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THE

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A CASE OF CHOLECYSTOTOMY FOR OBSTRUCTIVE JAUNDICE.*

By Dr. R. Whiteman, Shakespeare, Ont.

R., æt. 54, a tall, spare man with black hair and dark complexion, called at my office, October 17th, 1892, complaining of indigestion and general weakness. I was out at the time, so he was prescribed for by Dr. Smuck, of Binbrook, then a student at my office. On the 22nd he returned feeling worse, having been out in a heavy rain and caught a severe cold in the meantime. Pulse, 54; tongue coated; conjunctiva yellow; bowels constipated; skin slightly yellow and very itchy; in fact, a well-marked case, apparently, of catarrhal jaundice. There was no tenderness over the liver or gall bladder, and no history of gallstone.

^{*}Read before the Ontario Medical Association, June 7th, 1894.

October 27. Visiting another member of the family, I saw him in the orchard, on a cold, windy day, picking apples. I went over to see him and warn him against taking such risks. He was more jaundiced than before, but said he felt better when out, and that it was the best relief he got from the itching.

Nov. 4. I was called to see him, and found him intensely jaundiced, very dull, semi-comatose. Gave a hypodermic injection of gr. 1-6 pilocarpine, which caused profuse sweating, and was followed by relief. On rubbing him dry, the towel was colored dark-green by the perspiration.

Oct. 9. Advised a consultation, and Dr. D. B. Fraser, of Stratford, was called. We could find no enlargement of liver or gall bladder. Patient very weak, and somewhat comatose. The diagnosis agreed upon was obstruction of bile ducts. The causes, gallstones, catarrh, carcinoma, tumors, etc., were discussed. Owing to absence of pain, and the fact that the jaundice appeared to be brought on by a wetting, we inclined to consider it a case of catarrhal jaundice.

He was kept on a liquid diet and stimulants, giving hypodermics of pilocarpine as occasion required. For a time they gave relief. Enemata of Glauber's salts and magnesium sulphate were given to relieve constipation. Stools, light-colored, containing no bile; while urine was dark-colored and reacted freely to bile tests.

The pilocarpine worked well, and was given almost daily for about ten days, when suddenly it produced so much weakness that he would not have it any more. After its withdrawal jaundice deepened, skin getting very dark and coma more persistent.

I now arranged a steam bath as follows: Taking a large tub, I placed a chair in it; put a warm stove-lid, wrapped in newspapers, beside the tub for patient's feet to rest on; poured three pailfuls of boiling water into the tub. Then, stripping the patient naked, placed him on the chair, with his feet on the stove-lid, and wrapped a cotton sheet around his body and the tub, pinning it closely around his neck. In about ten or fifteen minutes he was perspiring freely, and, as soon as he began to feel weak, I replaced him and the steaming sheet in bed, wrapping well in warm flannels. As perspiration ceased, I had him rubbed dry, and dry clothes put on. This always gave temporary relief. The perspiration was profuse, and any clothes saturated with it were stained a dark-green color, and this was continued every day or two till the operation.

Between Christmas and January 1st, I began to make out the outlines of what I took for an enlarged gall bladder. The patient complained of a feeling of tightness in the same region.

Jan. 3, 1894. Dr. Fraser was again called for consultation, and diagnosis of enlarged gall bladder was confirmed, and it was decided to

try ox-gall pills, malt extract, peptonized food, e⁺c. Still no bile ever appeared in the stools, and the patient kept steadily, though slowly, emaciating.

I proposed cholecystotomy as an expedient that would remove jaundice and itching, and give time to get rid of or overcome, if possible, the obstruction.

Before operating, it was decided to call Dr. J. E. Graham, of Toronto, and, on February 28th, Drs. Graham and Fraser saw him with me.

After careful examination, Dr. Graham confirmed our diagnosis of enlarged gall bladder, inclining to the opinion that the obstruction was malignant, but, possibly, a large, smooth stone blocking the common duct, the chief argument against stone being the entire absence of bile in the stools, as some bile is apt to find its way past a stone.

The proposal to operate was submitted to Dr. Graham, and he advised it. The whole matter having been explained to the patient, and his consent obtained, I arranged to operate on March 6th, assisted by Drs. D. B. Fraser, Stratford; Minchin, Berlin; McGillivray, Wellesley.

An incision about five inches The operation lasted about two hours. long was made parallel to and about an inch below the lower border of the right ribs, carried through the skin muscles and down to the transversalis fascia. Then, carefully picking up, first, the fascia, and cutting it, I came upon the peritoneum, which I picked up, opened carefully, and ran in a director, upon which I made an incision three inches long, exposing the enlarged gall bladder. This I secured by passing into its wall two strong silk threads, drawing it well into the opening, and thrusting a large trocar and cannula into it between the threads. On withdrawing the trocar about one and a half pints of dark-green tenacious fluid ran out. I washed out the gall bladder, enlarged the opening in it to about two inches long, searched carefully with the finger, then with the probe, for cause of obstruction. I examined also the duodenum gall ducts and pancreas for cause of obstruction, but could not find either a stone or nodular mass such as we would expect to find with a malignant growth. Could not pass probe into the duodenum. As patient was very weak, I was obliged to hasten the close of the operation, which I did by sewing the peritoneal covering of the gall bladder to that of the abdominal wall, and next the orifice in the gall bladder to the skin.

The bile flowed freely during the operation, and I had difficulty in preventing its escape into the peritoneum. Having completed the operation, I inserted a Spencer-Wells ovariotomy tube, and put over it an antiseptic absorbent dressing.

He rallied nicely, and passed a good night. Next morning, on my return, I found him bathed in bile, the whole dressings saturated, and his

shirt and bed wet. Pulse, 78; temperature, 98.5°. Itching but very little. I removed the Spencer-Wells tube, and inserted a long rubber tube of about the same calibre, and long enough for its distal end to go into a round-shouldered eight-ounce bottle, the neck of which I tied to a bandage round his waist. In a few days I got this to work satisfactorily, so that all the bile was caught, and he was kept dry, and from March 11th the quantity secreted every twenty-four hours was measured. On that day it was one quart.

March 12. Pulse, 80; temperature, 98°; bile, 35 ozs.; specific gravity, 1011. Digestion gave considerable trouble, as before. Liquid nourishment continued, as no bile entered the bowel. Occasionally, he would have appetite for solid food, but felt distressed after eating it.

March 20. Pulse, 68; temperature, 97°; bile, 41 ozs. Yesterday ate freely of potatoes and fish, after which he did not feel so well; distressed with sour stomach. Gave hydrarg. subchlor., grs. v.; sodæ bicarb., grs. xx.; pulv. rhei., grs. x.

March 21. Bile deeper colored, but less in amount, being 29 ozs. Vomited; thinks the powders did it, but felt better as it worked off.

March 23. Looks, cats, and feels well. I tried again to pass a Sayre's flexible probe. It went two and a half inches along the gall bladder, then turned downwards and inwards three and a half inches more. I also attempted to force water into the duct until it gave pain in the liver, but none appeared to enter the bowel. The stools, when he did not take iron, were clay colored, without a trace of bile. The urine lost its deep yellow color, but still occasionally gave bile reaction.

Skin became normal in color. Itching ceased. I watched carefully the effects of drugs given, though I did not give any for experiment. I found calomel useful in removing undigested material from the bowels, but the quantity of bile passed in twenty-four hours rather diminished than increased by it. In fact, it was about the only drug that did appear to diminish the quantity of bile, while the urine became clearer. I did not use it often, for fear of salivating him, though it gave no signs of doing so. He suffered much from fermentative indigestion, owing to our not having the antiseptic action of the bile in the bowels. I tried sodium salicylate for this purpose, and soon found the amount of bile greatly increased; so I discontinued it, and used bismuth salicylate instead.

April 25. Pulse, 85; bile, 20 ozs.; urine, 40 ozs.; specific gravity, 1020. Gave sodium salicylate, grs. x., every two hours.

April 27. Pulse, 80; bile, 35½ ozs.; urine, 22 ozs.; specific gravity, 1020.

One fact appeared too often to be a mere coincidence: as bile increased, urine diminished, and the contrary. The patient always felt best when the quantity of bile was least.

This would appear to throw some light on a matter I had noticed in cases of sick, hysterical, or bilious headaches. Many patients have told me that they have scanty, high-colored urine as the attack is coming on, passing large quantities of pale urine as it passes off, the attack appearing to be due to a too free production of bile; which becoming inhibited, urine flows freely, and the headache ceases. An intelligent gentleman, formerly a martyr to sick headache, lately informed me that he can now always check it by drinking freely of water.

