, by the fact that the mesenteric attachment renders that portion of the circumference less yielding to force, which tends to increase the longitudinal axis of the bowel; hence, under these circumstances, flexures more or less acute must occur.

It does not require much thought to perceive how it is possible for an acute angle to be caught in such a manner against the abdominal wall or other resisting part as to favor collapse of the arm nearest the anus and the formation of a valve by the adjacent sides of the intestine. Once formed, the greater the pressure above the more firmly the valve is set. In my opinion, it occurs more frequently in two situations, namely, at the splenic flexure of colon and sigmoid flexure. In septic peritonitis, whether puerperal, post-operative or any other variety, there is frequently a locked condition of the bowels and great abdominal distention, the intra-abdominal tension often being so great as to arrest all peristaltic movements. In such cases we are told that paralysis of the bowel exists, and hence that a fatal termination is inevitable, and certainly the results of surgical procedures in the past strengthen the view. But those who have perused the paper which Mr. C. B. Lockwood read on the 23rd of October, 1894, at a meeting of the Royal Medical and Chirurgical Society of London, on "The Surgical Treatment of Diffuse Septic Peritonitis with Successful Cases," will have at least some doubt in regard to true paralysis causing the arrest of peristalsis—it is force that arrests the movements, not paralysis. I am convinced that paralysis of the bowel is an extremely rare affection, or even complication. To me, in abdominal surgery the term is frequently used in a way that resembles very closely in one respect what torpid liver does in medicine—a good screen behind which we may when pressed hide.

The points to which I desire especially to call attention in regard to the surgery of intestinal obstruction apply more particularly to those cases in which, when the surgeon arrives, the condition of affairs is desperate, but they apply also, though possibly less urgently, to all those in which there is distention. Such patients frequently suffer from the effects of useless efforts to obtain relief by drugs and are generally exhausted by pain, vomiting and the unavoidable arrest of nutrition. They are consequently far from being in a favorable state to bear a prolonged operation. Anything under these circumstances that will permit thorough work being done in the shortest time is worthy of consideration.

The points are as follows:

1st. Completely emptying the stomach by means of syphon tube. The stomach frequently contains a large amount of gas and fluid material.

Its removal by reducing the tension to a sensible extent improves the action of the heart and lungs, hence less danger is run from the effects of the anæsthetic. The annoyance, delay and danger frequently caused by vomiting are effectually avoided. Besides, it also saves time in the steps required to open the peritoneal cavity, for not nearly so much delicate work is necessary in order to prevent the knife or scissors from wounding the bowel.

2nd. The incision should be sufficiently extensive to permit the operator to reach any part of the cavity readily. In the majority of instances it should be in the median line. Those who have had much experience in this special line of work must admit that it is difficult to understand how an operator can, without becoming a criminal, devise a more certain means to prolong the operation, to damage organs and tissues that have already had their normal vitality lowered and to render his chance to save the patient extremely small, than for him to attempt to do through a small incision what is frequently quite difficult to accomplish through a large one. It is far from good surgery to force the fingers or hand first in this then in that direction again and again, over, between and among the crowded coils in vain efforts to locate the trouble, or to waste time in pushing them upwards, downwards, to the left and to the right; but such is the prejudice held by many against a free incision and such their fear of the phantomatic danger from exposure for a reasonable time of the abdominal organs to light and air that they, in a sense, dread the noisy though seldom dangerous thunder, and nurse the electric current which seldom allows an escape.

3rd. Evisceration of the intestines. Experience will soon convince an operator that in these cases it is extremely difficult to pass the hand into the abdomen: that attempts to do so are liable to abrade the peritoneal surface and otherwise injure the delicate structures, and that such efforts are usually utterly futile of good results and merely lead to confusion and waste of time. Notwithstanding what has been said by high authority against exposure of the bowels, I am positive that it is much better under these circumstances not only to make no attempt to prevent protrustion of them, but, on the other hand, to aid the expulsion as quickly as gentleness will permit. The coils should of course be received upon a warm, moist, aseptic towel or gauze, which, when the expulsion is sufficient for the purpose in view, should completely cover them. The temperature of the material used for protection is maintained not by frequent changes, but by constant irrigation of water heated several degrees above the normal heat of the body. When this is arranged expose a portion of a prominent coil, turn the patient somewhat on one side, and at the same time have pressure made over the abdomen with the object of forcing the intestinal contents into the external coils. Then everything is ready for the next step in the operation.

4th. Empty the distended intestines through one or more incisions. A keen knife is the best instrument for this purpose, although some prefer a trochar. The opening should be made opposite the mesenteric attachment. I prefer to make it transverse to the longitudinal axis of the canal, of course avoiding visible vessels, but there is no objection to the

incision running in the longitudinal axis, provided the position on the circumference is correct. The size of the opening should depend on the amount of dilatation of the portion of bowel chosen and the nature of the material to be removed. When the distention is great, an incision sufficient to admit the point of finger becomes little more than a small puncture when the bowel is collapsed, and can be effectually closed with a few sutures. The flow may, when necessary, be aided by gentle pressure, and even by passing the bowel between two fingers in such a manner as to press the contained material towards the cut. It is not always possible to empty the bowel sufficiently through one incision, and when such is the case, the first should be closed before another is made. In my practice it has been found necessary on more than one occasion to open in three different places before satisfactory removal was accomplished. It is advisable not to proceed with operation and close the abdomen so long as tension exists in any portion of the canal. All that should has not been accomplished for our patient if such is done. No matter how well we may do the work in other respects, the chances of recovery are not good if this condition of bowel does not receive special attention. I am convinced that, to a large extent, the hitherto high death rate in these bowel operations is owing to the important matter having been overlooked.

The advantages claimed for this procedure are not by any means confined to the improvement of the field as regards room in reaching and dealing with the cause of obstruction. It removes the cause of impaired circulation in the parts, renders functional activity again possible in the important organs affected, gives the over-distended muscular coat time and opportunity to regain tonicity, and, what is worthy of note, removes from the system offensive effete matter and myriads of pathological germs. In other words, by it we are enabled to improve the supply of volunteers and to aid the older phagocytes in their wonderful warlike attacks on the enemies of life.

There is another point which is not necessarily confined to the cases under discussion, but refers to nearly every instance in which it is advisable to use a drainage tube in abdominal work. It is this : do not place the tube in the lower angle of the wound, or any part of it, but as soon as you have decided that one is advisable, perforate the abdominal wall, making a separate wound merely sufficient to admit your tube immediately over the part where drainage is likely to be serviceable. Endeavor to place the perforation for drainage tube as far as possible from large wound. The adoption of this method permits of more direct drainage, while at the same time it allows the large incision to be completely closed and aseptically sealed. Hence there is less danger from infection, stitch-hole abscess and imperfect union and its undesirable result—hernia.

In 1893, at the annual meeting of the American Association of Obstetricians and Gynecologists, held in Detroit, when discussing the paper of Dr. A. L. Reed on "Management of the Abdominal Incision," it was my fortune, I believe, to direct the attention of the profession to this measure for the first time.

When the preparations have been carefully made to meet each of these steps in the operation, the intestines can be easily collapsed, the obstruction reached and brought into a position favorable for dealing with it in very much less time than is often required by those who adopt other methods to gain even an unsatisfactory conception by touch of the situation of the trouble. I have never known any harm to result from the intestinal cut, which in my practice is always closed with fine silk.

It is my firm conviction that the above procedures have on several occasions enabled me to save life under circumstances impossible by other methods.

Although my practice is not in a large centre of population, it has been my lot to have had three successful operations on infants for intussusception. The eldest of the little patients was only six months of age, and the youngest not three. In these tender subjects the fourth mentioned point was not carried out to the letter; instead of emptying the loaded ileum by means of an enterotomy, the contents were gently forced, after reduction of the invagination, into the empty colon, whence by natural means they were in each instance shortly expelled.

Besides the above-mentioned, I have within the last five years resorted to the measures on seven different occasions. The ages of the patients varied from sixteen to sixty-seven years. In six of these the operation was for intestinal obstruction, and the seventh for general suppurative peritonitis arising from a perforated and partially gangrenous appendix. Although the symptoms were in each case severe, all recovered but the last mentioned. Four of the operations were done at night with no better light than can be obtained from the ordinary coal-oil lamp used in the country, and in the unsanitary environment of the general room or kitchen.

Time will not allow me to report more than two of the cases at present, but I trust on some future occasion to be able to record the others.

The first given below is a good illustration of complete obstruction without a constricting band volvulus, intussusception, tumor, internal hernia, adhesions, or any other of the usual causes, but due to an acute flexure with great distention of the bowel above it. By it we may understand how, in even desperate cases, recovery has occasionally followed in the past the unsurgical procedure of plunging a trocar into the abdomen.

CASE I.

On the 31st August, 1893, a medical man requested me to see in consultation a farmer 38 years of age, who, eight days previously, while stepping from a mow to a load of grain had slipped and fallen between them to the floor. He was stunned and had to be carried to the house. The doctor saw him shortly after the accident, when he complained of severe pain in left shoulder and hip.

On the following day he felt much better, yet the pains in shoulder and hip were still troublesome. Any attempt to use the left arm aggravated the pain in shoulder. On the whole, to his medical attendant the daily improvement was satisfactory until the end of the

fifth day, when a rigor occurred, followed by rise of temperature, quickened and feeble pulse, much gastric disturbance and thirst. Then severe colicky pains and tympanites set in; the latter soon became a marked feature of the attack; but there was no excessive vomiting then nor afterwards. The bowels, which up to the day before had been regular, now refused to respond, though several active means were employed to procure a motion.

By the seventh day there were good reasons for alarm. Except the characteristic vomiting all the symptoms of acute obstruction were present, and there was considerable tendency to collapse.

When I saw him he was, in my opinion, almost as near death as it is possible for one to be. The pulse, which was hardly perceptible at wrist, varied from 160 to 170; temperature subnormal; surface of body moistened with a cold, clammy sweat; respiration rapid and superficial. The distention of the abdomen was simply immense. I never before nor since saw anything like it. So far as the abdomen was concerned the drum percussion note was universal, and on the left side extended up the chest as high as the upper border of the fourth rib. The apex of heart was displaced upwards so that it beat against the third intercostal space. On the right side the liver was pushed up sufficiently to give a tymphanite note over lower inch or more of ribs. The rectum was empty, and neither flatus nor fæcal matter had passed for three days.

Including myself there were four medical men present at the consultation. We all agreed that we had to deal with bowel obstruction, but differed from one another as to the cause of it. On account of the very unusual condition of left side of chest, and especially since it followed an injury, my diagnostication was hernia through the diaphragm.

One of the medical men present was a brother of the patient, who realizing there was no other possible escape, strongly urged an operation. Owing to the apparently moribund state of patient, and the unfavorable environment connected with the only room available for the operation, I at first demurred, but finally consented to perform it.

When the patient was fully under the anæsthetic and we were arranging the protective towels, it was fortunately discovered that his left shoulder joint was dislocated. The dislocation was easily reduced.

A median incision was then made extending from near the ensiform cartilage to umbilicus. When the peritoneal cavity was opened a portion of what we at first thought was part of the stomach dilated, but which proved to be the transverse colon, presented. The bowel was dilated to an enormous size. We now knew the trouble was situated between the part of colon in view and the rectum. An attempt was made to pull it out through the incision in order to relieve tension and thus facilitate our work, but it would not come; nor could the hand with justifiable force enter the cavity.

The presenting part was incised with a knife, and almost odorless gas escaped with force, and then partial evisceration of the transverse colon was accomplished. The tension being lessened the hand readily entered. On reaching the descending colon I found it collapsed; tracing it upwards my hand was arrested by a distended coil part behind which the empty

portion passed and was tightly pressed between it and the parietal wall. Considerable pressure failed to make any impression on the offending coil, so the hand was forced over it with a view to follow its course to opening. It took a zigzag course with several acute angles. In the course the hand must have reached a point as high as the fourth rib, and the impulse of the heart was plainly felt through the diaphragm. At last a part was reached where pressure easily forced the gaseous contents backwards towards the place of escape. Then by retracing my steps, portion after portion was emptied till the obstruction was overcome and gas entered descending colon. The bowel cut was not closed till the colon was completely empty. The bowel incision was at first large enough to admit my finger, but the contraction which followed the escape of contents reduced it very much, and only three sutures were required to seal it.

The abdominal incision was closed without drainage. The operation lasted a little over half an hour. When we consider the low state of the patient before we commenced, he made an excellent rally. That evening he felt much relieved, especially regarding pain and dyspnœa. The pulse remained over 140 for twenty-four hours, and then gradually fell. Flatus passed early in the night, and the bowels responded readily to an enema on the second day. He made an excellent recovery, and is to-day in the enjoyment of health and vigor.

CASE II.

On the 30th March, 1896, Dr. McPhaden, of Mount Forest, requested me to see a young man, 18 years of age, the son of a farmer of that neighborhood. The doctor, another medical man of the town, whose name at the present moment has escaped my memory, and myself, drove out, reaching the place about 2 a.m. A less desirable abode for operative work could not easily be found—*a mere hovel.*

The young man had all the symptoms common in intestinal obstruction. Though active and judicious measures had been taken, no movement of the bowels had occurred for six days. To be brief, the terrible suffering of the patient, the great abdominal distention, the complete absence of peristaltic movements, the rapid pulse and disturbed temperature, and, in fact, everything connected with the case, indicated that nature could not hold out much longer. The state of his body, garments, bed-clothes, and things in general about the cabin, plainly said that soap and water were practically unknown there.

After the examination I frankly told the father, who was the only member of the family present, that in my opinion there was not more than one chance in a thousand of saving the boy by an operation. His reply was: "Operate then, for it is plain there is no other chance."

The space was so cramped that with difficulty we managed to arrange the table so as to allow standing room on opposite sides of it, and the floor so uneven that one had to move carefully to avoid being tripped.

When the patient was prepared and anæsthetised, the father held an indifferent coal-oil lamp close to the field, in order to give us sufficient light to proceed. The incision extended from over two inches above the

umbilicus to near the pubes. Hardly a sponge was required, the tension of abdominal wall being so great as to almost arrest circulation in it. As many as possible of the distended coils were pulled out and protected with gauze. On making an incision into the bowel the only wash-basin connected with the establishment was quickly filled with offensive, liquid, fæcal matter; and then an ordinary milk pan was brought into use. Three intestinal cuts in all were made. After the contents were removed we had no trouble in exploring the interior of abdomen and finding the cause of obstruction. It was a cord-like band the thickness of a number six catheter, which crossed and tightly compressed the ileum close to the cæcum. The band was cut between two ligatures. The condition of our patient and other circumstances, not excluding the hot stove close to one's back, were not propitious for a critical examination of its origin.

In less than an hour the patient was back in his bed. Under the skilful treatment of Dr. McPhaden he made an excellent recovery.

It is quite clear to me that the knowledge we had pertaining to the measures referred to in this paper enabled us to save the life of the young man, and that no other method would have attained the same result.

ONTARIO MEDICAL ASSOCIATION.

(President's Address.)

GENTLEMEN:—When, at our annual gathering last year, I was made a recipient of the highest gift at the disposal of the Ontario Medical Association, my uppermost feelings were those of surprise, thankfulness and timidity. Many there were who, by right of seniority and veteran labors, had stronger claims on your consideration; any one of whom would have presided over this noble assemblage with all the dignity and ability that the occasion demands: therefore I the more keenly appreciate the expression of your kindly feeling and generosity. The undertaking, on my part, was fraught with much that would naturally disturb one's ordinary peace of mind. The infancy, childhood and puberty of this association (this is but its 18th birthday) have been intimately linked with a brilliant list of eminent men who, as chief officers, have so largely contributed to its growth and effectiveness—men who have created ideals the most impressive in character, and in whose onward footprints it is not easy to tread without faltering. With a consciousness of the responsibility resting upon me and a somewhat imperfect estimate of my shortcomings, I have gathered around the standard various committees possessing all the qualifications necessary to constitute this, our annual meeting, a step forward in the march of Canadian medical science; and I would take this opportunity of expressing my thanks publicly for the preparatory work which they have so gladly, assiduously and disinterestedly performed. It has been for them no sinecure: abundant evidence of this will be found in the comprehensive programme now laid before you, the carrying out of which, I trust, will prove, in the highest sense, both entertaining and instructive.

On behalf of the Association I extend to our guests from afar the right

hand of cordiality and good-fellowship; and, having again and again witnessed the proverbial hospitality of that branch of the profession resident in Toronto, I have full confidence that those members who have come from the many outlying districts of the Province will feel perfectly at home; indeed it will not be optional with them, but rather a matter of sheer compulsion, if I know aright the instincts that prompt the gentlemen who constitute the committee of entertainment.

In order that such a meeting as this should fulfil its purpose it is imperative that each contribute his share in elucidating the various topics that may be presented. Even at the risk of verging on the sacrilegious, I would say:

"Let not fitness make you linger
Nor of fitness fondly dream".

Modesty should be the handmaid of true ability, not its tyrant; prominence of location is not always a reliable criterion of intense personality or mental cultivation; the city doctor, to be sure, derives benefit from frequent converse with his fellows; but his solitary brother from the cross-roads has at least one advantage over him in that his environment, perforce, evokes the cultivation of self-reliance and the faculty of keen observation. I hope that none will hesitate; we are here for the rapid interchange of ideas that will stimulate afresh our enthusiasm and perseverance.