Landois, a German authority, gives the specific gravity of bile as 1026 to 1032, but from a fistula 1010 to 1011. In this case it varied from 1010 to 1012.

April 30. Slept well; awoke refreshed. Took porridge, followed by some mutton soup. Soon after felt heavy. Had enema of turpentine made into emulsion with egg and milk. About 10 a.m. felt cold, and took a severe chill, followed by temperature 100°, pulse 96. This was the first rise of temperature. It was followed by severe sweating, after which pulse and temperature subsided.

Till May 7, comfortable. Took liquid food with relish, with preference for fat.

May 24. Appetite poor; felt bloated. Bile, 14½ ozs.; specific gravity, 1010; urine, 32¼ ozs.; specific gravity, 1020. Gave soda salicylate, grs. x., every two or three hours.

May 26. Bile, 303/4 ozs.; specific gravity, 1010; urine, 47 ozs.; specific gravity, 1018. Emaciated; lost all appetite for food, though small quantities did not distress him.

May 29th. Had severe chill, followed by low delirium. I saw him June 2nd for the last time. Pulse 84, compressible; temperature 96°. Delirious at times, and very weak. He died on the 3rd.

Post mortem, conducted by myself and Dr. Fraser, June 3rd, about twelve hours after death. Extreme emaciation. Subcutaneous fat absent. Omentum dark-green color. Intestines dark-colored, adherent, and semi-gangrenous in appearance. Duodenum and jejunum much enlarged; transverse diameter about three inches. There were adhesions at lower part of the enlargement, but they did not appear sufficient to account for the dilatation. Liver dark-colored and small. Decomposition advanced. Gall bladder shrivelled to a small tube 2½ inches long. Hepatic duct enlarged to diameter of half an inch. As it joined the common duct there was inside of it a small, hard nodule, which, however, allowed fluid to pass. The common duct had a diameter, when spread out, of a little over one inch. At its entrance into the duodenum there was an area of thickened and infiltrated intestine. This infiltrated area was about two inches in diameter each way, compressing and completely

stopping the lower orifice of the duct, so that we could neither pass a probe nor force water through it. Dr. Fraser took some of the infiltrated tissue and some of the nodules for microscopical examination, and found them to be epitheliomatous, though in this case the impairment of health and death were due, not to the malignant disease *per se*, but to its mechanical interference with physiological functions. The pancreas entered the duodenum by a separate duct, and was in no way involved.

The following are amounts of bile discharged each day from the time we were able to obtain it all so as to measure correctly:

- i-	MARCH.		AP	RIL.	MAY.	
D.v.	Ounces of Bile.	Ounces of Urine.	Ounces of Bile.	Ounces of Urine.	Ounces of Bile.	Ounces of Urine.
1 2 3 4 5 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	20 35 37 ¹ / ₂ 36 34 ¹ / ₂ 31 30 37 ¹ / ₂ 41 29 36 38 42 ² / ₄ 42 43 36 38 37 43 ¹ / ₂	Urine not collected	41112344428 4412 428 444 428 444 428 444 428 444 428 445 445 445 445 445 445 445 445 445 44	30 22 40 36 22 19½ 17½ 21½	18½ 26½ 26½ 26½ 25½ 26½ 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25½ 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 473 25\% 47	40 26 20 18 25 14 16 18 17 18 27 38 16 23 23 20 15 16 31 21 23 47 25 14 47 23 47 25 14 47 27 28 29 20 20 20 20 20 20 20 20 20 20

SOME PHASES IN THE MANAGEMENT OF CONSUMPTION.*

By E. Herbert Adams, M.D., L.D.S., TORONTO.

THE number of new remedies for the relief and cure of consumption that have been brought forward in the last few years is legion. To discuss the merits of each remedy, or even of the most important of them, is not within the scope of this paper. Rather let me take up your time for a few minutes with a discussion of some of the fundamental laws in connection with the cure of the disease, without the observance of which medicinal agents will not only fail in their object, but often prove positively harmful.

In the first place, it may be laid down as an axiom that any remedy which interferes with the appetite or digestion, and consequent nutrition, of the patient must be looked on with caution, no matter how great its theoretical or apparent beneficial results. The patient will improve so long as his nutrition improves, and no longer. And yet how often is this essential law broken. How often are creasote, arsenic, cod liver oil, strong stomachics, alcoholics, and other vaunted specifics given ad nauseum, and without considering their effect on the patient's appetite or digestion.

It is true that, of late, hypodermic medication has to some extent superseded the internal use of these drugs, and now, forsooth, we inject under the patient's skin pure beechwood creasote until the patient's system is thoroughly saturated, and he can taste creasote in his mouth, and it can be found in the secretions, or until, as I saw in one case, an embolism occurred, and sudden death ended the experiment; or perhaps it is Liebreich's remedy, cantharidate of potash, that is used as an injection, and, while the patient's laryngeal or pulmonary symptoms appear to improve, large painful lumps on the skin in increasing numbers indicate the place of injection, and in many cases, as I have demonstrated, albumen in the urine shows signs of a beginning nephritis, due to the irritative action of the remedial (?) agent on the kidneys. Indeed, we cannot be

^{*} Read before the Ontario Medical Association.

too careful in the hypodermic use of such drugs, for while we may be destroying or eliminating the tubercle bacilli, we may be doing infinitely more harm to some portion of the system. It is true that temporary beneficial results have occurred with these two remedies, but in my experience it is not limited; patients so treated rarely eventually recovered.

The curative effects of cod liver oil have been much overestimated and extolled. It is merely an easily digested fatty food, and in some cases not even that, for it sometimes interferes both with the patient's appetite and digestion.

Many patients who will not take cod liver oil without nausea and without spoiling their appetite for their meal can yet be got to take with a relish ten times the amount of fatty nourishment in the form of cream or good fresh butter, and they obtain this extra nourishment, too, at a less-ened expense.

Many physicians who are obtaining some of the best results to-day in the cure of consumption never prescribe cod liver oil in their practice.

Use cod liver oil, by all means, in your practice, if you like; it is often a good food, but don't delude yourself or your patient into thinking it a specific.

All disorders of the digestive apparatus should be cured as soon as possible, and the mouth and teeth put in good condition.

Constipation, if present, should be relieved by a laxative diet, or very mild laxative pills, as constipation interferes both with appetite and digestion.

The patient's appetite must be improved. This is best accomplished by natural methods, such as pure, bracing air, bathing, exercise, cheerful company, etc., rather than by drugs. Climate and change of air and scene are here of importance, for a patient's appetite and nutrition will often improve without other assistance on removal to a more balmy or bracing clime, or, above all, to a place where he can be in the open air for a portion of the day.

A dry, warm climate and an altitude of about 2,000 feet seem most suitable, perhaps, for most cases of consumption. Any climate, whether moist or dry, where the patient's appetite and nutrition are improved, and continue to improve, is a suitable climate for that particular case. Thus it is that a sea voyage, where the humidity of the atmosphere is always great, is productive of good results in many cases. It is a mistake to think that patients cannot do well in Ontario. They can and do get well here, and often as speedily as they could have done anywhere else. One of the main objections to Toronto for consumptives, in winter, is the heating of the houses, and the enforced stay indoors. Hot-air furnaces are an abomi-

nation, as far as their effects on the production and cure of this disease are concerned. A warm-air furnace would, perhaps, be all right, but the majority of warm-air furnaces, so called, are hot-air furnaces, and, as a rule, this so-called warm air registers several hundred degrees, does not contain the proper amount of moisture, and is dry, dusty, and irritating, rendering individuals liable to cold and catarrhal diseases on going out of doors. In many cases, too, the fresh-air shaft is closed, and the same air is heated over and over again. Water and steam heating appliances are better, while the open fire grate is very useful. It is a common mistake to imagine that a consumptive takes cold much more readily than a healthy person. A consumptive who has fever can, in reality, stand the cold better than another person, and it is a common thing, at special sanitaria, to see consumptive fever patients, warmly wrapped, reclining on steamer chairs for a portion of the day, on the piazzas, even during the snows of winter, and with good results.

Climatic treatment aims, therefore, at removing the patient from those climatic conditions which predispose to bronchial and pulmonary inflammation, and hence to consumption; to remove the patient from a climate which induces an indoor and sedentary life to one where an outdoor life can be enjoyed without interference from meteorological conditions; to remove the patient from all depressing influences due to climate or unsanitary conditions, dampness of soil, etc., to a climate where change of air, diet, scenery, and daily routine proves sufficient to improve the appetite and nutrition and general spirits, and to eradicate habits which have assisted in lowering the vitality and rendering the system susceptible to the inroads of disease.

The management of the patient is a chief essential in the cure of the disease. There must be a constant supervision of his habits, movements, and inclinations. The consumptive must, in fact, be managed by his physician almost as a father would manage his child. Very few patients have either the will or knowledge of how to properly conduct the management of their own habits. If they did they would, probably, never have contracted the disease, or, rather, it would rarely have advanced to a serious stage.

In special resorts for consumptives, if the patient is not in a sanitarium and thus seen and watched every day, he is generally seen by his physician two or three times a week, and examined every week or fortnight, and it is natural for a patient, if he wishes to go to a concert, or even if he wants to go for a walk or a drive, to consult his physician.

If there is a hemorrhage of the lungs or a tendency to hemorrhage, the patient should be kept absolutely at rest in bed. Hemorrhage may, as a rule, be checked or prevented in this way alone. The slightest tinge of

red in the sputa indicates rest in bed, and enforced quiet till such symptoms disappear.

The loss of blood from hemorrhages, which could have been prevented, often throws the patient back for weeks or months, or even prevents any previous chances he may have had for recuperation.

More is to be gained by preventing hemorrhages than in checking the hemorrhage after it occurs.

This can only be done by having the patient under constant supervision after the disease has been once detected by physical and microscopical examination. It is not my intention to go into the special methods for the arrest of hemorrhage—these are well known to you all—but merely to emphasize the importance and practicability of the prevention of hemorrhage.

If there is fever, the patient should always be tested with the clinical thermometer; rest in bed, or in a reclining position, should be enjoined during that portion of the day when the fever is at its height, and no physical or mental exertion should be allowed when the temperature is above 100°. The heaviest meal should be taken at that time of the day (and this is generally the morning) when there is least fever. Even slight exercise on a heavy meal will often raise the temperature of a phthisical patient one or more degrees. Besides, a patient cannot digest his food as well, or stand fatigue as well, during the febrile state. By rest alone the temperature can often be brought down to the normal.

A common error is to recommend the consumptive to go to the mountains, live in the open air, take lots of exercise, spend most of the time in the saddle, etc., and never bother about a physician. This is suicide in many cases for the patient, as the over-exertion in this way often increases an already high febrile state, or brings on a sudden and possibly severe hemorrhage from an already weakened vessel, which throws the patient's recovery back for months, and it may be forever. Exercise of such kind should always be under the advice and guidance of a physician. Over-exertion in any way should be avoided. "Others may get tired and rest; the consumptive must rest before he gets tired."

So many physicians tell their patients that outdoor exercise, and lots of it, is their only chance for life that it is not surprising, though truly pitiful, to see such patients literally drag themselves about, exhausting what little strength or recuperative power they may still possess.

The consumptive should be carefully and sedulously guarded against the contraction of other diseases, such as typhoid, pneumonia, malaria, la grippe, colds, etc. Diseases from which, an ordinary healthy person will speedily and entirely recover will leave the consumptive a prey, in his weakened condition, to a more rapid progress of his tubercular trouble.

Even slight illness should be treated immediately, and not allowed to progress. This is another reason why patients should be under constant medical supervision, and where can this be obtained properly except in a special institution?

Importance of early diagnosis. In every case, as soon as a diagnosis has been made by physical or microscopical examination, and the latter should never be neglected when there is any expectoration, the patient, or one of his relatives or friends, should be told the real and serious nature of the disease, at the same time impressing on them the fact that the disease is usually curable in its earlier stages under proper treatment. From this time onward, till the disappearance of all symptoms of the disease, the patient should be under the guidance of a physician both as to habits, diet, and general mode of life. If, despite all skill and management, the patient does not improve, a change of climate or physician should be recommended before the disease has made much further progress. In all cases where there is chronic fever or tendency to hemorrhage, or loss of weight, it is advisable for the patient to quit work entirely.

It is a great and common mistake, through false kindness, not to tell the patient the real nature of the disease as soon as you yourself are positive. The disease is so slow and insidious that the patient himself rarely believes he has the disease until hemorrhages, night sweats, and other marked symptoms enforce it on his attention. Many patients could have been cured if they had been told the real nature of their disease in time, for they would then have quit work and given nature a fair chance to cure. I remember one patient, a prominent wealthy lawyer in the south, who for six months after I saw him never had a daily maximum temperature less than 103°. His temperature for from three to six months previous must have been as great or greater, and yet until I first saw him he had been actively engaged in his legal practice (and he had one of the largest legal practices in the south), and he had never taken a day off from his work, nor was he advised to take a rest by his medical adviser. When first examined by me both lungs were affected, and his sputa was constantly loaded with bacilli. If his physician had told him the nature of his disease earlier he would have stopped work and given his attention to the cure of his disease, and, judging by his constitution and family history, would have had a good chance for recovery.

This is but one example of a great class of patients which come under the eye of a physician practising in a health resort for consumptives. My experience in such a resort, where consumptives flocked from all quarters for their health, was that three-fourths of them, though they had been under the supervision and treatment of their family physicians, had yet never early been informed of the serious nature of their disease, and had not quit work until they were in advanced stages of the disease. My method, for several years past, has been to invariably tell the patient, or one of his friends, the real nature of his disease as soon as physical diagnosis or microscopical examination make it positive, and, at the same time, to tell them that they have a good chance for recovery, but that it is necessary to begin at once, under medical supervision.

The proper management of the tubercular patient, too, requires the services of a skilled expert, and more time and attention than the general practitioner can give.

In a large number of cases, too, the disease can be most successfully treated in a special institution, where the patient cannot only be under almost constant supervision and special treatment, but where the element of contagion from his dried sputa will not be a factor in the production of the disease in his friends or relatives

My personal experience is that better results can often be obtained there than elsewhere, and that, properly conducted, there is no depressing influence from segregation, or, where such occurs, that it is more than counterbalanced by the other benefits of such institutions.

And now that we are on the question of a hospital for consumptives, I wish to ask a vital question. Is there in Ontario to-day one hospital or other institution where victims of pulmonary tuberculosis have every reasonable modern chance for the cure of the disease, and where nontubercular patients are properly protected from danger of contagion from the tubercle bacillus?

Those who have studied this important question and looked thoroughly into the matter will fully appreciate, with me, the importance of the recent princely offer of Mr.W.J.Gage to the City of Toronto toward the establishment of a thorough modern consumptive hospital in High Park, and will join me in wishing Godspeed to the successful and early accomplishment of the object of Mr. Gage's wise and far-seeing philanthropy.

It will be (if the offer is accepted) the first institution of its kind in Canada, and one of the first in America, and, if properly conducted, it should prove not only a great boon to the consumptives of Ontario, and in the prevention of the spread of the disease here, but will also set an example which will shortly, let us hope, be followed in the majority of the large cities of both the new and the old world.

When such institutions become more common, the dawn of a better day for consumptives will be visible, and with it the setting sun of this dread disease, which, more than all others, has played wanton havoc with human life and happiness.

A CASE OF LUMBAR HERNIA.*

By. F. N. G. STARR, M.B. (TOR.),

Senior Assistant Demonstrator of Anatomy, Toronto University.

Mr. President and Gentlemen :

THE patient that I present to you to-day is one of peculiar interest. He has in his right lumbar region a hernia, and, as you are aware, lumbar hernia is of rare occurrence. There is nothing of importance in his family or personal history, except that eighteen years ago he fell, while carrying a sack of grain upon his shoulder, and hurt his side; and that he has had a violent cough on and off for fourteen years. From the fall he made a good recovery, and he does not think the "lump" appeared at that time, though he is not sure that it did not.

Twelve months ago, when stooping down, preparing to lift a weight, he was seized with a "stitch" in the side, which, for a few minutes, prevented him assuming the erect posture. After the severe pain had ceased he noticed a lump in his back, and it has persisted ever since. There is always a steady pain in the side, which sometimes becomes sharp, and, as he describes, "shoots into the backbone." After manipulation the other day he suffered from sharp pain shooting to the backbone, into the chest, and toward the shoulder.

The swelling of which he speaks, you will observe, is about the size of a duck's egg, its long axis being directed from above, downward, and outward, and is situated in the right lumbar region, between the lower border of the ribs and the crest of the ilium.