I scarcely think it needful to exhort the home members on this line, a very large majority of whom belong to the local societies; and, as a natural consequence, a *rara avis* amongst them would he be who required snipping of the lingual frænum. Let discussion be prompt and spirited, even approaching the line of disputation, if you will; we are assembled to elicit truth and relinquish error; and, although good-natured blows may mar the symmetry of some airy castle, its builder will not take umbrage; for, locked in the embrace of a common brotherhood, our ultimate object is not self-aggrandisement but the attainment of knowledge for the alleviation of suffering and the good of mankind.

This brings me to the subject to which, for a few minutes, I wish to direct your attention, viz:—the present relationship of the profession to the public at large; and, as a pre-eminent factor thereof, the standing of the profession itself, viewed, as much as in me lies, from an impartial standpoint.

Not self-constituted as such, but in the very nature of things, he who enters upon a medical career is compelled by the peculiarities of his calling to recognize himself as a guardian of the commonweal, prompted by instincts the loftiest and motives superior to mere selfishness or ardent longings for the accumulation of wealth. The people claim, and rightly so, the devotion of his unflagging energy to the physical welfare of those to whose necessities he is called upon to minister. Not this alone, but his avocation stands upon a still higher plane than the relationship to the individual; the world at large is the scientific physician's parish, and its defects the supreme object of his best thought; never satisfied with what has already been accomplished by others, his leisure moments are occu-

pied in striving to solve the problems of nature; often unsuccessful, but never without that reward which invariably follows the pursuit of the true and abiding. A Jenner, a Simpson, a Koch or a Lister once in a while towers aloft as some snow-capped Alp in the light of the rising sun, invested with all the majesty of a noble creation. These intellectual giants few can ever hope to emulate: but, from the history of their life work, the lowliest and most obscure may draw such inspiration as glorifies labor with high ideals and fills the heart with burning desire for the good of others.

Community of interest so intimately links the profession and the laity that it seems not unbefitting for me to dwell for a little while on some features of human life—family, social and educational—as we see it in this Province of Ontario; and, in so doing, if I should indulge in a little criticism, do not for a moment imagine that I am posing as the stalwart exponent of some great reformation. Much that I shall say has already been better said and written, my object being repetition for the sake of added testimony and emphasis.

During the past two or three generations there has been in progress, amongst our people, a certain kind of questionable evolution—intellectual development somewhat out of proportion with physical force and endurance. Our grand-parents were a hardy stock, well furnished physically for coping with life's difficulties. In those early days of migration from the old lands Canada was to them a far-off, unknown country clad in its primeval forests; and, to reach its shores, they had to undertake an ocean voyage in sailing vessels often badly equipped for the stormy journey. The weak and puny dared not venture; consequently, by natural selection, Ontario was peopled with a sturdy race of pioneers blessed with great physiques, living in a primitive natural fashion and free from the burden of too much scholastic training. *Pari passu* with the financial advancement of the country a gradual change has been going on in these respects; let us inquire if it is for the better.

Herbert Spencer never said a truer word than when he affirmed that "first attention should be devoted to the development of the body, and that profound erudition should be looked upon, in some senses, as of secondary importance." True education can be nothing more nor less than that which prepares mentally and physically for the oncoming struggle. It is fortunate for the race that young men naturally choose, for their helpmates, rollicking buxom damsels in preference to the sunken-eyed, sallow-faced slaves of knowledge. I do not, for a moment, seek to enter a protest against the higher education of woman; mental culture is, for her, a diadem of beauty; but too often a possession acquired at tremendous cost. None but the strongest should, in my opinion, enter on a career of study so exhaustive and exacting as the curricula of our universities set down. A head full of knowledge and a worn-out nervous system are but poor qualifications for the coming mothers of Canada's sons. We as a people are proud of our Ontario school system; that it is largely taken as a model by the Provinces of Quebec, Manitoba and British Columbia and the North-West Territories. and has been highly commended by the foremost educationists of the United States, amongst them the

Commissioner of Education at Washington, is a tribute to the wisdom and foresight of those who have placed able administrators at the head of this department of public affairs; but, like all things of human origin, we must not look for perfection in its details. From the physician's standpoint I humbly submit that it is handicapped with a defect of such magnitude as to alarm him who weighs well the possibilities of the future. The standards of to-day reach so far above those of a couple of generations back that evolution along the line appears to have advanced at a galloping rate. Is it not time to tighten the reins? Are not children sent to school at far too early an age to stand the fatigue of book-work? The first seven or eight years of life should be free from care and worry, and devoted exclusively to such pleasurable pursuits as shall conduce, in the highest degree, to the development of bone and muscle; for, during this period, the nervous system will have plenty to do in automatic preparation of itself for the subsequent performance of its special duties. Parents and teacher leap for joy when a five-year-old manifests his precociousness; and the nervous little monster is held up by his attenuated arms in the sight of his phlegmatic or sanguine classmates as a paragon of perfection angelic to behold; when he should be making mudpies and wearing out his pantaloons in the physical activities of childhood.

Unless the vision be tested too much with small objects, no one can take exception to the work of the Kindergarten; for its essence is agreeable discipline, the training of the faculty of observation and the directing of memory in preparatory channels without forcing its exercise; in a word, it is child's play made systematic.

In the ordinary schools, home-work, as a rule, is made a burden too heavy to be borne with safety—when the pupil has finished the task, there remains insufficient time for rest and recreation, and it is no unusual thing to find the problems of the evening in advance of what already has been thoroughly taught. It would appear, at times, as though the schoolroom were transformed into a hall of inquisition for the purpose of discovering how much the pupil has failed in his home study, instead of being the place for intelligent education in harmony with the order of development of the mental faculties.

It is to be hoped that, ere long, in the advanced classes of the Collegiate Institutes, as well as in our Universities, competitive examinations will cease to be so stiff that victorious combatants emerge from the conflict proud of their conquests, but, as likely as not, to fall into the hands of the doctor for repairs—sometimes too late, for often the foundation has already been laid for a neurasthenic superstructure. I am not speaking theoretically; but am setting forth those things with which, professionally, I have had to deal.

Let us propound to ourselves the question—why is insanity, especially that of adolescence, together with kindred forms of nervous disorders, on the increase?—and, having solved it to our satisfaction, let us give the community the benefit of the investigation. The emulation and everlasting strife for a place in the front ranks of society, financially and socially, constitute, doubtless, a potent factor; but let us not forget that

this restless activity is often born of the habits engendered long prior to manhood.

Functional excess is always at the expense of defective reparative power. An extraordinary organ is the brain—a tired muscle refuses to work; an overwrought mind declines to take repose—the ploughman, after having "homeward plodded his weary way," sinks into sweetest slumber, while the over-taxed student is, too often, the victim of insomnia with all its hideous reveries.

Someone has well said that the bulwarks of a nation consist not in strong fortresses erected on its boundaries, nor does its stability depend upon mighty navies that traverse every sea, but its security lies in the keeping of intelligent men and women who have sound and rugged bodies ever ready to repel the inroads of disease.

It is a matter for congratulatory reference that governmental assistance, municipal aid and private contributions, prompted by appeals from the profession, and under its guidance, have dotted the land with hospitals for the reception of the poor and needy as well as for the convenience of the opulent, and that these institutions are accomplishing a great work in the interest of all classes; but it is to be deplored that, under the guise of poverty, daily abuse is made of the privileges that philanthropic motives have provided for the deserving poor.

Here the attending physicians discharge responsible and onerous duties without hope or expectation of reward, other than that which might be expressed in Portia's words paraphrased—"Charity is twice blessed, it blesses him who gives and him who receives;" but gratuitous services to those who are quite able to remunerate are not a blessing but a pauperizing curse to the recipients.

It is stated by no less an authority than the *Medical Record* that the number of persons who received free medical and surgical relief at the hospitals and dispensaries of New York during the past year amounted to 49.7 per cent. of the entire population, and that fully 70 per cent. of this number were quite able to pay a medical practitioner at least a moderate sum for his services; and no member of a hospital staff in Ontario will deny the fact that the evil exists here. How this difficulty is to be met it is hard to determine; but some effectual check should be placed on a custom so fraudulent in character. As a rule, before admittance is granted to a free ward, a certificate is required from a clergyman or other reliable citizen to the effect that the case is one deserving charitable consideration; and, it seems to me that, were such a law extended so as to include those seeking out-door advice or attendance, the evil would be much mitigated. It is, of course, understood that exceptions would be made in cases of emergency and amongst those who are utter strangers in the municipality. I would suggest that a representative committee be appointed, whose duty would be to make full inquiry as to the best method of minimizing these impositions, and with instructions to report to this Association at its next annual meeting.

My immediate predecessor denounced in forceful language the universal existence of lodge attendance; I can only emphasize the remarks that fell from his lips. To contract work, on the ground of principle, none

could fairly take serious exception, provided always that the contract price is fully commensurate with the value of the work done; but to bring about such a condition of things will be accomplished only when the dignity of the profession rises superior to that which is accounted merely expedient; for, so long as medical men are willing to accept the beggarly pittance of one hundred and fifty dollars a year, or less, for looking after the health of a hundred members of some lodge or other, with the hope of securing thereby professional entree into their family circles, just so long will this financial snap prove to be one of the strongest drawing-cards in the hands of fraternal societies.

I do not feel free to denounce the individual transgressor to the lowest depths—the custom is everywhere; and often contrary to his nature, for self-protection he is forced into this objectionable line of work; still, after all, it is at best the same old lame excuse, "If I don't do it, others will." With all my heart and soul I stigmatize the system as a rotten plank in the platform of gentlemanly dignity and independence.

We have, in this country of ours, an array of medical men and a galaxy of schools of medicine and surgery that would be a credit to any land under the sun; for all that, one is forced to lament the fact that, in a certain sense, their light may be hidden under a bushel. I refer particularly to the non-production of home-made medical literature. Thirty or forty years ago our special knowledge was derived from the writings of men in the mother-land; since that time our cousins across the line have been forging ahead so rapidly, that to-day, in any medical library are to be found almost as many volumes of their production as those that come across the Atlantic; and amongst the best of these are those whose authors were formerly Canadian citizens, but who, in search after larger spheres of activity, have gone over to the Republic.

We have a few noted exceptions, workers who have had the courage to venture out on this field of labor, and their writings have met with much favor and appreciation. There are many others who have been richly endowed by Nature and possess the knowledge requisite for the purpose; but a single obstacle in the way, lack of self-confidence, has hitherto deterred them. Personally I hope to see the day when our students will have in their hands first-class books emanating from those of the profession in Canada who have the genius of imparting their thoughts in a form alike striking and attractive.

Should this company formally express its convictions as a stimulus, I cannot believe that I am allured by an *ignis-fatuus* when I predict that, ere we meet again in happy conclave, we shall see further evidence that the hardy sons of the north are determined that our country shall stand side by side with those that have given to the world medical works worthy of closest perusal, accepted as standards and a credit to the authors.

A few years ago, for reasons best known to themselves, the members of the Ontario Cabinet indirectly assumed the responsibility of annulling that clause of the Medical Act which made provision for the framing of a tariff in each electoral district; such scale of charges to be authoritative after endorsation by the Council of the College of Physicians and Surgeons.

I was given to understand at the time that Sir Oliver Mowat expressed the opinion that the system was objectionable owing to the lack of uniformity amongst these various tariffs, emanating, as they did, from as many Council constituences. In my humble opinion, on close investigation, this could not be held as a valid reason. The urban and pioneer settlements of the Province are vastly different so far as the financial resources of the people are concerned; a uniform tariff would either press too heavily on some, or be inadequate for the circumstances of others; and, therefore, could not be as fair as those which were in existence.

We all know that, during that session of the House, there was not a little influence exerted by a certain clique, or section, of the Legislature which promulgated the doctrine of extreme radicalism, and was largely founded on the principles of iconoclasm. A prominent feature of its policy was obnoxious opposition to all kinds of class legislation, and the doctor was labeled a parasite in the community. Zeal, not born of knowledge, used all available means to secure destruction of the tariff. How much their efforts conduced to the ultimate result I do not know; but speedily the tariff became a thing of the past, and, as a consequence, the judges of the land are left without any recognized guide in estimating the value of services rendered for which compensation might be sought in the courts.

A petition to the Government, asking for redress of this grievance, and directing attention to other matters of moment, was circulated last year amongst the profession by order of the Medical Council. It obtained nearly two thousand signatures, and was presented in due form; but the understanding given to the Committee of Legislation was that the complexion of the House was such as to render, for the present, any amendment to the Medical Act inexpedient.

I have always been, and am to-day, a consistent supporter of our Administration; therefore it will, I trust, be conceded that I speak from an unprejudiced standpoint; but I must say that we, as a profession, cannot afford to be deprived of that which was our honestly acquired possession, a privilege the abuse of which has rarely been assailed and never proven. Let this Association not forget that it wields a tremendous influence politically. I appeal to its members, as well as to those of the profession who have not yet entered its ranks, to account it their individual and combined duty to lay before their representatives in Parliament the exact facts of the case, in order to have a speedy restoration of their rights.

One word more on the much-discussed question of inter-provincial registration and I am done; and, in so doing, if I introduce aphorisms afflicted with talipes, give credit at least for the effort, because Mark Twain says: "It is easier to be good than to make a maxim."

1. Our existing system is egregious and the natural outcome of that part of the Act of Confederation which placed the control of education in the hands of the Provinces.

2. Vast fields in the Great North-West are being rapidly developed and require medical federation.

3. In the older provinces it would relieve plethora.

4. Recent licentiates, most of all, would appreciate its broadness.

5. On careful examination, I find our standard the highest, both as to preliminary training and the prescribed course of scientific study.
6. To await theirs to equal ours would postpone indefinitely.
7. Reasonable concessions are neither undignified nor disastrous.
8. Our co-workers could strive to meet us part way.
9. Mutual sentiments, then matrimony.
10. Unswerving loyalty to the genius of our calling and abiding confidence in Canada's future must, before long, remove every barrier, fancied or real, that stands in the way of its happy consummation.
11. A great empire, its greatest colony, one language, and a united profession.

In conclusion, let me again express my thanks, and wish you all abundant prosperity, during the coming year, in your various centres of usefulness.

THE PANCREAS AND OTHER SO-CALLED SWEETBREADS.

Dr. Parry, in the *British Medical Journal*, hints at a possible danger to health in the use of thyroid and thymus glands, that may be sold by butchers under the name of sweetbreads. He has made some investigation of the subject and finds that there is a confusion of terms, intentional or otherwise, in the minds of the sellers of meat. He says: "In talking to a butcher I was surprised to hear him say that there were three sweetbreads in an animal. I asked him where they were situated, and he told me at the root of the neck, in the cavity of the chest, and in the belly of the animal. I questioned him more closely and discovered that his three sweetbreads corresponded respectively to 1, the thyroid gland; 2, the thymus gland; and 3, the pancreas. To make quite sure that no mistake had been made, I watched him, a day or two after, kill and cut up a bullock. The thyroid gland in this animal is situated low down at the root of the neck, over the trachea. The thymus (which he told me was bigger in the calf than in the bullock) is placed in a somewhat similar position to where it is in man; while the pancreas, (the most important organ) he regarded as the least significant, and told me it was 'given in with the liver.' He told me, moreover, that if he were asked for calf's sweetbread he would always give (what we call) the thyroid and thymus glands. I have been informed that all butchers do the same thing, though I cannot vouch for the accuracy of this statement. At any rate, it seems to me to be right for every physician to be on his guard when ordering 'sweetbreads' for his patients that the pancreas be provided, and not these other glands. An undercooked calf's thyroid gland being repeatedly given in the place of a real 'sweetbread' might, as we know, produce untold mischief in a patient, as well as perplex the mind of the prescribing practitioner in a peculiar and undeserved manner.

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SURGERY.

IN CHARGE OF

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In December, 18, 1897, issue of *Journ. Amer. Med. Assoc.*, Dr. Gallant discussed the Van Arsdale triangular splint in fracture of the femur of children under six years old.

"The Van Arsdale triangular splint is made of thick straw or binder's board, as follows: Measure the length of the uninjured thigh from the middle of the groin to the end of the femur. Outline upon the cardboard a figure resembling two spades, as seen on playing cards, united at their points, the length of each of the four sections to be equal to the length of the child's thigh, the flayed portions to equal at the widest point the length of the thigh. Cut the outlined figure from the sheet of cardboard. Moisten this on one side, and fold at the junction of the ends of the spades and the narrow ends where they joint the enlarged part of the spade. These ends are then capped over each other and bound together, thus forming a triangle. Cover the abdomen and thigh with absorbent cotton held in place by a gauze bandage. Secure the splint by muslin bandages carried through the splint around body, then around thigh. To prevent lateral motion take fig. 8 turns at the upper angle around body and at lower angle around knee. Encircle the body and thigh with starch or crinoline bandages to fix the splint and prevent removal."

He claims the following advantages for this method:

1. Overlapping is prevented by the fixed position of the thigh, relaxing the muscles.

2. The fragments are held in perfect opposition, owing to the nice adjustment of the splint to the thigh, and complete immobilization in whatever position the child may be in.

3. Frequent readjusting is unnecessary, as the dressing is not soiled by the excretions, nor are chafing and dermatitis met with.

4. Complications due to confinement in the dorsal decubitus, such as hydrostatic pneumonia and vulvo-vaginitis, are avoided and the liability to concurring disease prevented.

5. Loss of flesh and strength does not occur, as the child is well and happy; it can nurse at the breast, sit on a chair, play on the floor, even learns to crawl about, sleep on either side; in fact, leads a perfectly natural life, with one exception—inability to walk.

6. Under these conditions we are justified in expecting rapid, firm consolidation in three weeks without shortening, and non-union will be rarely, if ever, met with.

7. For older children and adults the triangle can be strengthened by the use of plaster of Paris, the flexed position of the limb being the best for maintaining the fragments in apposition, the most comfortable for sitting or lying and other necessary functions, and the most convenient for getting about on crutches.

F. T. Paul, F.R.C.S., Surgeon to the Royal Infirmary, Liverpool, in a recent article suggests a new method of gastro-enterostomy (*Brit. Med. Jour.*) The plan is as follows: The bowel and stomach having been exposed, a longitudinal incision is made in the former—for about two inches in the human subject—through the peritoneal and muscular coats only. These are reflected with a small, curved, blunt dissector over an oval area, having a diameter of about 1 inch in the centre. The exposed submucosa is then rubbed with a stick of zinc-chloride, say half-a-dozen times, being well dried between each application, when it assumes a grey dead look. The bowel is now wrapped in a piece of moist absorbent wool and laid on one side, whilst the stomach is dealt with in an almost similar way. In preparing the stomach for the anastomosis, instead of making a linear incision, an oval patch of musculo-peritoneal coat is excised; the muscular coat being so much thicker in this organ, it is rather in the way if only reflected, and what is of more importance is that the loss of substance helps to prevent subsequent contraction of the opening. Both the wounds having been duly cauterised, they are brought together, and a continuous suture of the finest green gut or silk is run round the edges, as shown in the illustration—not, of course, penetrating the mucous membrane, but picking up as far as possible the tough submucous coat. Finally, a few Lembert or Halsted sutures are generally desirable, especially in anterior gastro-enterostomy.

The result of this operation in dogs—it has not been done in the human subject—is that the mucous and submucous coats slough and entirely disappear between twenty-four and forty-eight hours after the operation, and good firm union seems to take place with great rapidity. The complete removal of the slough might be a somewhat slower process in the average human patient; but probably an anastomosis would be effected within forty-eight hours—which is practically as soon as food could be digested, and quite early enough having regard to the proper adhesion of the external coats.

The features of this operation which it is hoped may be reckoned as advantages are:

1. The effect is one of pure traumatism. The viscera not being opened, all risk from such sources is avoided.

2. No foreign body is used.

3. The time occupied is less than for a suture operation, though more than for Murphy's.

4. The anastomosis resulting from loss of tissue should be more durable than in the majority of methods.

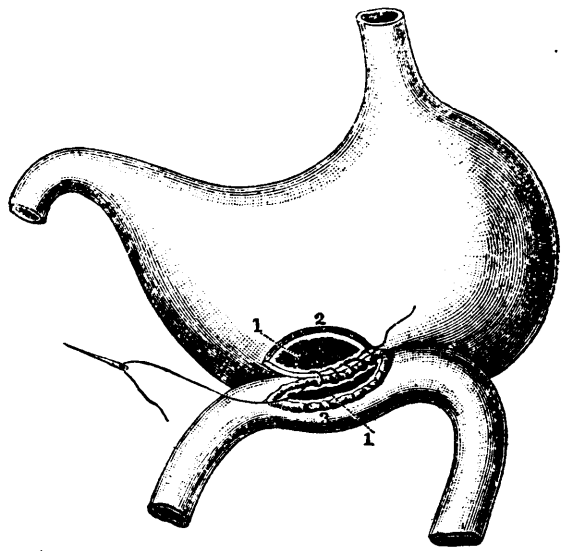
In performing the operation experimentally upon animals I have had the kind and valuable assistance of Professor Sherrington, who has personally helped me on each occasion, for which I feel very much indebted to him.

The chief points to which our attention has been directed were to ascertain:

1. The best chemical for causing necrosis of the mucous and submucous coats.

2. The interval between the operation and the breaking-down of the slough.

3. The character of the union.



Anterior gastro-enterostomy by a new method. 1. The eschar produced by chloride of zinc. 2. Wound in the stomach made by excising a portion of the outer coats. 3. Wound in the intestine made by incising and rolling back the outer coats. The commencement of the continuous suture is shown.

4. The efficiency and durability of the anastomosis.

Eight animals were operated on, and the experiments have been continuously progressing from November 2nd to the present time.

In regard to the general result the most noticeable feature has been the complete absence of shock in every case in which gastro-enterostomy alone was done. In estimating the severity of the operation, I am able to compare the effect of this method with that of several previous gastro-enterostomies in dogs, in which the viscera were opened, and I attribute the absence of shock, and, indeed, of any appreciable pain or disturbance, to the fact that nothing of a dangerous nature was done. The viscera were not opened, and therefore the local peritoneal reaction was purely plastic and aseptic, and was not accompanied by that sensation of pain and insecurity which is present when the localised peritonitis is associated with septic as well as traumatic influences. Professor Sherrington has had a much larger experience of the effect of operations upon animals than I have, and he quite endorses this view.

Only three chemicals were tried, as in the first instance I was limited to five experiments, though the limit was subsequently withdrawn. Strong nitric acid well applied failed to produce an anastomosis. At the end of a fortnight firm adhesions were present over the area operated on, but no opening at all. Chronic acid was more successful, but I thought not quite so efficient as zinc chloride, which has now been used seven times on six animals without once failing. Several other escharotics were thought of, but as the zinc chloride seemed to answer so well they were not tested.

The interval between the operation and the separation of the slough has not been quite definitely fixed. At 16 hours it was on the point of giving way. At 48 hours it was entirely removed, and strong union was present all round the opening. There were no other cases bearing upon this point.

The character of the union was very good in all the cases. The continuous suture was thoroughly embedded in a firm adhesion of plastic lymph which left nothing to be desired on the score of safety.

It has been difficult to decide as to the permanent efficiency of the anastomosis in dogs. In one the duodenum was divided, and gastro-enterostomy performed at the same sitting. The animal died at the end of two days from gangrene of the distal end of the duodenum, due presumably to division of the gastro-duodenal artery. Another in which the duodenum was greatly narrowed thrived well, but it seemed probable that some of the gastric contents continued to pass by the natural way, though the constriction of the bowel was sufficient to have produced dilatation above it. In a third, contraction of the pylorus was effected by destruction of the mucous membrane by zinc chloride, gastro-enterostomy being delayed until symptoms of pyloric obstruction were marked. After a few days' relief the severity of the symptoms increased, and the operation was a failure. At death a fortnight later the anastomosis was present, and would admit a little finger. It had either been made too late, or too small, or in a bad position, for it was high up near the lesser curvature towards the cardiac end. Probably all three conditions contributed to bring about failure. In this case the external coats of the stomach were incised only, and not cut out as I would now recommend, and the original incision itself was too small. Probably to get an orifice half an inch in diameter after complete recovery has taken place, one must operate on an area of twice that extent, and the loss of tissue should involve all the coats of the stomach if subsequent contraction is to be safely guarded against.

There was no evidence of regurgitation of intestinal contents into the stomach in any case. All the gastro-enterostomies were anterior, and in my limited experience in dogs and men this has not occurred in the anterior operation, though it did in one or two cases of the posterior operation in dogs which I performed in 1892.

In conclusion, I may say that I feel satisfied as to the safety of the operation I have proposed, and I believe there is a fair prospect that it will prove successful in effecting a satisfactory lateral anastomosis. The result of Murphy's operation in exhausted patients is sufficiently discouraging, in my judgment, to exclude it in this class of cases, though it is very successful under more favorable circumstances. I shall therefore feel justified in employing this method for my next gastro-enterostomy.

GOOD RESULTS FOLLOWING URETHRAL RESECTION.

Fuller (*Med. News*) describes two cases, in each of which a most extensive resection of the urethra was performed. The operation was ap-

parently first suggested by Konig, in 1882, his case being a traumatic stricture of the membranous portion. The free edges of the urethra were dissected up and brought into apposition by suture. Konig supposed that the success of the operation lay in the healing, by primary union, of these cut edges. The operation was, therefore, held to be applicable only to such cases of stricture of the membranous urethra as involved but a short portion of its length, and as would consequently admit of suture of the cut edges.

Acting on this idea, Wolfler, a few years later, finding that he had resected too great a length of the urethra for suture, grafted in the necessary amount of mucous membrane from a guinea-pig. He recorded a good result.

Many satisfactory cases of grafting were given by different observers; but the taking of the graft has been only inferred. Indeed, it is difficult to see how the graft can be exactly sutured so as to make a roof for the posterior part of the resected urethra. As equally favorable results were soon obtained, without the aid of either primary suture or graft, the objection to the excision of large strictures became void. Finally, in 1892, Guyon, and others of the French urethral surgeons, seeing no reason why resection should be confined to traumatic stricture, recommended the application of the method to contractile and rebellious strictures of gonorrhæl origin.

The usual proceeding advocated by the French authors is, after excising the stricture and surrounding cicatrical tissue, to induce a *sonde a demeure*, and then to unite the perineal or penile tissues by several tiers of suture over this. The advantage of the *sonde a demeure*, after extensive section of the deep urethra, is that it acts as a splint, steadying the cut urethral ends, and affording a firm, cylindrical body, about which the perineal tissues may be moulded, so that in healing they may be made to conform, as nearly as may be, to the shape of the new urethra. The disadvantage of the instrument is that it cannot be removed if its presence in the bladder causes tenesmus. If vesical tenesmus be excited, the urinary infiltration into and suppuration of the perineal tissues may result. If the sound is once removed to rest the bladder, it cannot be replaced, and the only thing to do, in such event, is to re-open the perineal wound.

Seeing the disadvantage of this mode of treatment, the author, in his two cases, divides the deepest part of the membranous urethra and the most posterior perineal structures, and passes a large-sized drainage tube into the bladder by this route. Then, along the urethra, he passes a soft catheter, extending to the big perineal tube, and about it sutures the perineal structures. This urethral tube is kept *in situ* for a week or ten days. The big vesical tube can be withdrawn and replaced, if necessary, without disturbing the urethral tube.

In the first case reported by the author, the scrotum and perineum was one mass of indurated tissue, riddled with fistulæ. Through one of these openings a filiform bougie was passed into the bladder as a landmark. Then a long, straight median incision was made, extending from the penile urethra, in front of the scrotum, back to and partially includ-

ing the anal sphincter. The cut split the scrotum, a testicle lying on either side of it. The entire bulbous urethra, an inch of the penile portion anterior to the bulb, and the anterior half-inch of the membranous portion were found disorganized. The diseased urethra existed as a hard, fibrous cord, perforated in numerous places, and so contracted that, on being split open by a longitudinal incision, little remained to mark the course of the canal. The whole of this disorganized urethra was dissected out with the cicatricial nodules about the perineal sinuses. A perineal vesical tube and a urethral tube were put in place in the manner just described. The urethral tube was retained for ten days, and the vesical one for nearly three weeks. The perineal wound healed practically by primary union, and in six weeks the opening left by the vesical tube was soundly healed. A year after the operation, a No. 18 (American) sound could be easily passed, and urination was normal. To the feel, the scrotum and perineum were soft and natural.

In the second case, the man was first seen suffering from extravasation. To open the bladder through the perineum, deepened as it was by so much infiltration, was likely to be such a prolonged and serious operation that supra-pubic drainage was performed. The other parts affected were freely incised. It was well that the opening was made above the pubis, for an abscess of the pre-vesical space was thereby opened, which could by no manner of means have been drained through the perineum. A fortnight later, the sloughs having separated, a further operation was performed. Part of the urethra was found to have almost sloughed away. The anterior end was defined by a catheter, and the cicatricial tissue about it excised. By passing a sound through the supra-pubic opening, down the urethra, the posterior end was cleared. In all one and three-fourth inches were removed. The structures were, as far as possible, drawn together over a urethral tube, as in the other case, and the bladder drained by a perineal tube. The wound was left to granulate. The tubes were removed as before, the urethral in ten days and the vesical in three weeks. The supra-pubic and perineal openings then quickly healed, and four months after operation a No. 17 (American) sound could be easily passed.—*Med. Chron.*

SURGICAL MEMORANDA.

EMPYEMA.—A study of recent literature and observations made at a number of the largest clinics of this country, both east and west, have led Dr. Rafferty (*Med. Record*) to question the propriety of the extensive resection of ribs in any but the most desperate cases. And while there are, no doubt, many cases in which the resection of a portion of a rib gives better results than the simpler methods, there have been many cases thus operated more for the sake of doing the major operation than with the belief that it was necessary. Especially is this true of the operation of Estlander and the thoracoplasty of Schede. As for other novel procedures occasionally advocated, such as curetting the pleural cavity, etc., they need only to be mentioned to be condemned. So, too, the indiscrim-

inate use of antiseptic injections is to be strongly deprecated. Many fatal results are recorded as immediately following this practice.

TUBERCULOUS DISEASE OF THE KNEE.—Dr. H. W. Cushing (*Bost. Med. & Surg. Jour.*, No. 12, '96) concludes as follows: When you operate on a tuberculous knee, operate so as to remove the disease. An erasion when limited; an arthrectomy when extensive. Reserve the typical excision operation to correct deformity from bony anchylosis. If properly done the disease can be checked. Apparently cured. I say apparently, for no one can say when a tubercular patient is well. There will result little or no motion. There will be more or less atrophy. There will be more or less shortening. This result can occur even with marked coincident disease in other joints. Operation is indicated:—When the disease is unchecked by treatment; when it is extensive; when a patient cannot have proper conservative treatment; when the general condition demands it to save life; to correct deformity of the knee-joint.

PROSTATIC HYPERTROPHY.—In a paper read before the Brit. Med. Assoc., at its recent meeting, Dr. McEwen stated that he had operated in five cases, three by double orchectomy and two by resection of the vas deferens. His conclusions were: 1. In many cases castration causes more or less atrophy of the prostate. 2. Atrophy occurs most commonly when the prostate is soft. 3. It is of most value when the enlargement is general. 4. Cystitis may be relieved or cured. 5. In marked cystitis drainage is better. 6. It may do away with the necessity of the use of the catheter. 7. Or the catheter may be required less frequently. 8. Resection of the vas deferens acts more slowly, but the effect is similar.—*Brit. Med. Journal.*

FRACTURE OF PATELLA.—Dr. George R. Fowler's method consists in exposing the fragments as an intermediate procedure, *i. e.*, after the immediate effects of the injury have subsided and before ligamentous union has occurred, for the purpose of clearing their surfaces of intervening soft parts, and the application of fixation hooks resembling Malgaigne's, though a single and not a double pair is employed. The incision is made either vertically, transversely or U-shaped, as indicated, and the hooks are inserted in the line of incision when possible, to avoid separate skin wounds. After carefully removing everything from between the fragments and applying hooks, the parts are stitched with sub-cuticular silk suture, sterile gauze and cotton are applied, and the limbs are enveloped in plaster-of-Paris splints for three weeks, at which time the hooks are removed.—*Med. Record.*

PROLAPSUS ANI.—Dr. Platt (*John Hopkins Hospital Bul., Jour. Am. Med. Assoc.*) resorted to the following procedure in the case of a child operated on in vain by other methods: At the junction of the skin and mucous membrane, just beneath the latter, a curved needle is inserted in the median line below, and a silk thread is carried half way around the anus and out again, in the median line above, reinserted in the same opening and brought out at the first puncture, making a purse-string suture. The little finger is then put in the anus and the string tied

snugly around it. Apparently, this would cause suppuration and possibly a fistula. It does nothing of the kind, nor does it cause any pain afterward. The child has his stools in the recumbent position. If the feces are at all hard, injections are given to soften them. After three weeks the suture is withdrawn when it heals immediately with no return of the prolapsus. By this method the bowel is kept in place long enough to contract adhesions.

MOVABLE KIDNEY.—Dr. Cordier (*American Journal of Obstetrics and Gynecology*) deduces the following propositions: 1. A movable kidney often produces a dilated stomach, with all the accompanying symptoms of a disease of the latter. 2. It is a fruitful source of gall stones, by the pedicle producing a partial obstruction of the common duct. 3. The bending of the ureter often gives rise to a hydronephrosis. This in turn is sometimes converted into a pyonephrosis. 4. It may produce death by a complete strangulation, by a torsion of the vessels and ureter. 5. By dragging on the abdominal aorta and kinking of the vena cava, a condition simulating an aneurism of these vessels may be produced. 6. Pain referred to the region of distribution of the spinal nerves is often induced by a movable kidney's disturbance of the abdominal basin. 7. A general nerve exhaustion (neurasthenia) is frequently induced by this condition interfering with digestion, assimilation, and elimination. 8. Nephrorrhaphy is a safe and effective surgical procedure. 9. All cases of movable kidney, if accompanied by symptoms pointing to the kidney as the source, should be operated upon. 10. In summing up the local and remote results of this now often-recognized condition, I think the correctness of the deductions has often been demonstrated by the disappearance of each and every symptom after a restoration and retention of the kidney in its normal position. 11. Symptoms are not to be relied upon in making a diagnosis of movable kidney; the physical examination is the only trustworthy guide.

SURGICAL ITEHS.

The mortality after prostatectomy is still high—about 18 or 20 per cent. for all operators. It is gradually becoming less as the indications for the operation are better understood. The death rate of individual operators will undoubtedly continue to grow less as they become more expert in performing the operation, and the cases of relapse and failure will be much fewer as more experience is gained.—*Alexander.*

From the evidence now at hand, the operative surgery of epilepsy must be regarded as an experiment with a very uncertain future. The facts at our disposal seem to indicate that while trephining may be a justifiable measure in these cases, the careful and conscientious surgeon must warn his patients and the parents not to be too sanguine of good results. Statistics seem to prove that operative measures should only be employed in traumatic cases in which there are localizing features, such as a depressed fracture, a scar from an old injury or focal manifestations on the part of the brain.—*J. C. Oliver.*

NERVOUS DISEASES AND ELECTRO-THERAPEUTICS.