Upon examination you will find that it is slightly tender on pressure, elastic to the touch, readily reducible, and as it disappears into the abdominal cavity it conveys to the hand a crackling sensation. If the patient is made to strain, and then percussion is tried, the swelling gives a tympanitic note; otherwise no resonance can be made out, partly, I think, because of the reducibility of the hernia.

I have had but little time to look up the literature of the subject, but so far have found reports of four cases. One by Cloquet, to occurring in a

man aged seventy-five years, and coming on suddenly, while trying to lift a heavy weight. One, by Edmund Ower,* in a child five and a half years old, which came on after a lumbar abscess. Giardano† mentions the condition in a recent contribution on the study and cure of laparocele, and last year Tucker‡ reported a case which occurred in a female. In his case the hernia was of enormous size, and upon operation the contents were found to consist of the stomach, the small intestines, the omentum, and a part of the colon. The whole mass was returned to the abdominal cavity through an opening just below the free border of the ribs, and running down to and along the crest of the ilium.

Treves§ says that a hernia in this region makes its appearance on the surface at the triangle of Petit (see Fig. 1), which, as you know, has for its boundaries the latissimus dorsi, behind, the obliquus externus abdominis in front, and the iliac crest below, having either passed through the quadratus lumborum muscle or through the transversalis aponeurosis, close to the

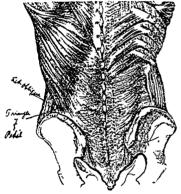


Fig. 1. (Gray) Showing muscles of the back, with triangle of Petit just above the crest of the ilium.



Fig. 2. (Gray) Transverse section of the abdomen in the lumbar region, showing at * where a lumbar hernia would appear on the surface.

outer edge of the quadratus lumborum, and then penetrated the obliquus internus abdominis, which forms the floor of Petit's triangle (see Fig. 2). The case before you seems to confirm this opinion.

A lumbar hernia has been, and may again be, mistaken for a lumbar abscess. Should such a supposed abscess be incised, the result might be disastrous. This is one of the reasons why I have presented this case here to-day, for it is too often true that we only see those things that we have been trained to observe.

You will notice that the patient has also a small hernia, about the size of a marble, two inches below the ensiform cartilage, between the abdominal recti muscles. This form of hernia is fairly frequent.

Selected Articles.

THE CONSERVATIVE TREATMENT OF THE FEMALE PELVIC ORGANS.*

BY WILLIAM GOODELL, M.D., LL.D., Honorary Professor of Gynecology in the University of Pennsylvania.

A LTHOUGH a co-referee, I have taken the liberty of changing the title of my paper to that of the "Conservative Treatment of the Female Pelvic Organs." This substitution of the more generic word treatment for the specific one of surgery does not, as will be seen, make me a traitor in the camp. But it enlarges the scope of the subject, and is more in keeping with my own views. For I hold that, besides strictly surgical ones, there are other kinds of conservative treatment which are especially adapted to the ailing organs of the female pelvis.

The question on which hinges the conservative treatment of the female pelvic organs is, What effect upon a woman has the removal of her appendages? Unquestionably, there usually follow the annoyances of the change of life. These, in my experience, are long spun out, because, when menstruation has been abruptly and artificially stopped, the change of life, especially in young women, takes a longer time to become fully established than when the menopause has been attained naturally. Consequently, months may elapse—nay, even years—before the victim of the operation escapes from the perspirations, the heat flashes, the skin tinglings, the numbness of the extremities, the nerve-stress, the nerve-storms, and all other vaso-motor disturbances which are so hard to bear.

Then, again, the unwelcome fact cannot be ignored that mental disturbances may be traced directly to the ablation of the ovaries. This is manifested by morbid broodings, by low spirits, by melancholy, by suicidal impulses, and even by insanity. Every ovariotomist regretfully has met with such painful episodes in his practice. Glaevecke, who has made

^{*}Read before the Congress of American Physicians and Surgeons, at Washington, D.C., May 31st, 1804.

extensive researches on this subject, goes so far as to say that "in almost all cases the mind becomes more or less affected, and not infrequently melancholia results."* Keith has stated that ten per cent. of his patients who recover from hysterectomy subsequently suffer from melancholia or from other forms of mental disease. Yet this result must have come in his cases,† not so much from the removal of the womb, which is merely a muscular bag, as from the associated ablation of the ovaries, of which the womb physiologically is only the appendage. Sinkler, who carefully and impartially has studied this subject, believes that Glaevecke's "statement is, undoubtedly, too extreme, but the number of cases of insanity following oophorectomy is large.";

Whether this deplorable event is due directly to the nerve-shock of the operation itself, together with its emotional environment; whether to the abrupt cessation of an habitual flow, or whether to the absolute need of the ovaries for mental equilibration, is yet an open question. We know, however, that sexuality is a potent factor in women, as well as in men, and that even certain sexual functions, such as coition, menstruation, gestation, parturition, and lactation, of themselves, tend not infrequently to disturb the mental poise. I am disposed, however, in a measure to attribute the attacks of insanity in those women who have lost their ovaries to their brooding over the thought that they are unsexed; and if brooding may be deemed in itself a mental aberration, Glaevecke's sweeping statement is not an extravagant one.

But, above all, the burning question is, Does the removal of the uterine appendages affect the sexual sense of the woman, or in any way unsex her? Here we have an embarrassing diversity of opinion. Some operators contend that in these respects castration does not change her at all; others, that it does so, and often very decidedly. The truth in such cases usually lies in the mean, as I shall try to show.

After a close study of this subject, it seems to me that the fairest comparison of a castrated woman is not to a castrated man, but to a woman who has reached the menopause before her time. Now, the natural change of life when fully established, but not until it is fully established, does very sensibly dull and deaden the sexual sense of women, which ultimately disappears in her long before virility is extinguished in man. Reveillé-Parise, in his classic treatise on old age, enlarges on this fact, and makes the period of gradually lessening sexual feeling in woman to last from the age of forty-five to that of fifty, when this sense is usually lost.§

^{*}New York Medical Journal, July 20, 1839, p. 73. †Ibid., p. 73. †University Medical Magazine, December, 1891, p. 176. \$Traité de la Viellesse, chapter ix.

This is most marked in those women who have reached the menopause much earlier than the usual time for it. Such women, as is well known, lose their sexual feeling very soon after the cessation of menstruation. Nor is the survival of the sexual feeling after the menopause so essential to the woman, because, when menstruation ceases, she loses the power of procreation, which, however, is retained to an advanced age by the man. Now, what happens in the natural change of life holds good in that artificially produced, with this important difference, that in the latter the sexual feeling is sooner dulled and sooner lost.

My own large experience would lead me to the conclusion that in the majority of women who have been castrated the sexual impulse soon abates in intensity much sooner than after the natural menopause, and that in many cases after the lapse of a few years it wholly disappears. This tallies with Glaevecke's verdict, that "in most of the cases the sexual desire is notably lessened, and in many cases extinguished." In corroboration of this statement I could cite many cases in point, but time forbids.

Dr. Gill Wylie* mentions as one result of castration the atrophy, senile in character, of the external genitalia, which makes coition often very painful. He refers also to a distressing hyperesthesia of the vulva in young women who have been castrated. These conditions I have occasionally seen. One of my patients operated on two years ago, who was unusually amorous before castration, now not only has lost all sexual feeling, but she suffers much pain during sexual intercourse. Yet with true womanly devotion she has studiously kept her husband in ignorance of these facts. Another woman, operated upon not quite a year ago by one of my friends, "abhors sexual intercourse" to such a degree, on account of this hyperesthesia, as to make her married life an unhappy one.

There are yet two other points of importance relating to the castration of women. The first one is, that sterility follows the complete extirpation of the uterine appendages. Now, barrenness is a frequent cause of domestic unhappiness, and is in itself often a great curse. Further, as women advance in age there comes an irresistible yearning for offspring, and she often repeats that despairing cry of Rachel, "Give me children, or else I die." What physician is there of ripe years who has not been importuned by women, hitherto wilfully barren, but now longing for children, to undo the mischief caused by preventive measures?

The next point is this one. The majority of physicians and all laymen look upon women deprived of their ovaries as unsexed. Just as castration in the male, so castration in the female is deemed a sexual mutilation to which common consent attaches a stigma. No woman would marry a

^{*}American Journal of Obstetrics, November, 1891, p. 1374.

eunuch, and few men would wed a woman deprived of her ovaries. In my own practice I have known of several very sad cases of married engage ments broken off, of marital infidelity, and of bitter estrangement between husband and wife, all of which could have been avoided had one ovary been spared, or, indeed, had a mere fragment of one been left behind.