IN CHARGE OF
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NEURASTHENIA ESSENTIALIS AND NEURASTHENIA SYMPTOMATICA.

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(Concluded.)

If we pause to analyze the various visual disturbances of neurasthenia we find that the same truth is evident. Here the principal symptoms are those expressive of ready fatigue. I will not pause to analyze them in detail, but simply to allude briefly to a few of them. One of the most common statements which we meet with from neurasthenics is that they are not able to read for more than a few minutes at a time, and that if they persist, the letters become blurred and indistinct, and that the effort gives rise to pain, generally headache. It is probable that in this symptom there is involved a three-fold weakness of retina, muscular apparatus and cerebral centres. Irritability is noted in the fact that many neurasthenics are unable to withstand any but the slightest exposure to light, the light giving rise to exaggerated and painful sensations. It is for this reason that so many neurasthenic subjects spontaneously begin the use of smoked glasses. These symptoms, ready fatigue and irritability, are primary symptoms. Other symptoms, however, are frequently present; thus patients will declare that everything appears as though seen through a mist or veil, or that objects look exceedingly dull, or, on the other hand, unusually bright, or that objects look as though they were far away, or at times excessively large. All of these symptoms are clearly secondary in value; they are all of them adventitious to the primary symptom, namely visual fatigue.

The same difference also obtains with regard to the disorders of hearing. Slight impairment of hearing coupled with auditary hyperasthesia, great irritability to sounds and noises, obtains in a very large number of cases, and these symptoms are beyond cavil primary and fundamental. In addition however, paræsthesiæ are frequently complained of. They consist of various forms of tinnitus, such as roaring, buzzing, whistling sounds and at other times of throbbing, beating or tickling sensations. These are beyond a doubt adventitious and bear but a secondary rela-

tion to the fatigued condition of the auditory apparatus. I might pause to point out a similar truth with regard to the disorders presented by the senses of smell and taste, but it is hardly necessary. I need only to briefly allude to the excessive sensitiveness of some neurasthenic patients to odors, and also to the fact that olfactory paræsthesiæ sometimes occur. This is equally true of the sense of taste. The accuracy of the latter is often distinctly lessened, and very frequently paræsthesiæ are present, so that common articles of food like bread and meat present strange and often disgusting flavors.

When we turn to the motor phenomena we find that these also resolve themselves into primary and adventitious symptoms. Muscular weakness is so pronounced a symptom of the average case of neurasthenia that it was constituted by Charcot one of his fundamental symptoms or stigmata, and termed by him *amyosthenia*. This amyosthenia is a primary symptom, and yet it is frequently associated with other symptoms, such as tremor. Tremor may present itself in a characteristic manner as a fine intention tremor of the hands, or it may be limited to certain groups of muscles or even to a few fibres of a muscle. When present as an intention tremor it is most readily demonstrated in the extended hands. When limited to special bundles of fibres it is most frequently observed in the muscles of expression, notably in recurring twitchings of the orbicularis palpebrærum or of a few fibres of the frontalis or, it may be of a few fibres of the orbicularis oris. These intention and fibrillary tremors are evidently not primary but are adventitious and secondary and should be so regarded. The term primary should be restricted to the amyosthenia itself.

When we turn to the disturbances of digestion, of circulation, of secretion and of the sexual functions, the same general truth is again noted. For instance, regarding digestion, the primary symptom is that of digestion enfeebled and delayed; *i.e.*, atonic indigestion—an indigestion also associated with an atonic constipation. Now, what are the secondary symptoms that sooner or later make their appearance? To the existing delay of digestion, the symptoms of a gastric catarrh, the result of abnormal fermentation, accompanied by the formation of abnormal acids, such as butyric, are added. Evidently gastric catarrh with its abnormal acidity, excessive or diminished, is to be looked upon as a secondary or adventitious condition. The disturbances of the circulation afford another illustration. The coldness of the extremities, the feebleness of the pulse are primary symptoms and expressive of general weakness. The disturbances in the rhythm, as manifested by irregular action of the heart or of cardiac palpitation, are to be regarded as adventitious symptoms. The circulatory apparatus, together with the nervous mechanism controlling it, is in a condition of irritable weakness, and that as secondary outgrowths of this irritable weakness there should be gross disturbances of its rythmic action is not surprising, but these disturbances must be looked upon as secondary and as not essential to the clinical picture of neurasthenia. The disorders of rhythm may be so great as to mount to most frightful attacks of tachycardia. The various heart murmurs that are occasionally noted in neurasthenic subjects are likewise to be relega-

ted to the secondary group. The loss of vaso-motor tonus, as made evident by involuntary flushing of the face or other portions of the body, or, on the other hand, by such symptoms as aortic pulsation, are also to be regarded as secondary.

Again, the sexual disturbances also reveal as primary symptoms, weakness and irritability and, in addition, as secondary symptoms, various paræsthesiæ, such as pricking, creeping, throbbing or cold sensations. The secondary symptoms, here, as elsewhere, are indirect outgrowths of the primary weakness and irritability.

The psychic symptoms of neurasthenia can be isolated with the greatest readiness. The very first symptom that we note is the diminution in the capacity for study or for intellectual effort; just as the patient is incapable of long-continued physical labor, so he is incapable of long-continued mental labor. To attempt to do mental work, sooner or later, brings on in the neurasthenic, symptoms of exhaustion. If the task be persisted in, the fatigue sensations become very pronounced, and, in addition to headache, secondary symptoms, such as sensations of constriction, giddiness and even vertigo make their appearance.

The next symptom that presents itself is also one indicative of weakness. It consists in the lack of the power of concentrating the attention, and this the patient frequently mistakes for loss of memory. Other symptoms of weakness are lack of spontaneity of thought, a diminution in the strength of the will, a condition of general indecision and mental and emotional irritability. These symptoms are all referable to the primary group. In a large number of patients, however, other symptoms make their appearance, symptoms which are clearly secondary in character; they associated with the general incapacity for exertion, the weakness of concentration and lack of spontaneity, there is often associated an apparently causeless, general sense of fear. This feeling of fear may be vague and ill-defined, and may consist merely of a general feeling of anxiety. More frequently, however, it takes some definite form. The patient experiences a sudden sense of fear which is uncomplicated and may be slight or may be so intense as to be horrible and overwhelming. Now, instead of assuming this generalized form, the fear may assume a special form, and here we have the special fears which have been described by various writers, notably by Beard. They are fears which find an apt illustration in the fear which a perfectly healthy person experiences when standing at a great height, even though they know themselves to be in a perfectly secure position. In neurasthenics, as is well known, these special fears assume the most aberrant forms. It is hardly necessary in this connection to refer to agarophobia, claustrophobia, and their congeners. Let it suffice to say that all of the forms of fear from the simple and purely generalized form to the most highly specialized forms all belong to the secondary group of symptoms. For some reason Charcot placed the various special forms of fear presented by neurasthenics in a third group of symptoms, but certainly if we regard neurasthenia as a fatigue neurosis with secondary outgrowths and complications, this formation of a third group of special mental phenomena is not justified.

Neurasthenia is not a vague ill-defined affection, as Binswanger would have us believe. I contend that it is an affection with a syndrome as well defined, as well established as any with which we, as clinicians, have to deal. The moment we regard neurasthenia in its true light, namely, that of a fatigue neurosis, much of the mystery passes away and, as pointed out, the essential symptoms, those directly expressive of fatigue, stand out boldly and prominently, and give to the disease its clinical features. The failure to assign to the secondary symptoms their proper value has been a prolific source of error and misconception. Often these secondary symptoms are quite prominent and striking, but they should not throw us off our guard. If the case be one of neurasthenia, some of the fundamental or primary symptoms can always be found.

If time permitted I would enlarge this discussion by inviting your attention to the pathology of true neurasthenia, would allude to the studies of Hodge with regard to the changes which nerve-cells undergo during fatigue, and also spend some time upon the histo-chemistry of neurasthenia—upon the probable source of the uric acid which is so often found in excess, and to point out how these factors enable us to draw still more clearly the differences between true neurasthenia and neurasthenia symptomatica, or spurious neurasthenia. Finally, permit me to allude to a condition which I myself have called Neurasthenia Terminalis. It is well known that prolonged and persistent derangement of function may be followed by actual tissue changes. Thus, a heart which is constantly overacting, the result of repeated and violent attacks of palpitation, may undergo hypertrophy, or the walls of the blood-vessels may become thickened, and, if the case persists sufficiently long and be associated with deranged tissue metabolism such as we have just alluded to, even atheromatus changes may take place in the vessels; or, again, if digestive disturbances persist sufficiently long, secondary changes may ensue, *i.e.*, terminal organic changes may occur in the digestive tract. That organic changes may also occur in other structures, such as the muscles and even the bones, there can be very little doubt. These changes are often suggestive of premature senescence. When any of these changes are present in a marked degree the case is classed by us clinically according to the diseased condition which predominates. To state the proposition in other words, simple and uncomplicated neurasthenia, if it persists long enough, results in actual tissue changes, and if the patient presents himself before these changes are accentuated in any one organ and are still slight and generalized, the case should still be considered as neurasthenic, but should be regarded, as I have suggested, as the terminal form. These are the cases which are largely intractable to treatment. The subject merits extended consideration, but time will not permit me to more than touch upon this interesting subject.

My object in this brief paper was merely to present in as condensed a way as possible my own interpretation of the symptomatology of neurasthenia, and was prompted especially by the publication of Binswanger's untenable and retrogressive views. I intended, namely, to point out the difference between true neurasthenia and spurious, or symptomatic neurasthenia, and also to give to neurasthenia its proper position in our nosology as a fatigue neurosis.

PATHOLOGY AND BACTERIOLOGY.

IN CHARGE OF

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ETIOLOGY OF INFECTIVE ENDOCARDITIS.

Kanthack and Tickell (*Edinburgh Medical Journal*, July, 1897) publish an article on this subject, based on an analysis of all the fatal cases which were observed in St. Bartholomew's Hospital from January, 1890, to March, 1897, and subjected to a necropsy. These amounted to eighty-four. The writers very properly insist that the term "infective" should be used and not "malignant" or "ulcerative." The question always is, Are the vegetations due to bacteria or not? Micro-organisms may cause acute endocarditis without ulceration, and, conversely, ulceration may be found in their absence. In all but ten cases either old cardiac disease or an inflammatory infective lesion accompanied the endocarditis. Of these ten cases, malignant disease existed in four, and a possible pneumonia in one, so that only five cases can be considered as uncomplicated. Old cardiac disease was present in fifty-four cases (64 per cent.), sixteen of which were accompained by a recognized infective process,—viz., pneumonia in seven cases, pyogenetic process in four, empyema in one, vaginal and uterine disease in two, bronchiectasis in one, and influenza in one. Of the remaining thirty cases in which old cardiac disease was absent an infective process was discovered in twenty, which either preceded or accompanied the endocarditis—viz., pneumonia in five, pyogenetic process in six, empyema in one, vaginal and uterine disease in two, otitis in three, tubercle in two, and typhoid fever in one. Of all acute diseases pneumonia is most frequently complicated with endocarditis. The writers found an antecedent pneumonia in 14 per cent. of all the cases. Where the pneumonia is croupous the pneumococcus is the cause of the endocarditis, and seems to be attracted and arrested by a pre-existing cardiac lesion. Endocarditis is by no means common in typhoid fever. When it occurs, either streptococci and other pyococci or typhoid bacilli have been found in the heart's blood. Similarly, in those rare cases of infective endocarditis occurring in diphtheria or gonorrhea, the Klebs-Löeffler bacillus or Neisser's coccus may be present, or streptococci and other pyococci. In one case there was a tuberculous endocarditis. Mixed infections are common in all these cases. Therefore, when an endocarditis complicates an infective fever it may be (1) homologous, (2) heterologous, or (3) mixed infection of the endocardium.

CHOLECYSTITIS IN ENTERIC FEVER.

Dungern (*Münchener medicinische Wochenschrift*, June 29, 1897, and *British Medical Journal*) first observes that mixed infections are very important in enteric fever, but that the typhoid bacillus may unquestionably be the cause of some complications. Severe complications involving the biliary passages are rare in enteric fever, and here the typhoid bacillus itself is very frequently the cause. As a result of the penetration of the typhoid bacillus into the gall-bladder, gall-stones may ultimately occur. The author is only acquainted with four cases of cholecystitis with or without calculus-formation in which the typhoid bacillus was the cause. He gives short details of these four recorded cases, and adds the following one: A woman, aged 46 years, had typhoid fever fourteen and a half years previously. Nearly five years afterwards she had attacks of pain accompained by vomiting, but without jaundice. During the next one or two years she had many attacks, but then remained quite free from them for six years. The attacks then recurred, and a hard swelling was felt in the region of the gall-bladder. This swelling was cut down upon by Kraske, and an abscess was opened, and 150 cubic centimetres of brownish-yellow pus evacuated. The pus was not bile stained. Any connection of the abscess with the gall-bladder was not vigorously sought for. No gall-stones were found, but occasionally the discharge was stained with bile. The typhoid bacillus was found in the pus in pure culture. It was submitted to all the ordinary tests and gave the serum reaction. It is most probable that the typhoid bacillus penetrated into the gall-bladder at the time of the enteric fever, but the interval of five years before the first attack of biliary colic is striking. In the last year of the six years' interval the patient suffered from a periostitis of the lower jaw, which may also have been due to the typhoid bacillus. If the above suppositions are true, the typhoid bacillus retained its vitality for fourteen and a half years. The patient's blood produced immobilization and agglutination in typhoid bacilli. The typhoid infection has been known to involve the biliary system even without any intestinal lesion. The author then refers to the bacillus coli communis, and its relation to suppuration; this micro-organism may even produce a disease not unlike enteric fever. The typhoid bacilli from the author's case proved themselves to be virulent when injected into animals, but the virulence was slight.

ACUTE RHEUMATISM.

Riva (*Centralbl. f. inn. Med.*, August 14th, 1897) makes a preliminary communication upon the etiology of this disease. He first refers to the fact that, although it is generally accepted that acute rheumatism is an infective disease, yet the pathogenic microbe remains undiscovered. Perhaps this is due to the nutrient media used for its cultivation not being suitable. The author obtained synovial fluid for this purpose from the joints of horses. To the peptone broth, fish jelly (8 to 10 per cent.)

or fucus crispus (1 to 2 per cent.) is added. A small quantity of glucose (1 to 2 per cent.) is also added, and just enough lactic acid to make the medium slightly acid. He has in addition used broth without the jelly or fucus, also the fluid alone from the inflamed joints, etc. Riva has thus examined 8 cases of acute rheumatism, 7 of moderate severity, and 1 very severe and complicated with pleurisy, pericarditis, and perhaps broncho-pneumonia. The fluid to be examined was always obtained from the knee-joint, and in 3 cases the blood was also examined. Five or six drops of the synovial fluid were obtained under the strictest precautions and added to the culture tubes. In this way a growth was obtained in all cases, whereas the ordinary nutrient media remained sterile. The author cannot as yet draw any definite conclusions as to the morphology and biology of the microbe. The growth was luxuriant at 35° to 37° C., but only slight at 15° to 17° C. The surface growth was in the form of a film. The gelatine was liquefied at ordinary room temperature, otherwise it became turpid. Growth appeared in media not acidified with lactic acid, but it was sparse. Glucose was likewise not essential but useful. In young colonies the microbe was found, assuming later an egg shape, and varying in size from a leucocyte to a large torula. Later these bodies disappeared and two different kinds of bacilli were found. Thus, (1) a growth similar in all cases was always obtained, and (2) no growth was obtained with one or two exceptions, when subcultures were made upon the ordinary nutrient media. In all probability this is the microbe causing acute rheumatism.—*British Medical Journal.*

TYPHOID FEVER PUMPS.

The discussion of typhoid fever epidemics should direct the attention of the health authorities to the danger lurking in the old-fashioned pumps. Many are still found in our modern cities, and to our knowledge many are still used in Philadelphia. The exceedingly dangerous quality of water pumped from springs in the vicinity of city dwellings is well known. The ground underlying a city is saturated with fluids escaping from old privy wells and drains, and the springs are therefore almost certain to be contaminated with typhoid fever germs. It is scarcely possible to think of a more dangerous drinking water than that pumped up from such urban springs. The menace to the public health from city pumps is emphasized by reason of the fact that tainted water is often very clear and sparkling. In a city like Philadelphia, for example, where the water supplied by the municipal government is often muddy or inky black, and with an unpleasant odor, uninitiated and thoughtless people are certain to prefer the sparkling, limpid pump water to that drawn from hydrants and household spiggots. It would never occur to such people that the pump water needs boiling, to kill the typhoid fever germs almost certainly contained in it, much more certainly than in the water drawn from the city mains. We have seen children and others drawing or drinking water from the wooden pump on the north side of Lancaster Avenue near Thirty-seventh Street, and have often wondered why the Board of Health

permitted such lurking dangers to remain. It would be interesting to know whether the vicinity of each pump is not conspicuous for cases of diarrhœa, typhoid fever and other sickness.—*Philadelphia Medical Journal.*

PHYSIOLOGICAL ALBUMINURIA AND THE BICYCLE.

It seems from certain observations made by Müller (*Munchener medicinische Wochenschrift, Centralblatt fur innere medicin*) that in albuminuria that cannot be distinguished with the microscope from that of genuine kidney disease, but one that must be looked upon as physiological, since it disappears within a few days after the cessation of the exertion, leaving absolutely no signs of the disease. Müller's observations were made on twelve bicyclists, eight of whom he calls trained and four untrained. Among the eight trained wheelmen there was only one whose urine contained albumin before the exercise, but after it the urine was albuminous in seven. In six of them, including the one whose urine was free from albumin, there were at the same time present in the urine casts in numbers as great as are generally met with in acute or chronic parenchymatous nephritis, and the two others had a few hyaline casts. Most of the casts were hyaline; the minority showed distinct renal epithelia and were granular. Free renal epithelia were found in every instance. White blood corpuscles appeared sparingly, but red corpuscles were not met with at all. Among the four untrained wheelmen, in all of whom the urine was free from albumin before the exercise, two showed albuminuria and one cylindruria after riding from an hour and a half to three hours.—*N. Y. Med. Jour.*

CYSTIC TUMOR OF THE SPLEEN.

Baginsky (*Berliner klinische Wochenschrift*) reports the removal of a large hemorrhagic cyst of the spleen, which developed in a girl 12 years old, after a fall on the abdomen. The tumor formed a large mass occupying the left hypochondrium, and was fluctuating below, but solid above.

The blood, on examination, was found to be normal. Exploratory puncture revealed the presence of a brownish fluid, which was examined for echinococcus hooklets, with negative results.

The tumor increased gradually and began to affect the general health, when operation was performed. Upon opening the abdomen a large hemorrhagic cyst, which contained a quart of bloody fluid, was found in the spleen.

The cyst was removed, and upon examination the wall was found to be composed of dense connective tissue and normal spleen substance.

The child recovered entirely from the operation, and was discharged in good health.

Baginsky also refers to another similar case which occurred in a girl 7 years old, and proved fatal at the post-mortem examination. Three cysts were found in the ductus choledochus which had resulted from the retention of bile due to inflammatory obstruction ofthe duct.—*University Med. Mag.*

PAEDIATRICS.

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PROGRESS IN PEDIATRICS DURING THE VICTORIAN AGE.

Those who are able to look back for no more than half the period over which the Queen's reign has extended, will yet be able to perceive that among the social changes which have come about have been some which nearly affect childhood. More thought and more skill are devoted to their education, and greater care to the preservation of their health, while greater anxiety is displayed to make the period of childhood happy. If the tendency of the age has been such, it is not surprising that it should have witnessed also, on the part of the medical profession, a greater disposition to study the pathology, the etiology, and the treatment of disease as it occurs in childhood. The development of interest in the subject within the last fifty years, and the growth of knowledge in connection with it has indeed been remarkable. The gains have been made simultaneously in this country, in Germany, in France, and in America.

That this assertion can truly be made is due to the scientific spirit and unselfish devotion exhibited at an early date by Dr. Charles West, who may justly be called the founder of the study in this country. By his writings, which have been translated into many languages, he has been one of those who have influenced most powerfully medical opinion throughout the world, towards a more serious apprehension of the importance of acquiring a better knowledge of the causes and the cure of the diseases most prone to afflict childhood. It is, therefore, with great pleasure that we are able to print below some brief reminiscences which Dr. West has been good enough to write in response to a request for his assistance:

"At the time when I settled in London, in the year 1838, the only English books specially treating of the diseases of children were those of Dr. Underwood and Doctors Maunsell and Evanson; and the only institution specially set apart for children's diseases was the dispensary in the Waterloo Bridge Road, where I worked for twelve years. During that time I preserved a record of 600 cases and 180 *post-mortem* examinations, made at the homes of the poor in Lambeth and Southwark.

"The results of these observations appeared partly in the medical journals, and completely in the *Medical Gazette*, as 'Lectures on the Diseases of Children,' which were delivered at the Middlesex Hospital,

and were afterwards published, in 1848, as a separate book. This book has since gone through seven editions, the last of which was based on the record of 2,250 cases, and 650 *post-mortem* examinations, and appeared in 1884. This book has gone through five editions in America, four in Germany, two in France and two in Italy, and has also been translated into Spanish, Danish, Dutch and Arabic.

"When the Hospital for Sick Children, in Ormond Street, was opened, in February, 1852, no other children's hospital existed in England or in America. At present there are forty-three in England, Ireland and Scotland, and I know not how many in America—all lineal descendants of the Ormond Street Hospital, which opened with fourteen beds and one little girl—the solitary in-patient.

"The foundation of a hospital for sick children was the dream of my youth, and the occupation of thirty years of manhood. I looked forward to helping to organize the institution which is housed in the building planned by me in conjunction with my dear friend (the late Mr. Edward Barry), and which, like the old hospital, was fitted and furnished throughout by me, and I trusted that when old age came I might be allowed to linger about the place to which my heart turns as a parent's towards his child.

"This happiness has been denied me to my lifelong heartbreak; and it is now too late for me to hope for more than this—that when I have passed away those to whom my memory will still be dear may hear my name sometimes mentioned as the founder of the first children's hospital that ever existed in this country, and as having given the impulse to that movement which has led to the children's hospitals in almost every town in England and America, and has enriched the once scanty literature of the subject with contributions of surpassing value.

"That with increased opportunities for observation, knowledge too would increase was certain. The evidence of this is seen in various papers communicated to the *Transactions* of societies, and to medical journals, as well as in systematic works. Of both, the merit is in many instances very great, and to me in my old age it is a real pleasure to see some of my mistakes corrected, some of my doubts answered, and my lagging pace outstripped by younger runners in the race, of which the goal is not alone the honor of him who wins the race, but above all the common good. May they act on the motto of the first great inmate of 49, Great Ormond Street, *Non sibi sed toti.*"

The movement which made it possible to found the Hospital for Sick Children in Great Ormond Street did not by any means expend itself in that effort. Owing not a little to the influence, direct or indirect, of Charles Dickens, public sympathy was aroused, and numerous hospitals sprang up in various parts of London; thus hospitals for children were founded in Pimlico and in Chelsea in 1866, in Hackney in 1867, in Shadwell in 1868, in Southwark in 1869, and in Paddington as recently as 1883.

Edinburgh can boast that the first step towards a study of diseases in children was taken there somewhere about the year 1838, by Dr. William Campbell, lecturer in midwifery and diseases of women, in the extramural school, who gave a separate course of lectures on that subject.

In 1856, Dr. Charles Wilson urged the "expediency of founding a hospital for the diseases of children in Edinburgh" in a series of articles in the *Edinburgh Medical Journal*. Nothing practical followed. But again, in February, 1859, another series of letters appeared in the *Scotsman* above the signature "Sigma, M.D." These are now known to have been written by Dr. John Smith, who was not only a pioneer in this department of medicine, but also in that of dental surgery. At that time, in the eight largest towns of Scotland, the mortality among children under five years of age was 46 per cent. The public press now espoused the cause of the children, and the result was that, on May 5, 1859, at a public meeting, it was resolved, on the motion of Dean Ramsey, that a hospital for the relief of sick children be forthwith established in Edinburgh. On February 15, 1860, a small hospital of twenty-four beds was opened. It was extended from time to time until it had seventy-three beds. With a view to the extension of the Royal Infirmary the managers of that institution bought the grounds of Meadowside House, and the directors of the Children's Hospital in turn bought the Trades' Maiden Hospital and grounds at Rillbank Terrace. The old building was pulled down, and an excellent hospital of 120 beds built on the site. This was opened by Princess Beatrice on October 31, 1895.

The multiplication of hospitals is not an unmixed advantage, but these facts are mentioned as an indication of the increased interest exhibited, during the present reign, in the study and the treatment of disease in childhood. The labors of many physicians and surgeons have gradually accumulated a body of knowledge which has been fully placed at the disposal of the profession in their writings, and through the instruction which has been given in many of these hospitals to students and junior practitioners. It has been said, with what truth we shall not pretend to say, that "pediatrics is the specialty of the general practitioner." Certain it is that the treatment of the diseases of children constitutes no small part of general practice, and a part the importance of which has been steadily growing in the eyes of the public.—*British Medical Journal. 1897. No. 1903.*

THE CAPACITY OF THE INFANT STOMACH.—Stomach capacity in the very young oftentimes becomes an important factor in artificially-fed babies. Unless careful measuring of food is observed, over-feeding is very apt to occur, particularly in cases of mild pyrexia, where more is consumed than is required simply to obtain an increased quantity of fluid, plain water satisfying every want if given instead of the bottle. The following approximations of stomach capacity are from Holt, and are of assistance in regular bottle-feeding. At birth, ℥ i; at two weeks, ℥ ii; at three months, ℥ 4½; at six months, ℥ 6; and at twelve months, ℥ 9. Loss of weight and fretfulness are the leading symptoms of insufficiency of proper food. A normal and properly nourished child should increase nearly one-third during the first month, about one-half during the first six months, and at the end of one year be about three times its original weight (Donkin).

FRANK WHITEFIELD SHAW, M.D.,
In *Brooklyn Medical Journal.*

OBSTETRICS AND GYNAECOLOGY.

IN CHARGE OF

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Corner Isabella and Church Streets.

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PREGNANCY AND FIBROID TUMORS.

BY H. C. COE, M.D., OF NEW YORK.

The subject assigned to me is not only quite familiar, but is one in regard to which there has been no essential change in the views of accepted authorities during the past twenty years, or since the publication of Gusserow's exhaustive monograph on uterine neoplasms. It would, therefore, seem to be a thankless task to discuss such a well-worn theme. However, with the advance of aseptic surgery, we may at least record more intelligent methods of dealing with the complication in question.

Assuming that the question of fibroids in connection with labor and the puerperium is one that more directly concerns the obstetrician, we shall confine ourselves to what may be called its gynecologic phase.

It is a curious fact that in spite of the somewhat extensive literature of this subject there exists a considerable diversity of opinion with regard to the significance of pregnancy occurring in a fibroid uterus. Thus, we read in a recent text-book that "with tumors above the internal os from 70 to 80 per cent. of the patients may be expected to go on to term;" while a well-known authority (Bland Sutton) states in a clinical lecture just published that "when a woman with a myomatous uterus conceives it is certain that her life is in jeopardy, not only so long as the fetus remains within it, but also when it is expelled, whether this occurs prematurely or at full time." It is evident that the acceptance of either of these extreme views must lead the inexperienced either to adopt an ultra-conservative policy, or to lean too strongly toward radical methods.

It is impossible to lay down general rules for the treatment of a complication in which the conditions differ so essentially in different cases. The skill, experience, and bias of the surgeon, as well as the anatomic conditions, are to be considered. One who regards the presence of a uterine fibromyoma of moderate size as a sufficient indication for a radical operation, irrespective of serious symptoms, will naturally be more indifferent to the interruption of pregnancy than the gynecologist who operates only for the relief of urgent symptoms, and prefers to save the uterus when this is possible. But, from the standpoint of the general practitioner, whose laudable desire is to avoid operative inference wherever it is compatible with the safety of the patient, it is desirable that a few definite facts should crystalize out of the mass of conflicting evidence.

The statement so frequently reiterated that conception is rare in women with fibroid uteri is doubtless correct, but with certain exceptions. That it does not apply to subserous growths is well known to those who practice among the negro race.

Unfortunately, the presence of small interstitial fibroids in the lower uterine segment, especially those which develop between the folds of the broad ligament, do not by any means offer that hindrance to conception which we are ordinarily taught to believe.

It is unsafe to assume that the presence of any uterine neoplasm is absolutely incompatible with pregnancy; so that the natural corollary is that, having an unmarried patient with a fibroid even of moderate size (unless it be of the subperitoneal variety) it is the duty of the physician to state frankly the possible risks of matrimony and to dissuade her from it.

In considering the influence of pregnancy upon fibroid tumors, and conversely, the effect of such growths upon the course of pregnancy, we shall assume that the elementary facts with regard to the genesis, mode of growth, degeneration, and usual complications of fibromyomata are sufficiently familiar to you. Without subscribing to the extreme view that every fibrous neoplasm, though innocent in itself, is to be regarded as a possible menace to life at some indefinite period in the future, we must all admit that certain changes may occur in the tumor itself, or in its environment, which may cause it to assume serious clinical importance. As is well known, the indications for surgical interference in these cases are progressive increase in the size of the tumor, hemorrhage and pressure-symptoms—one or all. That these may develop in connection with a fibroid which has previously been quiescent under the influence of pregnancy, at once suggests the importance of the complication. That such a tumor, especially when interstitial, should rapidly enlarge under the influence of the increased blood-supply is self-evident. This enlargement is not always permanent; it may be simply due to edema, but none the less it gives rise to marked pressure-symptoms, especially if impacted within the pelvis.

Changes in position of the tumor and uterus as the latter enlarges are not unimportant. A subserous growth at the fundus may cause retroflexion and incarceration of the gravid organ, or may press it downward upon the bladder.

The liability of pedunculated tumors when displaced by the enlarged uterus to suffer torsion of the pedicle—with all the serious results which may ensue—has been noted by several writers. Moreover, the occurrence of localized peritonitis with the subsequent fixation of the growth and uterus by adhesions has often been demonstrated at the operating-table.

Among the internal changes which may take place in the neoplasm itself in consequence of prolonged pressure, obstruction to the circulation, etc., are hemorrhage, cystic degeneration, and even necrosis.

Clinically, the site of the growth is by far the most important point. All agree that subserous tumors at the fundus, even when of large size, may be influenced but slightly, if at all, by pregnancy, which may advance to full term and be terminated in an entirely normal manner.

Small interstitial growths may be equally quiescent, and many cases have been reported in which submucous polypi have been recognized only after the birth of the child. But, it is equally certain that growths of either the subserous or interstitial variety situated in the true pelvis, especially if these be impacted or adherent, may give rise to disturbances entirely out of proportion to their size; hence they always cause more or less apprehension should pregnancy occur.

Did time permit, I could report fatal cases of ureteral and intestinal obstruction, of septicemia, and of thrombosis, due to the pressure exerted by fibroid tumors of small size complicated by pregnancy. I have discussed this subject in a former paper on "Impacted Intrapelvic Tumors" (*Medical News*, October 30, 1897). Nor is this the only danger from growths so situated. If abortion occurs spontaneously or is induced, even as early as the second or third month, the cervical canal may be so encroached upon that it is impossible for the product of conception to pass, and then serious hemorrhage or sepsis may result.

Fortunately the condition of the endometrium in cases of sessile submucous fibroid is such that conception is unlikely to occur, but when it does, premature expulsion of the fetus is the rule, and with it often an alarming hemorrhage. We need not dwell upon the dangers of conception in connection with intra-uterine polypi—a somewhat rare complication. Sloughing of the growths during pregnancy or after delivery is always to be apprehended, as experience proves.

As to the influence of fibroid tumors on the course of pregnancy, it may be said in general that we cannot always predict what the outcome of an apparently unfavorable case will be. While the gravid uterus is apt to enlarge irregularly, and often to suffer displacement, as before stated, it may, as it rises out of the pelvis, carry with it a tumor which was supposed to be impacted, and thus naturally prevent the complications which were feared. Such a fortunate development could, of course, not be hoped for in the case of growths in the lower segment. The latter, however, may not affect the course of the pregnancy, which goes on to term with all the risks attending labor under such circumstances. With large interstial fibroids, on the other hand, the probability of early detachment of the placenta is great, or if pregnancy advances there is imminent risk of accidental hemorrhage. The imperfect contractile power of the uterus in this condition is well recognized, as is also the consequent risk of hemorrhage and retention of the product of conception.

Although foreign to the present discussion, it may not be amiss to call attention to the fallacious view that while fibroids may enlarge under the influence of pregnancy, they undergo a notable diminution in size, or even disappear, during the process of involution. Under favorable conditions (as in the case of small intramural growths) such a diminution may sometimes be observed, but to hope that such a growth will entirely disappear is hardly less reasonable than to expect its total removal by electricity. One would hardly recommend pregnancy as a cure for fibroids.

The question of the diagnosis of pregnancy in a fibroid uterus is one which concerns the general practitioner quite as much as the specialist.

The history may be entirely misleading, especially where the patient is unmarried or the periods are irregular. Rapid enlargement of the tumor in a woman who has previously been under observation, in the absence of evidences of degenerative changes, would cause suspicion. This sign alone led to the diagnosis of pregnancy in two cases in which I performed hysterectomy for large multiple fibroids. Both patients were unmarried, one being a young girl, the other a negress so advanced in years that she was thought to have passed the menopause.

With a retro-uterine or intraligamentous growth the diagnosis would be comparatively easy because the softer body of the uterus could be isolated from the tumor. Asymmetry of the uterus is not an infallible sign, by the way, as it has been noted in normal pregnancy. Dermoids and solid tumors of the ovary, when impacted in the cul-de-sac, adherent to the uterus, are so often mistaken for fibroids that the error should never be a subject for criticism.

If there is any doubt as to the true condition, examination under anesthesia is not only advisable, but obligatory. It is so important to determine not only the fact of pregnancy, but the precise character, relation, and range of mobility of the tumor, that one cannot afford to neglect any means of arriving at an exact diagnosis. This is especially true if the question of the performance of a radical operation is under consideration. Any one can recognize a good-sized fibroid; this is an elementary point. There are many other things to be taken into consideration.