To sum up the foregoing statements: It is manifest that during the period of woman's menstrual life, her mental, physical, and social welfare depend greatly upon the continuance of the catamenial and reproductive functions. Therefore the conservation of those organs which preside over these functions is of the utmost importance, and should be so regarded by the physician.

As a help to the conservative treatment of the female pelvic organs, let me consider a few points. In the first place, the fatality of chronic diseases of the appendages is greatly overrated, and that factor need not greatly disturb us or hurry us on to hasty operative interference by abdominal section. Too many appendages have been needlessly removed, and too many lives have been needlessly sacrificed. Far more women perish from the operation of removing the tubes and ovaries than from their diseases themselves. In this opinion I am confirmed by Reamy, who states that in forty years he had "not seen five cases of death directly traceable to ruptured pus-tubes." * After the patient has safely passed through the acute stage of the inflammatory attack, her life is in very little danger. Chronic diseases of the appendages usually affect the well-being of the woman, but they ordinarily do not threaten her life in any other way than by the wear and tear of prolonged discomfort. They may shorten her days, but fatal attacks of peritonitis or deaths from chronic abscess or from the bursting of a pus-tube into the cavity of the peritoneum are extremely rare.

To restore the health of a woman whose appendages are diseased, or to relieve her sufferings, abdominal section is by no means always necessary. Of the advantages of Polk's method of curetting the womb and of packing its cavity, I have had ample demonstration. Let me refer to one case: An uncommonly handsome and finely-formed woman came under my care for nerve-prostration, heightened by menorrhagia and by a constant nagging pain in the left ovarian region and down the right thigh. The cervix was torn and the womb hypertrophied. Both ovaries were swollen and tender, especially the left one; while the left tube was distinctly enlarged, tortuous, and fixed. I repaired the cervix, curetted the womb, and gave my patient rest, massage, electricity, and topical treatment; but not drainage. She was in many respects greatly improved, but the menorrhagia still persisted and the ovarian pain stubbornly held its

^{*} American Journal of Obstetrics, April, 1894, p. 525.

own. She was such a splendid specimen of female humanity that I shrank from mutilating her by the removal of the offending appendages. Dr. Polk had just published his valuable paper on uterine drainage, so I sent her to him. He confirmed my diagnosis, and by the use of the curette and uterine drainage restored her to complete health. Here was a case so stubborn that it would ultimately have driven even me to the castration of my patient had not conservative surgery cured her. Since then I have repeatedly employed Polk's method with great advantage to my patients.

Many women with adherent tubes and ovaries, and, for the matter of that, some even with pus in these organs, suffer either no inconvenience whatever or very little, indeed, from that condition per se. I know numbers of such women, some with fixed appendages and some with pus in their tubes, who now never need medical advice, and who are to all intents and purposes well. There are, again, others who have pains and aches only at their monthly periods. Let, however, this health break down from grippe, from influenza, from malaria, from overwork, or from nerve-strain: then symptoms may arise from their hitherto latent pelvic lesions. Yet, in most of these cases no surgical operation whatever is needed, for if the woman can be restored to her former condition of health—that is to say, that which she enjoyed just before her final breakdown—she will lose her local symptoms and become symptomatically well. On this matter I can speak positively, for many a patient has been sent to my private hospital to have her distinctly damaged tubes and ovaries removed who has been restored to health without a resort to the knife. By the use of rest, massage, and electricity, by a general building up of the whole system, and by topical treatment, there have been cured by me cases with all the objective and subjective symptoms of ovarian or of tubal abscess. few of these cases this treatment was followed by conception, pregnancy, and parturition. In at least two such cases in which I urged castration, fortunately refused, the patients subsequently conceived and gave birth to living children at full term. Nor is my own experience isolated. At the last meeting of the American Gynecological Society, Dr. Robert A. Murray * gave a clinical report of six cases of double pyosalpinx. He had treated them by Polk's method of uterine drainage, and they all afterwards conceived and bore healthy children. In the discussion which followed the reading of this paper, Dr. George M. Edebohls stated that he "had known a number of cases of true pyosalpinx get well, the women afterwards becoming pregnant." Lusk, Chéron, and Dolèris have had an analogous experience. The latter goes so far as to make the too sweeping assertion that eight-tenths of cases of damaged tubes and ovaries can be cured with-

^{*} Transactions of the American Gynecological Society, 1803, pp. 435 and 436.

out operation. This opinion, somewhat modified, was sustained by several physicians who took part in the discussion at the International Congress of Gynecologists, held two years ago at Brussels.

The possibility of a closed-up oviduct regaining its bore is warmly disputed, yet it is a well-known fact that solid uterine fibroids of several pounds weight have been known to spontaneously disappear through retrogressive metamorphosis. At a meeting of the Obstetrical Society of London, held June 7th, 1893, Doran and others referred to forty such cases, and I myself have met with three analogous ones. So, also, will firm and extensive adhesions vanish away. Why, then, may not the thin tubal barriers and septa of inflammatory origin also break down and melt away? On the other hand, great disorganization of the ovaries is not incompatible with conception and pregnancy, for it appears that a very small amount of ovarian stroma goes a great way. Atlee reports two cases in which, one ovary having been removed, the other became so cystic as to need repeated tappings, yet each woman not only menstruated, but conceived and gave birth to a child.* In one of these cases, an ovary having been removed many years previously, the other one, becoming cystic, was tapped twice before conception, twice before delivery, seven times afterwards, and was then extirpated. A number of years ago I had a case of intraligamentary cyst of the right ovary. After its removal, which was attended with much difficulty and with much loss of blood, the left tube and ovary were found vitally attached to the pelvic wall, and to the surrounding viscera. In view of the shock under which my patient was laboring, and of the dangerous character of these adhesions, I did not dare to detach or remove this appendage. Yet, not many months later, this lady, who hitherto had been sterile, conceived, and bore a healthy child. Dr. B. F. Baer has had a still more remarkable experience. his case, the womb and both appendages being firmly bound down by adhesions, he, "by great effort," released the womb, tore the left ovary and tube "piecemeal" from their position, and ligated their "shreddy pedicle." "The right appendages were found in an almost similarly diseased condition, and, when they were dissected loose, they were also in shreds, the tube having been torn off about two inches from the uterus."† Dr. Baer urged their removal, but he was not permitted to do so by a physician present, who was the brother of the patient, and had promised his sister that only one appendage should be removed. Fifteen months later the woman gave birth to a child at full term. To cap the climax, Robertson‡ mentions a marvellous case in point. He extirpated both the

^{*} Atlee, Ovarian Tumors, pp. 38 and 39.

[†] Annals of Gynecology and Pediatry, January, 1894, p. 232.

t British Medical Journal, September 27th, 1800, p. 722.

damaged ovaries from one of his patients, yet she afterwards conceived and gave birth to a child. His explanation is that he must have left, unwittingly, a scrap of healthy ovarian tissue in one of the stumps. This hypothesis is unquestionably correct so far as it goes, but it does not cover the insemination of the ovum and its descent into the womb, which can be explained only on the supposition that the lumen of one of the oviducts had reopened at the point where it had been sealed up by the adhesive inflammation set up by the ligature.

But, supposing simple therapeutic measures fail, or that the use of the curette and of uterine drainage are not followed by relief, and the surgeon is driven to surgical interference, must he, after breaking up the adhesions, always extirpate the now free uterine appendages? Many surgeons contend not only that the diseased appendage should be removed, but also that both appendages should be extirpated, even if one alone is damaged. This advice is given on the ground that the healthy one is liable, in its turn, to become affected. My own course under such circumstances would be never to remove the healthy appendage unless the menopause had been already established, or unless there existed a good reason for hastening it on, such as the presence of a uterine fibroid, or of uterine disease, or the insanity of the patient, making it undesirable for her to have offspring. On the other hand, should both ovaries be intrinsically diseased, and the tubes contain much pus, I should always remove both uterine appendages in their totality, no matter what the age of the patient might be. Generally, however, the pus is limited to the tubes, and in that case one ovary, barring its adhesions, which, of course, must be broken, is healthy enough to be left behind. In such a case the tube alone, if possible, should be removed, and not the healthy ovary, or the healthy ovaries, if both happen to be sound. Nor have I ever found it needful to remove the womb on account of disease of its adnexa. Some of my most notable cures have been in cases in which the tubes were so rotten that they were either pinched off close to the womb or else were removed by a wedge-shaped incision in the womb itself, the uterine wound either being closed by suture or seared by the actual cautery.

Further, rather than wholly remove all ovarian stroma, I should try, in such cases, unless contraindicated, to leave behind at least a small fragment. For, in several of my cases in which a piece of an ovary not larger than a bean was left behind, not any menstrual or sexual changes whatever took place in the women. Should the uterine appendages be merely adherent, and not intrinsically diseased to any extent, I should, as a rule, during active menstrual life, release them, and perhaps extirpate the worse of the two, but not both of them. Such methods of conservative surgery will be occasionally rewarded by the maintenance of fertility. Polk,

McMonagen.* Schroeder, Martin, and others have published cases in which after a mere fragment of an ovary had been spared, and, indeed, after resection of the oviducts, conception and parturition took place.

The aim of modern surgery is conservation. Limbs, members, and organs are now saved which formerly would have been sacrificed. This is its glory, and this has been brought about by antisepsis. When, but a few years ago, gynecology was weaned from its obstetric nurses, it threw off its swaddling clothes and marched abreast of its sister sciences. But antisepsis, by the glamor of success, has so dazzled modern gynecology as to make it a spoiler rather than a conservator. Reform is here needed. This reform does not imply a return to the expectant therapeutics of our forefathers—"ancestral gynecology," as Chéron scornfully calls it. It signifies conservative gynecology, a golden mean between the let-alone methods of the old school and the too hasty and too radical interference of the new school. —University Medical Magazine.

^{*} American Journal of Obstetrics, 1893, p. 807; Transactions of American Gynecological Society, 1893, pp. 175 and 457.

HOMEOPATHIC ATTENUATIONS: FROM THE MATHEMA-TICAL POINT OF VIEW.

A NOVEL and ingenious criticism of the encurpound opathic attenuations of high potency is contributed by Professor NOVEL and ingenious criticism of the therapeutic value of home-Sauter to Gaea, Leipzig, July. The fundamental principle of homeopathy, as he presents it, consists in mechanical attenuation of the remedy employed, by solution in water or alcohol in the case of soluble substances, and by attrition with lactose or sugar of milk for the insoluble. The course originally followed by Hahnemann was to make his attenuations of the first potency as 1 is to 100; that is, one hundred drops of the solution contain ninety-nine drops of water or alcohol, as the case may be, and one drop of the medicine. At the present day it is usual to make the attenuations of the first potency as I is to 10. In either case, starting from this basis, the attenuations are carried to indefinitely higher potencies in a regular ascending series; that is to say, if we adopt the decimal scale, one drop of the attenuation of the first potency being added to nine drops of distilled water or alcohol, as the case may be, gives an attenuation of the second potency; and one drop of this, of course after due intermixture, added to nine drops of distilled water, etc., gives an attenuation of the third potency. If it is desired to raise the attenuation to the twenty-fourth potency, the simplest way is to take twenty-four glasses, and pour into each of them nine drops of water. Then pour into the first glass one drop of the medicine of the first power; then add one drop of the mixture to the next glass; one drop of that mixture to the third glass, and so on to the twenty-fourth glass, when, if the admixture is thorough, and the original medicine uniformly divided, the proportion of the original medicine in the fluid will be as I is to I with 24 ciphers annexed.

"And now," says Professor Sauter, "in order to appreciate the medicinal value of the ultimate attenuation, it must be borne in mind that both chemistry and physics point to the conclusion that all bodies are composed of definite numbers of ultimate molecules, which are not susceptible of further mechanical division; but which chemically may be further divided into the several atoms of which the molecule is composed. The investigations of De Heen, Loschmidt, W. Thomson, and others into the size

or diameter of molecules, although followed on different methods, are nearly uniform in result, and give the diameter of a molecule of water as 0.000,000,075 mm., or, roughly, thirty-two billionths of an inch.

"Now, as, according to universal acceptance, a cubic centimeter of a liquid contains sixteen drops, one drop will be found, on calculation, to contain at the utmost one quadrillion molecules, that is, basing the calculation on the size of the atoms without making any allowance for interstitial space. And as one drop attenuated to the twenty-fourth power potency contains just one molecule of the medicine, assuming that admixture has hitherto been perfect; but any attempt to carry the attenuation to a higher potency-to the twenty-fifth or twenty-sixth potency, for example—would be impossible. The one drop of the twenty-fourth power would carry one molecule with it; but on dropping this into nine drops of distilled water, the one molecule of the medicine would exist isolated among about nine quadrillion molecules of water, and the chances against the transfer of the molecule of the original medicine to any attempted attenuation beyond the twenty-fourth potency are 10 to 1, rising to 100 to I beyond the twenty-fifth potency, 1,000 to I beyond the twenty-sixth potency, and so on."

To afford the non-mathematical mind an idea of what is practically meant by an attenuation raised to the twenty-fourth potency, on the decimal scale, the writer goes into a calculation to show that the Boden-See with its surface area of 539 square kilometers, say 235 square miles, would require a uniform depth of nearly 116 meters, say 64 fathoms, to suffice for the attenuation of a drop of the original remedy to the eighteenth potency; but, according to homeopathic professors, the homeopathic high potencies do not begin until the thirtieth potency is reached; and yet to raise the attenuation to the twenty-fourth potency would require a volume of water equal to the whole water surface of the globe, with a mean depth of more than 90 fathoms. "It is hence," concludes the writer, "clearly evident, on purely scientific grounds, that, as regards attenuations of high potency, they can have no possible remedial value. In attenuations raised to the thirtieth power, the chances are just one million to one against the ultimate molecule of the remedy being present in the drop taken. Assuming that the remedy were equally divided, there would be one molecule of the remedy to every 160 gallons of the attenuated liquid." -The Literary Digest.

Clinical Notes.

A CASE OF CEREBRAL GLIOMA.*

By J. E. GRAHAM, M.R.C.P. LOND.,

Professor of Medicine and Clinical Medicine, University of Toronto; Physician to the Toronto General Hospital, and St. Michael's Hospital.

THE patient from whom this specimen was taken was not under my care, so that I was unable to make frequent examinations as necessary.

In any case, the past history would have been unsatisfactory, as the patient had no friends who could give a history of his previous condition.

So far as could be ascertained from himself, he had been in good health until four months previous to his admission into the hospital. He then met with an accident on the railway, when he received a severe blow upon the right side of the head. He was rendered unconscious at the time, but was soon able to go about. Nothing further could be learned as to his condition between the time of the accident and his admission into the hospital. I examined him on two different occasions. His condition was somewhat improved on my second examination. He remained most of the time in bed, although he was able to walk fairly well.

The most striking feature of his case was the presence of aphasia, which was of the motor type, presenting the signs both of the amnesic and ataxic varieties. He understood thoroughly what was said, and would commence to answer, but was immediately stopped for want of words. He would then show signs of impatience. He had forgotten proper names altogether, could not remember native country or city, but when the name was suggested he at once assented. At times he mixed up the words he used in such a way that he could not to be understood.

He had slight paralysis of the right side of face and of the right arm, but none of the right leg. The tendon reflex on the right side was some-

^{*} Presented at the Toronto Pathological Society.

what increased. He walked without difficulty. His general condition was good, and functions normal.

A few days before he died his temperature rose and he became delirious, and then comatose. I do not know whether any change took place in the paralysis or not. He had no convulsions at any time.

From the symptoms present, and the previous history, I was of opinion that there existed a destructive lesion, either in the centrum ovale or in the internal capsules, on the left side. I did not think the cortex was affected, as he had never had convulsion, and the arm was very free of spasm. We concluded, from the history given, that the lesion might be a hemorrhage, the result of contre-coup, as the injury to the skull was on the right side.

At the post-mortem examination, to my surprise, we found a glioma present in the anterior portion of the centrum ovale on the left side, and affecting the anterior limb and germ of the internal capsule. The glioma was about the size of a large walnut, and presented softer portions in the centre. There also existed a surrounding cerebritis, which probably commenced a short time before death.

A depression of the outer plate was found on the right side of the skull, at the seat of injury. The internal table was intact.

An interesting point arose in this case: How long had this glioma been in existence? Was it there before the accident, or had it formed since that time? It is generally thought that these tumors grow very slowly, but on what grounds I do not know.

In this case the natural inference is that an injury was produced by contre-coup, and that the tumor then commenced to grow.

While the cortical centre itself does not seem to have been injured, the commissural fibres, as well as those passing down to the internal capsule, must have been affected; otherwise he would have regained to a greater extent his powers of speech.