The reproach that gynecologists of the present day have become more careless in regard to diagnosis as they have increased in operative skill is not undeserved. We do not examine either the inside or the outside of the uterus as carefully as did our predecessors in the art, being content to wait until the abdomen is opened before trying to settle disputed points. The prompt recognition and proper appreciation of the complication which is under discussion calls for no small amount of diagnostic acumen. If skill and experience are requisite for the making of a correct and exhaustive diagnosis, certainly in the decision as to the best course of treatment to pursue there is opportunity for the display of the ripest judgment. As was stated at the outset, no fixed rules can be applied. Each case must be decided by itself, since no two are exactly alike. While the physician will naturally be somewhat influenced by the wishes of a patient who earnestly desires offspring, he cannot allow this factor to have much weight when it is evident that it is impossible for pregnancy to continue to the full term without imminent risk to the patient.

When the tumor, or tumors, is subserous and the uterus enlarges symmetrically, there will, of course, be no occasion for solicitude. A pedunculated, movable growth will bear watching, since symptoms of torsion may require a prompt resort to celiotomy; or, it may slip down into the pelvis, so that it will be necessary to push it above the brim. A fibroid of considerable size, situated in the anterior or posterior uterine wall, may also take care of itself and cause no solicitude even during labor.

(To be continued in our next.)

MEDICAL SOCIETY REPORTS.

ONTARIO MEDICAL ASSOCIATION.

The eighteenth annual meeting of the Ontario Medical Association was held in Toronto, June 1st and 2nd, Dr. William Britton presiding.

Dr. E. L. Shurley, President of the Michigan State Medical Society, was introduced and given a seat on the platform.

Dr. A. McPhedran presented the report of the Committee on Papers and Business, and moved its adoption. Carried.

The reception of the report of the Committee of Arrangements was postponed.

Dr. Greig, Toronto, read a paper on "Infant Diet."

Dr. George Peters, of Toronto, opened the discussion in Surgery: subject, "Treatment of Fractures of the Skull." This was discussed by Drs. Bingham, T. T. S. Harrison, T. K. Holmes and I. H. Cameron. Dr. Peters closed the discussion.

Dr. Sampson, of Windsor, read a paper on "Conclusions Culled from Thirty Years' Experience."

The President read a communication from Dr. Rogers, chairman of the Committee of Foreign Invitations of the American Medical Association, extending to the members of the Ontario Association an invitation to be present at the Denver meeting.

On motion of Dr. Harrison, seconded by Dr. McPhedran, a vote of thanks was tendered to the American Association for their kind invitation.

The secretary read the minutes of the morning session.

Dr. Ryerson read the report of the Committee of Arrangements, which was adopted.

Dr. Bruce Smith presented the first interim report of the Committee on Credentials, which was adopted.

Dr. Britton then delivered the presidential address. He was tendered a hearty vote of thanks, on motion of Dr. John Coventry, seconded by Dr. Harrison.

Dr. W. J. Wilson moved that the regular order of business be suspended, as he had a resolution to bring before the meeting. Carried.

Dr. Wilson moved, that, in the opinion of this Association, no one should receive free treatment as an out-door patient in our public hospitals except those receiving their hospital maintenance from the municipality to which they belong.

Dr. Sampson moved, in amendment, that a committee, consisting of Drs. Coventry, John Wishart, T. K. Holmes, Bruce Smith, A. H. Wright, J. C. Mitchell, W. J. Wilson and C. O'Reilly, be appointed to consider the various recommendations made in the President's address.

On motion of Dr. Ross, seconded by Dr. Powell, Dr. Wilson's resolution was tabled.

Dr. A. T. Hobbs, of London, read a paper on "Some Present Methods of Treatment of Patients at London Asylum for the Insane." This was discussed by Drs. J. Russell, Bruce Smith and J. F. W. Ross.

The Association then divided into sections.

MEDICAL SECTION.

Dr. J. C. Mitchell was appointed chairman in this section, Dr. Brown acting as secretary.

Dr. R. Ferguson, of London, read a paper on "The Injurious Effects of our Overwrought School System on the Health of Public and High School Pupils."

Dr. Ferguson, at the end of his paper, introduced the following resolution:—

"That this section of the Ontario Medical Association expresses its conviction that the school pupils of this province are overworked; that the examination system is overdone, and that the strain and cramming due to excessive study are injurious to the mental and physical constitution of the pupils; that this section recommends that the number of school studies be lessened, and that the curriculum be framed with a due regard for the mental capacity and the preservation of the health of the school children."

This was discussed by Drs. Sheard, Spence and Britton. Dr. Ferguson closed the discussion.

The chairman suggested that those who had spoken on the subject constitute a committee to consider the resolution, and report before the general session of the Association.

Dr. C. J. O. Hastings read a paper on "Toxæmia of Pregnancy."

A paper on "Vicarious Urination" was presented by Dr. A. T. Rice, of Woodstock. This was discussed by Drs. Adams, Hastings, McLurg, Cruickshanks, MacCallum (London), Fenton, Chambers; Dr. Rice closing the discussion.

Dr. C. B. Oliver's paper on "The Traumatism of Labor" was taken as read.

Dr. Walter McKeown read a paper on "The Application of the Principle of Osmosis to the Treatment of Toxaemia."

Dr. Olmstead's paper was postponed.

SURGICAL SECTION.

Dr. Angus McKinnon was appointed chairman of the section, and Dr. Herbert A. Bruce secretary.

Dr. A. Primrose presented a paper on "Operative Methods in the Conservative Treatment of Tubercular Joints." This was discussed by Drs. Coventry, A. Davidson, H. P. Galloway and C. L. Starr. Dr. Primrose replied.

Dr. Holmes was appointed chairman while Dr. McKinnon read his paper on "Supra-Pubic Prostatectomy." This was discussed by Drs. A. B Welford, Greig, Forfar, H. H. Oldright, Holmes and Peters. Dr. McKinnon replied.

The section then adjourned.

EVENING SESSION.

Dr. McPhedran presented his paper on "Cretinism in Ontario," illustrated with lantern slides.

Dr. H. A. MacCallum opened the discussion in Medicine on "Excretion in Cure and Immunity." This was discussed by Dr. Anderson.

Dr. J. C. Adami, of Montreal, read a paper on "Syphilitic Cirrhosis."

THURSDAY MORNING.

The President ruled that papers read be handed to the secretary, to be disposed of by the Committee on Publication.

Dr. Holmes, of Chatham, opened the discussion in Gynecology: subject, "Carcinoma of the Uterus." This was discussed by Drs. Rowe, Georgetown; and A. A. MacDonald, of Toronto.

Dr. A. H. Wright presented a paper on "The Management of Difficult Breech Labors. The essayist demonstrated his method by the use of a mannikin. Drs. C. J. Hastings, W. Oldright, Bray, and Rice discussed the paper.

Dr. J. H. Richardson was invited to the platform, and briefly addressed the Association.

A communication was read from Dr. A. M. Rosebrugh, secretary of the Prisoners' Aid Society, regarding the establishment of a Home for Inebriates. The President said that he would, with the consent of the Association, appoint a committee, whom he would ask to consider the matter, and report at the next annual meeting. This was approved of by the meeting. The President referred the matter to the Committee on Public Health.

Dr. McKinnon begged the privilege of introducing a motion: That the dinner of the Association take place on the first evening of the Association, and that the out-of-town members pay their own way. Seconded by Dr. Rowe. Carried.

The Association then divided into sections.

MEDICAL SECTION.

Dr. A. T. Rice, of Woodstock, was appointed chairman of this section.

Dr. R. Doan, of Harrietsville, read a papor on "My Experience with Antitoxin in the Fall of 1897." This was discussed by Drs. E. L. Shirley, C. Sheard, Price-Brown, Adami, J. M. Johnston, McPhedran and Samson. Dr. Doan closed the discussion.

Dr. Heggie then read a paper on "Hyper-resonance of the Chest a Premonitory Symptom of Pulmonary Tuberculosis.'

Dr. P. H. Bryce read a paper on "The Effect of the Climate of our Canadian North-West on Patients with Tuberculosis."

The section then adjourned.

SURGICAL SECTION.

Dr. N. A. Powell read a paper on "Cat-gut, Gauze and Sponges: What are the best Methods of their Preparation?"

Dr. Oldright, Sr., read a paper on "When Should we Operate?" illustrated with cases. This was discussed by Drs. McKinnon, Riddell, McKenzie, C. Starr and Holmes.

Dr. G. H. Burnham read a paper on "The Various Operative Methods of Dealing with Eyes Lost through Injury or Disease." This was discussed by Dr. Chas. Trow.

The section then adjourned.

The Association then adjourned for luncheon at the Royal Canadian Yacht Club House.

A clinic followed at the Victoria Hospital for Sick Children. Dr. W. B. Thistle showed two cases of rheumatoid arthritis. Dr. Geo. Peters showed (1) a case of teratoma—two tumors on the back of a child, each containing intestine; (2) a case of ectopia vesicæ, with prolapse of the rectum; (3) a case of empyæma.

Dr. Primrose showed (1) a case of psoas abscess, in which he had operated without drainage; (2) a case of deformity due to birth palsy; (3) a case of arthrectomy for tuberculosis of the knee-joint; (4) a case of Calot's operation for forcible reduction of spinal deformity.

Dr. Crawford Scadding made some remarks on the administration of chloroform in the prone position. He showed a case of rickettes.

Dr. Powell showed a case in which he had fractured both lower limbs by manual force, followed by plaster Paris splintage for the correction of deformity.

The hot-air bath as used in the treatment of surgical and medical diseases was shown, and its operation demonstrated.

EVENING SESSION.

Dr. Britton presided.

The minutes of the preceding session were read and adopted.

Dr. McPhedran presented the report of the Committee on Nominations. It was as follows: Next place of meeting, Toronto. President, W. J. Gibson, Belleville; first vice-president, J. F. W. Ross, Toronto; second vice-president, I. Olmstead, Hamilton; third vice-president, W. J. Rowe, Georgetown; fourth vice-president, N. McCrimmon, Kincardine; general secretary, John N. E. Brown; assistant secretary, E. Hulbert Stafford, Toronto; treasurer, Geo. Carveth, Toronto; and to the Committee on Credentials were added W. J. Wilson and W. J. Craig, Toronto; to the Committee on Public Health, J. Hutchinson, London, and Gilbert Gordon, Toronto; to the Committee on Legislation J. C. Mitchell, Enniskillen, and John Samson, Windsor; to the Committee on Publication, J. T. Fotheringham, Toronto, and V. Anglin, Kingston; to the Committee on By-laws, J. Wishart, London, and A. McKay, Ingersoll; to the Committee on Ethics, A. A. McKinnon, Guelph, and G. Hodge, London; to the Advisory Committee, Wm. Britton, Toronto.

The report was adopted.

Dr. Samson was then appointed to the chair.

Dr. W. Britton presented the report of the committee appointed to consider the resolution appended to the paper of Dr. Ferguson. It was as follows:

The committee appointed yesterday by the Medical Section to prepare a resolution for submission to the Association on the subject of over-study in the public and high schools of Ontario, and other matters pertaining thereto, beg leave to recommend the adoption of the following resolution:

Inasmuch as the promotion and maintenance of the public health constitutes one of the most important objects for which the Ontario Medical Association was organized, it is submitted that, while fully recognizing

the high standard of general education attained under our provincial school system, it is the opinion of this Association:

1st. That the school children are overworked, to the detriment of their mental and physical health.

2nd. That in many schools the ventilation and air space per pupil are not ample to fulfil the proper sanitary requirements.

3rd. That the lighting of the schoolrooms is often so inadequate or so badly arranged as to induce various forms of visual defect.

4th. That while some provision has been made for physical exercise, there is room for improvement in this respect.

5th. That home studies are, as a rule, made too arduous to allow for such rest and recreation as are essential to physical growth and development.

It is therefore recommended:

1st. That the number of subjects of study prescribed by the Education Department be lessened.

2nd. That home work be curtailed.

3rd. That less exacting examinations be imposed on the pupils.

4th. That more time during school hours be devoted to physical culture.

5th. That school trustees should confer with members of the medical profession as to lighting, ventilation and capacity of schoolrooms.

6th. And that the curriculum generally be framed with full consideration of the paramount necessity for preserving the physical health of the rising generation.

All of which is respectfully submitted.

The resolution was signed by Drs. Britton, Sheard and Ferguson.

Dr. Britton moved the adoption of the report. Dr. Peter Bryce seconded the motion. It carried unanimously.

Dr. Ross, Minister of Education, who was present, was then called upon. He expressed his pleasure at the recommendation made by the Association, and invited the president to appoint a committee to confer with him regarding the points touched upon in the report.

The president named the following gentlemen as members of the committee to confer with the Minister of Education: Drs. R. A. Reeve, A. A. MacDonald, D. G. Wishart, E. J. Barrick, A. McPhedran, J. T. Fotheringham, R. Ferguson, A. McKinnon, C. Sheard, J. Spence, Rowe, G. Gordon, Hutchinson, H. Griffin, P. H. Bryce, G. S. Ryerson, and L. L. Palmer.

The treasurer presented his report, which was adopted.

(See archives for statement of same).

It was moved by Dr. Britton, and seconded by Dr. W. J. Wilson, and resolved:

That this Association deplores the fact that in the various hospitals and dispensaries of the Province, under the guise of poverty, many designing persons who are quite able to pay a medical practitioner at least a moderate sum for his services make false representations as to their financial standing, thereby securing gratuitous care and professional advice or attendance, inflicting a great evil upon the profession at large, imposing upon the time and skill of those who attend them, and obtaining the charitable

consideration which is designed exclusively for the deserving poor; therefore it is further resolved that a representative committee be appointed, consisting of five members from the staffs of as many hospitals, and five chosen from the outside profession, with power to add to their number in the same proportion, whose duty will be to make full enquiry during the coming year as to the extent of the evil, and to report to this Association, at its next annual meeting, their conclusions as to the best means for its suppression.

The resolution was discussed by Drs. Ryerson, Bryce and Fotheringham. Carried.

It was moved by Dr. F. N. G. Starr, and seconded by Dr. T. S. Harrison: That this Association desires to express its willingness to approve of some scheme whereby reciprocity between the provinces may become an accomplished fact, without degradation of the Ontario standard, and that its members in meeting assembled do request that the Ontario Medical Council act in conjunction with the councils of the other provinces with a view to bringing about this happy result.

This was discussed by Drs. Powell, Britton, Ryerson, Cruickshanks and Barrick, and carried.

It was moved by Dr. Barrick, and seconded by Dr. W. J. Wilson: That it be an instruction to the Committee on Papers and Business to take up the report of the legislative and special committees, and resolutions of which notice has been given, immediately after the president's address at the next meeting of the Association.

This motion was discussed by the mover, the seconder, J. F. W. Ross, H. T. Machell, and Bryce. Lost.

Dr. Barrick then gave the following notice of motion:

That, whereas there is reason to believe there is a widespread feeling among the medical men of this Province that the system now in vogue of Lodge and contract practice is undignified and derogatory to the best interest of the profession, and should be abolished.

Be it therefore resolved, that in the opinion of this Association, the medical council be and is hereby memorialized to take a plebiscite on the question of prohibition of Lodge and contract practice,

And further, in case the prohibition be endorsed by a substantial majority, to immediately, or as soon thereafter as possible, apply to the local legislature to have such amendments made to the Medical Act as to put the above in force.

The usual honoraria were then voted to the secretaries.

A letter was read from Dr. C. R. Dickson, president of the American Electro-Therapeutical Association, inviting the members of the Ontario Medical Association to attend the annual meeting to be held in Buffalo in September.

On the motion of Dr. E. H. Adams, all papers unread were taken as read.

Dr. Bruce Smith presented the following report of the Committee on Necrology:—

Your Committee on Necrology beg to report the names of the following members of this Association who have gone over to the majority during

the last year:—Drs. Burns, Strange, Burgess and Closson, of Toronto; Drs. Miller and Shaw, of Hamilton; Dr. Cronyn, of Buffalo; Dr. Dixie, of Springfield; Dr. Newcombe, of Sandwich; Dr. McClure, of Thorold; Dr. Griffin, of Brantford; Dr. Killock, of Perth; Dr. Hill, of Ottawa, and Dr. Cunningham, of Kingston.

The report was adopted.

Dr. Primrose presented the report of the Committee on Publication as follows:—

The Committee on Publication beg to report that in consequence of the fact that during the past few sessions of the Association members have been permitted to part with their papers otherwise than through the Committee on Publication, the members of the Association have not handed their papers to the secretary. The president ruled this morning that all papers should be disposed of through the committee, and that they should be distributed to the various journals. This ruling was, however, too late to affect matters this session, and in consequence the committee have no papers referred to them.

Dr. N. A. Powell presented the report of the Committees on Ethics. It was as follows:—

Your committee beg to report that during the year no formal complaints have been sent in calling for action at our hands.

We recommend that, as the supply of copies of the code of ethics adopted by this Association is now exhausted, an issue be arranged for. The code having received a thorough revision when last before the Association, it is inexpedient to make further changes in it at the present time.

It was moved by Dr. Samson, and seconded by Dr. Harrison, that the sum of seventy-five dollars be donated to the Ontario Medical Library Association in recognition of its usefulness to the profession throughout the Province generally, if the funds of the Association will warrant it. Carried.

The following votes of thanks were then passed:—

It was moved by Dr. Gibson, seconded by Dr. C. R. Dickson, that the thanks of this Association be tendered to the Royal Canadian Yacht Club for the use of their club-house in entertaining the members of the Association.