Progress of Medicine.

MEDICINE

IN CHARGE OF

J. E. GRAHAM, M.D., M.R.C.P. Lond.,

Professor of Medicine and Clinical Medicine, University of Toronto; Physician to the Toronto General Hospital, and St. Michael's Hospital.

AND

W. P. CAVEN, M.B. Tor.,

Lecturer in Clinical Medicine in the University of Toronto; Physician to Home for Incurables.

THE PREPARATION OF CONCENTRATED ORCHITIC FLUID. (D'ARSONVAL.)

Concentrated orchitic fluid is obtained by macerating testicles for twenty-four hours in glycerine, in the proportion of 1 kilo. to 1 litre of glycerine at 32°C. The macerator, a sterilized tin dish, is provided with a perforated piston, so that the testicles might be kept at the bottom of the glycerine, and to avoid the alteration that might take place by the testicles coming in contact with the air. Filter through Chardin's filter-paper, and sterilize the liquid by exposing to carbonic acid for four or five hours at 50 atmospheres. The observer has found that this sterilization is absolute, and it has allowed him to come back to extracts well loaded with glycerine, which he had before abandoned because of the difficulty he had encountered to filter glycerine through the porous plate. This new liquid cannot be used undiluted. For this purpose he uses salt solution 1 per cent., or carbolized water 1 in 1000. Pain is avoided by mixing the orchitic fluid intimately with the solution, and injecting slowly.—Revue Internationale.

TREATMENT OF TUBERCULOSIS.

M. Lancereaux read a report upon a work of M. Caravias on the treatment of tuberculosis by substances which form succinic acid in the organism, such as raw meat, fats, bimalate of lime, benzoic acid and its

salts, non-acidified pepsin, asparagin, carrots, green vegetables, etc. According to M. Caravias, this treatment produced a notable amelioration in cases in which it had been tried, except, of course, in such as suffered from too extensive lesions. He believes that it has no action upon the bacillus, but that by its antiseptic properties it antagonizes invasion by the bacilli, modifying the soil, as it were, and allowing the tuberculous material to pass through its several phases, to be eliminated in the expectoration.— Sémaine Médicale, January 31, 1894.

VENESECTION IN RENAL ASTHMA: INSTANT RELIEF; URIC ACID IN THE SERIM.

I was hastily summoned to this patient on November 20th, 1893, in the absence of his ordinary medical attendant, and found the symptoms so urgent that I was obliged to act alone and at once. The case was that of a man, aged 52, who had been under treatment for albuminuria and dropsy for rather less than a week. I found him in a state of orthopnea, and tossing about in bed in his distress. Expiration was prolonged and accompanied with loud dry rales; the pulse was somewhat slow—the actual rate was not noted—and, as it appeared to me, of markedly high tension.

I immediately bled the patient pleno rivo to 15 ounces, with the result that he could at once lie down, and that all the distressing symptoms had disappeared next morning. He was afterwards in the Western Infirmary for some time, and there is reason to believe that the attack has been an acute one, and not likely to merge into chronic Bright's disease.

Having previously discovered crystals of uric acid in the serum of two cases of convulsions which I had bled, and being much interested in the important researches of Dr. Haig on uric acid in the causation of disease, especially headache, high-tension pulse, convulsions, epilepsy, etc., I forwarded a specimen of the blood to him in the above case, which he was so kind as to examine. He reports as follows on November 24th, 1893:

"The specimen of blood you sent me on November 21st contained uric acid to the extent of 0.015 per cent. My experience with blood drawn during life is too small to draw any sweeping conclusions from; but the largest quantity I have found in blood of venesection was 0.03 per cent. in a case of cerebral hemorrhage. I have often found smaller amounts, 0.002 to 0.004. I should think, therefore, that 0.015 per cent. represents a distinct excess of uric acid, but that double this quantity may be found in some cases."—ROBERT KIRK. M.D., Physician to the Dispensary, Glasgow Western Infirmary, in British Medical Journal.

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EARLY DIAGNOSIS OF GASTRIC CARCINOMA.

In the Deut. med. Woch., May 17, 1894, Cohnheim, of Boas's Poliklinik, contends that it is possible to make a fairly certain diagnosis in the absence of a tumor. The old idea that chronic gastritis is accompanied by lactic and fatty acid formation is disputed, but in cases of carcinoma an intense reaction to Uffelmann's test for lactic acid appears. For such an intense reaction stagnation of the gastric contents and a lasting absence of free hydrochloric acid are necessary. If only one of these conditions is present, as in chronic gastritis or dilatation of the stomach, such a reaction does not appear. The author relates a case in which a simple ulcer was suspected, and in which treatment had no lasting effect. When the stomach contents were at length examined no free hydrochloric acid was present, and Uffelmann's test gave a marked result. The stagnation of the gastric contents here was against chronic gastritis, where the food passes into the intestine within the usual time. Later, besides other symptoms, there was marked wasting, and vet no tumor could be felt. At the necropsy a limited growth was found at the pylorus. The author points out that in this case, in the absence of recognizable tumor, a correct diagnosis was made six months before death, chiefly from the constant and marked presence of lactic acid. Within eleven months ten such cases were seen without recognizable tumor, all of which gave a positive reaction with Uffelmann's test, and yet no such reaction was ever observed in cases of gastrectasis or of chronic gastritis with absence of free hydrochloric acid. The author lays stress on the importance of early diagnosis in regard to the question of possible removal. Lastly, he refers to the new test proposed by Boas for lactic acid in the stomach contents.—Epitome, British Medical Journal.

THE TREATMENT OF CHRONIC RHEUMATISM.

Dr. Dujardin-Beaumetz divides chronic rheumatism into three groups: (1) Rheumatismus deformans (Charcot); (2) chronic, succeeding an acute rheumatism; (3) the multiple manifestations in chronic course of a rheumatic. The first group must be treated for a disturbance of nutrition, and arsenic and the iodides give the best results. Fowler's solution, sodium arsenate, arsenious acid are useful, but arsenical baths—because it has been proven that an intact skin does not absorb medicinal solutions—are likely to be therapeutic illusions. In the iodine treatment, the iodine itself is not to be preferred to the iodides, because, even if administered in wine, it irritates the stomach. Of the iodides, an average daily dose of fifteen grains is sufficient; as a potassium iodide, or as sodium iodide with the sodium bromide and chloride, or in alteration with gold and sodium

chloride. For the painful crises, phenacetine gives the best results. Paracetphenetidine, in seven-grain doses, is a powerful analgesic. diet is the opposite to that of the gouty; meats, green vegetables, generous wines, and milk. The external treatment consists in electricity and balneotherapy. The chronic rheumatisms of the second class are relieved by the salicylates, and they as well have a preventive action. Fifteen to thirty grains per day, or, in some cases, asaprol, and more rarely phenacetine, are required. But the essential cure of this rheumatism is external treatment, massage, electricity, and balneotherapy. The massage, methodically employed, and with care, during the period of quiescence, benefits the functional impairment of the joints, and as well the accompanying muscular atrophy. The muscular atrophy is benefited by electricity, by continued or slowly interrupted currents. The baths at Aix, Bourbonne, Plombières, and Dax, particularly the mud-baths at the last station, give excellent results. For diet, a mixed one, in which vegetables form a large part, is indicated. It is important that the different emunctories shall act properly, and laxatives and diuretic liquids should be employed, white-In the last form it is the diathetic condition which must be wine or milk. opposed; here the thermal waters and regulated diet are important. Muscular pain and neuralgias of rheumatic origin are relieved by antipyrine, and especially phenacetine, which should be placed by the side of sodium salicylate and asaprol. In this class also the bowels should be kept open and the kidneys active, and in the latter case the action of antipyrine in diminishing the urinary secretion may be a disadvantage. assist the skin in performing its functions, vapor baths, Russian baths, warm or Scotch douche, even the cold douche, are excellent methods. As for the thermal stations, especially are to be considered Dax, and afterwards Plombières, Aix-les-Bains, Bourbonne-les-Bains, Bourbon-Lancy, the last particularly for the visceral manifestations, the myocardites, diet should not include any substance which can contain toxic ptomaines. Game, fish, shellfish, mushrooms, old cheese, should be guarded against, while a vegetable diet, milk, and fruits, are useful.—Bulletin général de Thérapeutique, 1894, 6th liv., p. 97.—American Journal of the Medical Sciences.