It was moved by Dr. Dickson, and seconded by Dr. Clouse, that the secretary be instructed to send to the Toronto Street Railway Company the thanks of the Association for their kindness in supplying cars for the excursion about the city. Carried.

A hearty vote of thanks was tendered to the Honorable the Minister of Education for the courtesy manifested in placing once more the handsome rooms of the Education Department at the services of the Association.

The meeting then adjourned until the first Wednesday and Thursday of June, 1899.

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—NEW YORK MEDICAL JOURNAL, *Feb. 5, 1898.*

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Editorial.

A NEW SANATORIUM FOR CONSUMPTIVES.

The following is an outline of a movement now being made by medical practitioners and a few other gentlemen of Toronto to provide a much needed Sanatorium for consumptives within a few miles of the city so that city patients, and those in the vicinity, desiring to take advantage of it may be easily visited therein by their own physician and their friends.

It is the intention to have it near one of the trolley lines which run out of the city, on either of which there are very good elevated sites, and to make it a first-class institution in every respect as relates to general equipment, providing all well recognized modern means for the most scientific treatment of patients, yet on an economical plan.

It is the purpose of the promoters to provide for the poorer classes of patients, and in all stages of the disease, with the hope of checking its progress in cases even considerably advanced in the second stage, as sometimes has been done, and also to provide a home wherein the last days of hopeless sufferers may be relieved of their most distressing symptoms,

and made as comfortable as the resources of modern medicine, including, of course the best of nursing and general care, can make them, and avoiding in this way danger to their relatives and others.

In view of the fact that loss of time in treatment is such an important element in lessening the chances of improvement or recovery, in any stage of phthisis, the disease usually making daily progress, patients, on proper application, will be received into the Sanatorium at once, as in any hospital.

It is purposed to obtain, if possible, a small farm in an elevated, sunny locality, as free from fogs and dampness as possible, in order both to provide ample room for buildings, on the cottage plan, for the different classes of patients and stages of the disease, and also that some of the patients who would be benefited by such exercise may engage in farm and garden work, and so help to provide the institution with the necessary farm and garden food stuffs, including food for cows, poultry, etc.

The promoters feel assured that there is a very general feeling amongst city practitioners and others that such an institution is much needed.

It is a movement in which almost everybody is interested and should feel an interest.

"Who hath not lost a friend" by this most prevalent of all diseases? And not a very large proportion of the community can be individually assured of continued immunity from it.

Not only is it the most common and fatal of diseases, but it demands prompt special treatment, and in a special institution and locality.

With such treatment a larger proportion of consumptives than is commonly supposed can be practically cured.

It is, therefore, believed that a project as above outlined will appeal so strongly to the charitable public of Toronto and its vicinity, that there will not be much difficulty in obtaining the necessary funds to carry it out.

[It will be seen that there is much to be admired in this scheme if it can be carried through. It cannot be a rival to the Gravenhurst Sanitarium, where only specially selected cases can be placed. But it can be a distinct relief to the General Hospitals of the Province, in taking off their hands the more advanced cases from which contagion is apt to occur for other inmates where proper segregation is impossible. We think, too, that with the growing public knowledge of the danger of contagion many cases are likely to be sent there that would otherwise linger at home without the comforts and expert care and nursing that they would receive in such an institution. The gentleman in whose hands the organization of the institution rests is one whose energies have been for years bent to the study of tuberculosis, and whose writings have been most favorably noticed by the leading British and American medical reviewers, as well as in Canada. ED.]

THE DISCIPLINE COMMITTEE AND ITS LATEST INVESTIGATIONS.

The brilliant young lawyer who writes the leading editorials on bucolic topics for the *Weekly Sun* has seen fit to lend the columns of that bland

and child-like journal to the Munyon Company for the purpose of conducting a campaign against the medical profession in its attempt to shield the public from the conscienceless swindle worked by the Company. When the report of the Discipline Committee has been laid before the Council we shall be glad to let our readers see the exposure made of the methods of this American commercial organization, which we regret to say has found certain holders of the Ontario license willing to lend their influence and protection to what would otherwise be nothing more than a street pedlar's business. Here is one paragraph:—

"It is not, however, to the etiquette of the medical profession or the merits of these cases that we desire to refer. What we wish to call attention to is this fact—that the question as to whether a doctor shall be permitted to pursue his calling in the Province of Ontario is placed in the hands of a body of men, none of whom he has a right to challenge, who may be his personal enemies, who are governed by no legal forms or procedure, and who are responsible neither to the Government nor to the public."

What a touching instance of sympathy for the downtrodden doctor! The outside profession and the public appear in a new rôle here. The quarrel, if quarrel there be, is one that interests no outsider, and interference of such a kind is gratuitous and most impertinent. The columns of the *Weekly Sun* are being utilized to furnish clippings to be inserted at advertising rates as reading-matter in other journals by the Munyon Company. It is a strange comment on the self-respect and conscience of our secular press that the only journal willing to publish a word as to the investigation should be those who have had no advertizing from the Company. None of our readers need to have pointed out to them any of the errors as to fact of the above paragraph. The whole article in the *Sun* is full of similiar bias and untruthfulness. But quacks, and fools for their victims, we shall have with us as long as men remain mortal.

ONTARIO MEDICAL LIBRARY ASSOCIATION.

The annual meeting of the Ontario Medical Library Association was held at Dr. J. E. Graham's, Bloor Street, June 29th, 1898, President Dr. Graham in the chair.

The minutes of the previous meeting were read by Dr. Pepler, Secretary *pro tem.* Treasurer's report read by Dr. Greig.

Curator's report showed the library to have 4,406 complete volumes (bound and unbound) and 27 journals regularly on file. An unusually large number of books have been donated during the year by Drs. Osler, Graham, Sweetnam, Powell, Grasett and others.

Dr. Osler, who was then called upon to address the meeting, began his remarks by mentioning three important points to be remembered in the conducting of a library:

1st. Get as many good journals complete as possible.

2nd. Keep about 100 good journals on file.

3rd. Obtain important new books as fast as they come out.

He spoke of the formation of a Provincial Library, and considered it a good idea where practicable.

Referring to the best way of maintaining a library, he mentioned two systems:

1st. By voluntary subscription.

2nd. By organization of physicians, of which the library is a part.

He considered the latter to be the better plan. He advocated the fusing of the different medical societies, and suggested that an annual payment be made toward the library fund; that this organization should have a proper habitation in some central locality, and that it be called the Medical Chambers.

On behalf of the Association, Dr. Graham then thanked Dr. Osler for his admirable address, and warmly seconded Dr. Osler's suggestion.

The President then announced the retirement of Dr. Greig from the Treasurership.

Dr. Powell then stated that all doctors outside Toronto could have access to any books in the libarary by paying all express charges, subject to required conditions.

Dr. Osler stated that he wished to donate one hundred dollars a year to the library for the purchasing of new books, with the idea of perpetuating the memory of his old preceptor, Dr. Bovell; and he wished this donation to be known as the Bovell Library of the Ontario Medical Library Association.

Dr. Graham then donated five hundred dollars towards an endowment fund.

Moved by Dr. Wishart, seconded by Dr. Machell, that the thanks of the meeting be tendered to Dr. Osler for his valuable subscription. Carried unanimously.

The meeting then adjourned for refreshments.

THE TREATMENT OF INEBRIETY.

A correspondent writes: "An editorial in the last number of THE LANCET contains a statement in reference to the Keeley Company so unfair and unfounded that I am sure you will, on learning the facts, give equal publicity to this correction. It is alleged that the Company have recently 'attempted to get control of the treatment of inebriate prisoners in the county gaols and central prisons of the Province thus arrogating to themselves influence under the aegis of Provincial authority, and securing at the same time a reputation for charitableness.'

Nothing could be further from the truth. When approached on the subject by philanthropic persons interested in the rescue of inebriate prisoners, the Company not only took no action themselves, but deprecated any being taken by their physicians or managers. They stated that if the Ontario Government desired to introduce the Keeley treatment into penal institutions (as has been done in the United States) they would agree thereto, but on condition that its administration should be entrusted

only to the medical officer of the gaol, prison or asylum, and should be restricted to the case of such prisoners as desired treatment, were recommended therefor by the prison authorities, and would agree to repay to the Government a nominal fee to cover the actual cost of the remedies used.

You have doubtless been misled by a paragraph which appeared some weeks ago in certain Toronto papers, based upon statements made to them by a physician connected with the Prisoners' Aid Association. You quote the report of this gentleman, professing to embody the result of an investigation by him into the methods adopted in the United States for the treatment of inebriety. The "true inwardness" of this report is disclosed by its concluding recommendation, "that with a view to both *economy* and *efficiency*. . . . the Ontario Government should be called upon *to appoint an Inspector of Inebriate Hospitals.*" (The italics are taken from the report itself as quoted in THE LANCET).

Will it be believed that this impartial and disinterested investigator of "the methods adopted in the United States for the treatment of inebriety" did not visit a single one of the forty or fifty Keeley Institutes scattered all over the Union, in which more patients are to-day being treated for inebriety than in any similar institutions in the world; that he entirely ignores a discovery which within two decades has completely revolutionized the ideas theretofore held by the profession, as well as the public in reference to the status and cure of inebriates which has been officially recognized and adopted by municipal and local authorities, State Legislatures and the United States Government itself, and the permanent efficacy of which is attested by the personal experience of more than 300,000 cured men?

Will it be further believed that, although the statistics contained in his report show the most successful results, (viz., 50 per cent. of satisfactory cures) to have been attained in the county workhouse of Minneapolis, Minn., among prisoners, most of whom had heretofore been repeatedly "sent down" for drunkenness, he suppresses the fact (of which he was perfectly well aware) that the treatment which produced these results was the Keeley Cure and nothing else?

When, upon the testimony of a witness so unfair and untrustworthy, the Keeley Company are accused of having endeavored, under the guise of charitableness, to secure Government influence (*or Government office*) may they not reply '*Mutato nomine, de te fabula narratur.*'"

[We wish to accept, with certain limitations, the correction suggested by our correspondent, and to say that the Keeley Company would appear not to have approached the Government officially. That the Keeley system of treatment has been urged upon the Central Prison authorities and the Prisoners' Aid Association, as well as on certain members of the Ontario Cabinet, for over a twelvemonth, is still a fact; but it has been so urged not by the consent of the Keeley people here but by a thoroughly disinterested and philanthropic lady in Toronto out of purely humanitarian motives. Our editorial statement was, from our information, correct, as on at least one occasion this lady appeared before the Executive Committee of the Prisoners' Aid Association, accompanied by one of the officials of the

Keeley Institute here, which would certainly lend color to the statement that the Keeley Company was approaching the Prisoners' Aid Association officially. The portion of our correspondent's letter referring to the merits of the Keeley system we print without comment, except to take very strong exception to the statement that the "*discovery*" has "completely revolutionized the ideas theretofore held by the profession in reference to the status and cure of inebriates." The profession has not changed, and will, we trust, never change its attitude of opposition to a cast-iron commercial organization like the one in question.—ED.]

CANADIAN MEDICAL ASSOCIATION.

Although the attendance at the Ontario Medical Association was good, there are still hundreds of practitioners who have failed to do their duty to the profession and to themselves by appearing this year at a medical society meeting. The correspondence elsewhere printed in this issue is worth noting. A meeting in Quebec will be a treat in every way, apart from the excellence of the papers to be read. Let a word of advice be pardoned. It is this, that at least every other medical man in the Province should arrange now to have a holiday, and to take it in the shape of a water trip to Quebec for the meeting; and let him, above all, preface it by reading Parkman's "Montcalm and Wolfe." If he cannot then with pleasure stand on the citadel and plot out with kindling eye the camps and movements of that stirring time which won Canada for the Empire of which we are so proud, he must be somewhat of a clod.

THE ONTARIO MEDICAL ASSOCIATION.

The meeting this year was an unusually good one. The attendance was very good, the papers read were of a rather higher standard than usual, and the social element in the proceedings was very enjoyable, thanks to the energy of the committee on arrangements, though we do not select this committee specially for invidious remark. The meeting was of special public interest from the strong resolution passed on the question of pressure in the Schools of the Province. This was apropos both of the President's reference to the subject in his address, and of the paper read by Dr. R. Ferguson of London. It is to be hoped that the committee appointed on the suggestion of the Minister of Education to confer with him may succeed in effecting some easement of the burden laid on the children by the competitive idea which has been allowed to run like a shoddy thread through the whole warp of our boasted educational system, and in fixing the responsibility for our system of cram where it properly belongs. Some of us think that we know that already, and all of us agree that it should cease.

Communications.

Editor CANADA LANCET.

SIR,—There is no man so deserving of a holiday as the hard-working physician who has had his nose to the grind-stone from early morning till late at night. It is not only a privilege but a duty to relax one's energies at least once a year and take an outing. Having made up one's mind to go away for a bit, the next question is where to go, for one likes to gain some mental profit as well as physical vigor. This year the Canadian Medical Association offers peculiar inducements to the busy man by meeting in the historic old city of Quebec on August 17th, 18th and 19th, next. This will give to the physicians all over the Dominion an opportunity to visit at a trifling expense one of the most picturesque parts of Canada. It too will enable the English and French to become better acquainted, thus helping to bring about a more thorough understanding.

The President, Dr. J. M. Beausoleil, of Montreal, is putting forth every effort to make the meeting a success. The local committee of arrangements under the chairmanship of the Vice-president, Dr. C. S. Parke, ably assisted by the local Secretary, Dr. A. Marois, are doing good work toward making the visit of their medical brethren enjoyable. It has been whispered that a trip to Grosse Isle is a probable part of the entertainment. The officers of the Association are confidently looking forward to a large and enthusiastic gathering. For particulars address the Secretary,

F. N. G. Starr,
471 College St., Toronto.

To the Editor of THE CANADA LANCET, *Toronto.*

DEAR SIR,—It may be interesting to the readers of your Journal, and especially to old Fellows of Trinity Medical School, to hear of Surgeon-Captain B. Hopton Scott, a graduate of Trinity in 1883, and one of the House Surgeons in the T. G. H. in that year, and who has recently returned home under circumstances of peculiar interest and distinction.

Scott, after passing into the Army Medical Service, saw active service in the Chitral expedition, but suffering from ophthalmia, contracted during the North-West frontier war, he returned home on sick leave. Subsequently, in February of this year, he exchanged for service on the West Coast of Africa, proceeding to Port Lokko, on the Sierra Leone river, where, in Major Norris' Company, he received serious injury during an encounter with the natives.

In an account of the affair, *The Times* says: "The medical man accompanying the expedition, Surgeon-Captain Scott, had his leg broken in two places by a shot, besides having a narrow escape when a shot passed across his chest, grazing it. Surgeon-Captain Scott, behaved with great gallantry, for, notwithstanding his own injuries, he continued to attend on the other wounded who were brought to him for that purpose."—*Times*, 9th April.

Captain Scott was invalided home, arriving on the 1st of May, since when he has been in St. Thomas' Hospital, under the care of Mr. Battle. By X-rays the bullet in the leg was located, and afterwards removed. It is an irregular looking bit of metal about ¾th inch in length, roughly cut from ⅜th inch rod iron.

The sciagraph of the femur shows a communicated fracture in its upper third, with splitting of the bone almost to its lowest extremity; there is a good deal of deformity in the line of bone, as the wound received no surgical care for many hours, and the patient was conveyed to the base in a hammock, without any appliance to relieve muscular contraction, and under conditions which Scott himself considered almost hopeless for recovery.

There is now firm union, and the ultimate result will probably be shortening of a little over an inch.

Since treatment in St. Thomas's there have been no unfavorable circumstances, and recovery from these extensive injuries has been uninterrupted, and Captain Scott is in excellent condition.

The conduct of Surgeon-Captain Scott under the severe test to his courage has been recorded by the Surgical Journals here, and cannot fail to be of interest to those who knew him in his student days at the Toronto General Hospital.

I am, yours, etc.,

JAMES M. COCHRANE,
M.D., C.M., Trin. Coll., Toronto,
L.R.C.P., Lond.

10 Weymouth Street,
Portland Place, W.
12th June, 1898.

Book Reviews.

VOLUME I., SERIES VIII., INTERNATIONAL CLINICS: A quarterly of Clinical Lectures on Medicine, Neurology, Surgery, Gynæcology, Obstetrics, Opthalmology, Laryngology, Pharyngology, Rhinology, Otology, and Dermatology, and Specially Prepared Articles on Treatment and Drugs. By Professors and Lecturers in the leading Medical Colleges of the United States, Germany, Austria, France, Great Britain and Canada. Edited by Judson Daland, M.D., (Univ. of Penna) Philadelphia; J. Mitchell Bruce, M.D. F.R.C.P., London, England; and David W. Finlay, M.D., F. R C.P., Aberdeen, Scotland. Philadelphia: J. P. Lippincott Company, 1898 (Copyright, 1898).

This volume of 365 pages, with twelve plates, contains thirty nine articles by well known clinicians on various topics in Medicine, Surgery, Drugs and Remedial Agents, Treatment, Neurology, Gynæcology and Obstetrics, Ophthalmology, Laryngology, Rhinology and Dermatology.

The editors evidently have had in view the collection of a series of lectures on subjects of the greatest practical importance, covering the widest field of medical art, by authors competent to speak with authority in their various departments. In this object we think they have succeeded. The work, truly international as it is, will prove very useful, and of especial interest, by placing at one's disposal the views on important current topics of leaders of medical thought in widely separated medical centres of the world. Without reviewing in detail the different lectures we refrain from individualizing, but that by Prof. E. Von Leyden on Myocarditis we read with particular pleasure. We believe these clinical lectures will be especially valuable to the general practitioner.

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The prescribed dose produces a feeling of buoyancy and removes depression and melancholy ; *hence the preparation is of great value in the treatment of nervous and mental affections.* From the fact, also, that it exerts a double tonic influence, and induces a healthy flow of secretions, its use is indicated in a wide range of diseases.

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PUBLISHERS' DEPARTMENT.

The twelfth annual class for instruction in orificial surgery will assemble in Chicago at 9 a.m., Monday, September 5, 1898, and will continue to meet daily during the week, as usual.

For particulars of this clinical course, address:

E. H. PRATT, M.D.
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Las Vegas, one of the best health resorts, possesses certain negative virtues. It has no malaria; hay fever is unknown; epidemics of acute intestinal diseases never occur; there are no hot nights and no sultry days. Neither need one contemplate from afar the possible fatigue of a journey. Las Vegas Hot Springs is less than two days' ride by rail from Chicago and St. Louis, and trains carrying palace sleeping cars and reclining chair cars pass Las Vegas daily, affording comfort-ensuring facilities. Round trip tickets to Las Vegas Hot Springs at greatly reduced rates may be purchased—particulars obtainable of any Santa Fe Route agent.

THE HARD RUBBER TRUSS.—As now manufactured, it would be hard to find a single fault in it. The best trusses of this kind, "Seeley's," are manufactured by Messrs. Chesterman and Streeter of Philadelphia, for whom Messrs. Hargreaves Bros., 162 Queen St. West, are agents for Canada. Seeley's trusses come from the largest and oldest establishment on this continent for the mechanical treatment of hernia, and have enjoyed the confidence of the profession for almost 40 years.

Among the many advantages possessed by these trusses might be mentioned the following: The springs are of the finest steel, especially prepared for the purpose in Sheffield, England; shaped under personal directions and highly tempered; covered with highly-polished hard rubber, they are impervious to moisture, used in bathing, and, fitting perfectly to shape of body, may be worn without inconvenience by the youngest child, most delicate female, or the laboring man, with perfect comfort and safety.

The pads are hollow (or shell-like), yet extremely strong, and made in many different shapes and sizes, to meet anatomically all of the various locations and forms of rupture.

These trusses, being unaffected by perspiration, are easily kept clean, avoiding all sour, sweaty, chafing unpleasantness, and, while extremely light, the worst form of hernia or rupture will be held permanently, thereby causing a radical cure where cure is possible by any means.

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The Gleason Sanitarium at Elmira, New York, now under the immediate medical direction of Dr. John C. Fisher (who is well-known to many of our readers as the former physician in charge of the Warsaw Salt Baths), comes to us most highly recommended by a successful career of forty-eight years, as well as a guarantee of its worth furnished by the presence of Dr. Fisher as its medical head.

The Sanitarium has recently been partially rebuilt and entirely refitted; has large and commodious bath and treatment rooms, and is thoroughly equipped with all the sanitarium appliances of the age, among which are Turkish, Russian and Roman baths, static electricity and brine baths. These baths are especially helpful in rheumatic troubles, and are given by skilled attendants and under the immediate supervision of Dr. Fisher.

The management of THE LANCET would be glad to answer letters of inquiry relative to the Sanitarium, or to forward printed matter descriptive of it.

A SHEET ANCHOR.—On September 10th, 1897, a well-known New York physician of the Third Avenue Cable Railroad Company, returned to the New York office of the Norwich Pharmacal Co., ninety-four one-pound empty Unguentine jars. In a letter accompanying the jars, the doctor says: "The jars I return to you represent the number of pounds of Unguentine I have used since December 1st last. I have from twelve to fifteen cases a day, motormen, conductors, and stablemen, suffering from slight wounds, abrasions, cuts, bruises and burns, and about the only treatment I make is to give them a small box of Unguentine. It is certainly my sheet anchor in practice, as in every instance it heals all the above cases quicker than anything I have ever used."

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It can be administered at short intervals after eating, as soon as regurgitation, distension or acidity occurs. Its action in arresting excessive

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LEVER BROTHERS, Limited, Port Sunlight, England, Proprietors of SUNLIGHT SOAP, have received the following Report on LIFEBUOY ROYAL DISINFECTANT SOAP from Dr. Karl Enoch, Chemisch, Hygienisches Institut, Hamburg:—

The examination of the sample of "Lifebuoy Royal Disinfectant Soap," furnished to me by Messrs. Lever Brothers, Limited, of Port Sunlight, England, gives the following results as to its action as a disinfectant:—

Solutions of 1, 2 and 5 per cent. of Lifebuoy Royal Disinfectant Soap in water were made. These solutions were brought to bear on a variety of clean cultivated microbes (Bacillus); in each case a certain exact time being allowed for the operation; and thus the capacity of this Soap for destroying the various live and growing germs was proved. To carry out this the following species of germs or microbes, amongst others, were used:—

1. Typhoid Microbe.
2. Cholera Microbe, taken from Hamburg and Altona.
3. Diphtheria Microbe.
4. Carbuncle or Boil Microbe.

THE RESULTS were as follows:—

1. The obstinate Typhoid Microbes, with the 5 per cent. solution, were dead within 2 hours.
2. The operation of this Soap on the Cholera Microbes was very remarkable, and showed this soap to be in the highest degree a disinfectant. These were taken from persons who died of Cholera in Hamburg, and showed a result as follows:—

With the 2 per cent. mixture, Cholera Microbes were dead within 15 minutes. With the 5 per cent. same were dead within 5 minutes.

3. The Diphtheria Microbes were killed after 2 hours with the 5 per cent. solution.
4. The 5 per cent. solution was tried on fresh Carbuncle germs, and the result showed that the Microbe life was entirely extinct after 4 hours.

From the foregoing experiments it will be seen that the Lifebuoy Royal Disinfectant Soap is a powerful disinfectant and exterminator of the various germs and microbes of disease.

(Signed) KARL ENOCH,
Chem. Hygen. Inst. Hamburg.

A DOCTOR'S OPINION: "We cannot overrate the value of cleanliness of person, that is, of clothes and body. The bath, whether it be the daily cold tub, the evening warm bath, or the weekly Turkish, does far more than most people would believe. To avert sickness and maintain the body in health, such a soap as LIFEBUOY soap is beyond all praise; its softness and purity must commend it to all."

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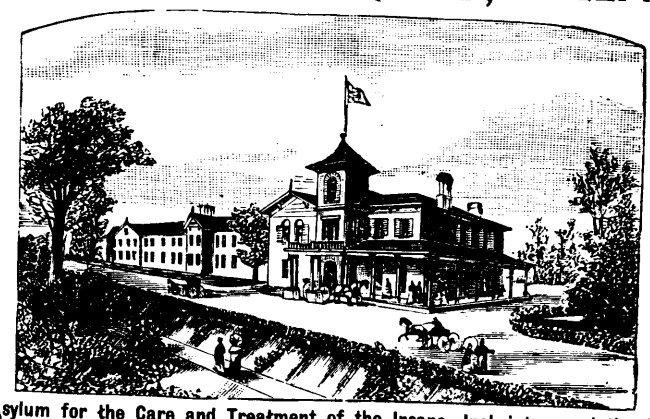

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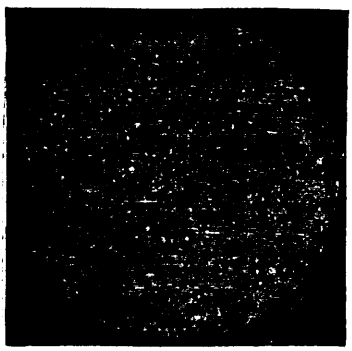

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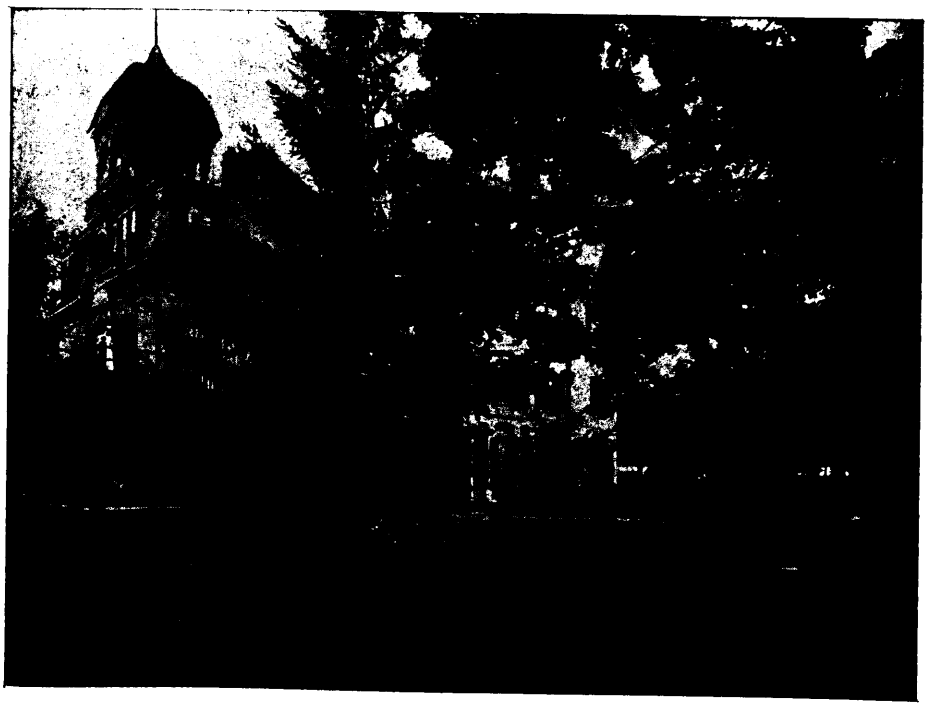

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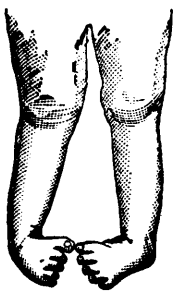

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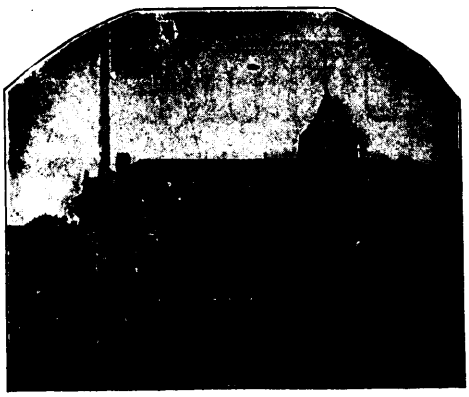

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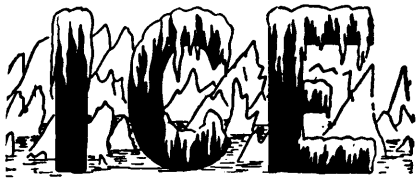

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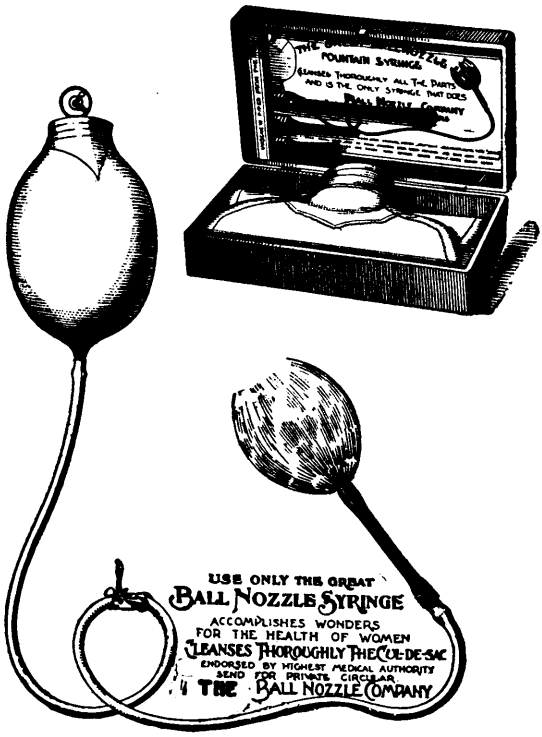

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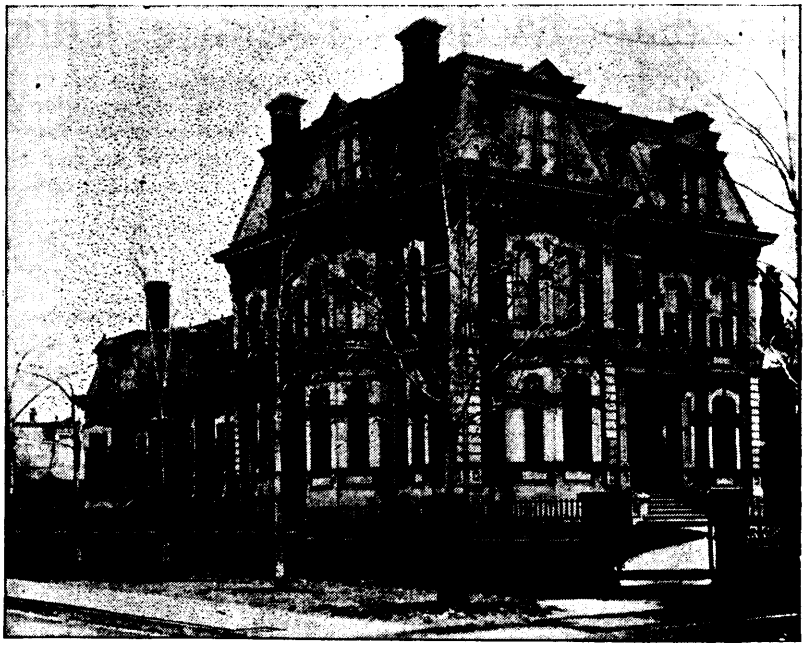

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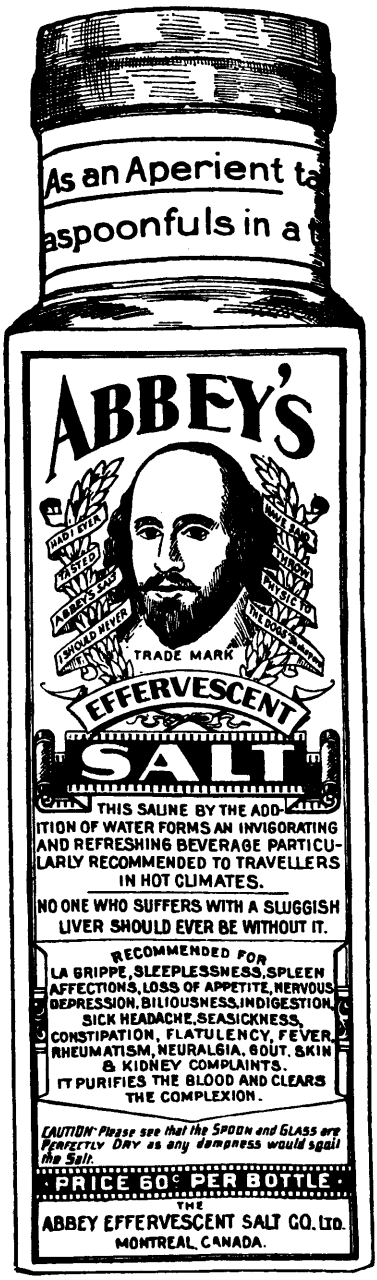

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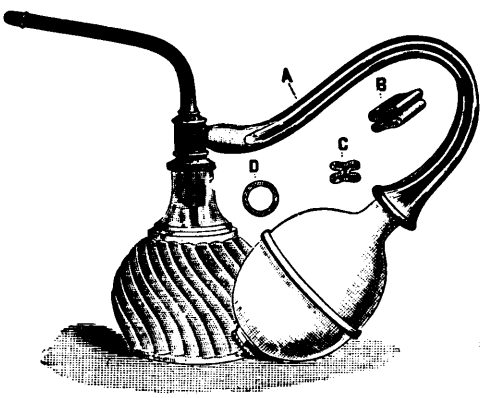

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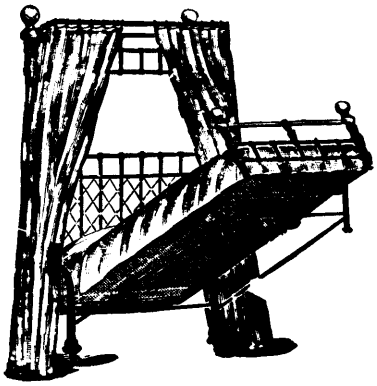

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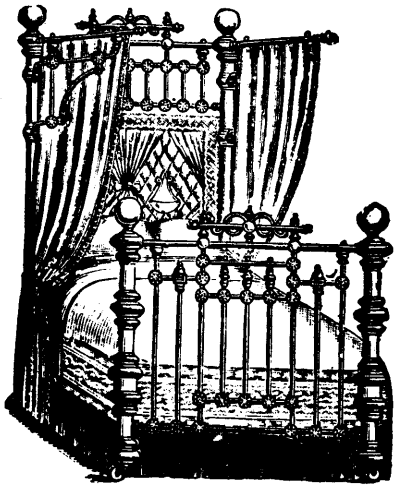

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