SUPPURATIVE PYLEPHLEBITIS; LAPAROTOMY; RECOVERY.

Frederick Treves reports the following very instructive case (Lancet London, 1894, vol. i., No. 11): A young lady, aged fifteen years, was seized with symptoms of perityphlitis, ten days after an ocean voyage, during which, in addition to full meals, she had eaten large quantities of nuts and candy. She had an attack of perityphlitis four years before, and

another two years prior to the one reported. She was of constipated habit. The attack began with sudden pain in the abdomen, vomiting, coated tongue, and moderate fever, which reached 104° on the third day. The symptoms gradually ameliorated, until the eighth day, when there was a severe rigor, the temperature registering 103°. The condition was thought to be due to stercoral ulcer. From this time on she pursued an irregular course, gradually becoming weaker and more emaciated as a result of her disease, with the accompanying fever and vomiting. On the thirty-first day Mr. Treves was asked to perform exploratory celiotomy, on the supposition that an abscess of the liver existed. At this time the patient was very ill, she was emaciated, very prostrate, the forehead was wrinkled, and she appeared in a state of ceaseless anxiety. Pain was complained of "all over," but marked tenderness was manifest only over the liver.

An incision was made in the right semilunar line. There were no peritonitis, no ascites, and no adhesions. The cecum appeared normal; the appendix was healthy and freely movable. The gall bladder exhibited no morbid changes. The appearance of the liver was remarkable. It was enlarged, of normal color, but its consistence was as soft as a lung. All of the exposed portion was dotted with minute yellow specks, perfectly round, and the size of an ordinary pin-hole; they were not perceptible to the touch. The region of the fissure of the portal vein was examined, but nothing peculiar was noted. The patient made a rapid and uninterrupted recovery, and at the time of the report, eighteen months after the operation, her health had remained sound.

It is suggested that the case was one of typhlitis or perityphlitis followed by pylephlebitis. The points of particular interest are: (1) All cases of perityphlitis do not depend upon a previous appendicitis, even where there have been repeated attacks (in the present case the appendix was entirely healthy); (2) the rapid and complete recovery following exploratory celiotomy; and (3) recovery after pylephlebitis. In connection with the second feature, the author calls attention to the monograph of J. William White on "The Curative Effect of Operation per se," in which a very large number of cases have been collected where simple exploration has been followed by amelioration or cure of apparently malignant conditions.

Treves has seen one other case in which recovery took place. The text-books teach that the condition is commonly fatal.

THERAPEUTICS

IN CHARGE OF

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THE USES OF GUAIACOL.

Recently guaiacol has come into such general use as internal treatment for phthisis, as a local paint to reduce temperature, as a topical application in quinsy, and as an external application in several affections, that we append a few excerpts from recent literature on the subject. The reason that creasote so frequently produces gastric derangements is that it is not a definite chemical product, but is a mixture containing guaiacol, toxic cresol, and toxic derivative of pyrogallol. Guaiacol, the active principle of creasote, is recommended by Dr. Sahli, instead of using the unstable The liquid guaiacol itself is never a pure product, containing creasote. only seventy-five per cent. pure guaiacol. C.P. guaiacol is altogether too irritating and poisonous to become of general use. Von Heyden has greatly overcome this difficulty by combining guaiacol with carbonic acid. when an innocuous and non-irritating compound is formed. Guaiacol carbonate retains all the valuable properties and none of the deleterious It is decomposed in the intestines into carbonic acid and pure guaiacol, and from here it exerts its medicinal effect.

GUAIACOL CARBONATE IN THE TREATMENT OF TUBERCULOSIS.

Guaiacol carbonate, ninety-one per cent. of which is chemically-pure guaiacol. It is a well-defined, white, crystalline powder, odorless, tasteless, neutral, and non-irritating. When the stomach is healthy it has no action upon it. In the stomachs of tuberculous subjects, which contain enormous quantities of parasitic saprophytic bacteria, a sufficient quantity of guaiacol is set free, as the effects of putrefaction and fermentation, to check the development of the bacteria, and thus to unload the stomach of

these pernicious parasites. The carbonate of guaiacol is, therefore, appropriate in every respect to the stomach. In the intestines it is slowly decomposed, water being taken up, and free guaiacol and carbonic acid being set free. There is therefore no danger of any toxic effect. The free guaiacol at once begins to be absorbed, so that even a considerable dose of guaiacol carbonate occasions no accumulation of free guaiacol in the intestine. A dog some months old, weighing 5 lbs., after fasting for 24 hours, was given, by means of a tube, 180 grains of carbonate of guaiacol the first day, and 225 grains the following day (the medicament being mixed up with milk), without experiencing any distress. Rabbits have taken the same substance for a week without any untoward effects.

Half an hour after the absorption of the drug, free guaiacol can be demonstrated in the urine. Once in the blood, it acts by steadily and permanently removing from the blood of phthisical patients the poisonous substances generated by the tubercle bacilli. (Berliner klinische Wochenschrift, 1892, No. 3.)

Guaiacol carbonate was first used by Sanitætsrath Dr. F. Hoelscher in the Hospital of the Three Kings, at Muelheim on the Rhine (Berliner klinische Wochenschrift, 1891, No. 51). From September, 1890, to October, 1891, 60 consumptives were treated with it. The daily dose was, at the beginning of each treatment, 6 to 15 grains, given in two portions, morning and night. This was gradually increased until the daily dose reached 90 grains; for, like creasote, guaiacol does more good the larger the dose of it that can be borne. All these patients, including two who always vomited after creasote, took guaiacol well, even when fasting.

One of the first points noticed by Dr. Hoelscher was a marked improvement in the patients' appetites, some being constantly hungry. The increased ingestion of nutriment soon caused increase of bodily weight and strength. The fits of coughing became less violent; expectoration was easier and less abundant.

This latter improvement made the sleep less disturbed and more refreshing. The night sweats disappeared and the fever diminished.

The physical signs showed marked improvement of the lungs. The râles diminished and in some cases ceased entirely. Dullness disappeared rapidly, and, in extremely favorable cases, large cavities so decreased in volume as not to be recognizable by physical examination in the course of a few months. Sputum examinations also showed a rapid decrease in the number of bacilli.—Notes supplied by Schening and Glatz.

EXTERNAL APPLICATION OF GUAIACOL IN FEVERISH CONDITION.

Dr. Stolzenburg, in Berliner Klinische Wochenschrift, details his experience with the external application of guaiacol as recommended last year

by Sciolla, of Genoa. From two to four cubic centimeters of guaiacol are painted on a portion of the skin, preferably that of the thigh, and this is then covered with some impermeable material. Observations are recorded of its effects in septicemia, acute tuberculosis, rheumatism, pneumonia, etc. He arrives at the following conclusions: (1) Guaiacol painted in this way over the skin produces a prompt and decided fall in temperature. (2) The first dose in an adult should not be greater than two cubic centimetres. If it is well borne, and the fall in temperature is not too marked, the amount may be increased to four cubic centimeters. which dose it is seldom desirable to exceed. (3) Untoward effects of moderate doses upon the heart and kidneys were never noticed. Large doses in weak individuals produced symptoms of collapse. (4) The symptoms associated with the fall in temperature—e.g., profuse perspiration succeeded by a chill as the temperature begins to rise again—sometimes weaken a patient to such an extent that its prolonged use cannot be recommended. (5) The observations so far have not been sufficient to show the effect of the treatment on the whole course of any disease.— International Medical Magazine.

On the Absorption of Guaiacol by the Skin.

Dr. Linassier and Dr. Lannois (Semaine Médicale) have carried on observations on the absorption of guaiacol by the skin and its after-elimination by the urine. Their experiments prove that the drug is really absorbed by the skin, as the effect takes place with equal intensity when the patient breathes through a tube opening outside the room where the patient sits. In a quarter of an hour after the application of two grammes to the skin, its elimination by the kidneys becomes manifest. The elimination reaches its maximum in from one hour and a half to four hours, and in twenty-four hours after the application only a trace can be found in the urine. The total quantity eliminated in this way may amount to about fifty-five per cent. of the total quantity applied to the skin.—International Medical Magazine.

THE EXTERNAL USE OF GUAIACOL.

In La Province Médicale for February 3rd there is an article on this subject, of which the following is the substance: This drug, which was used by Sciolla and Bard, has for some time been employed as an antithermic. It consists in painting the greater part of the exterior wall of the thorax, and sometimes the forearms, with pure quaiacol. According to different authors, the doses are variable, ranging from 1 to 2 cubic centimeters up to 7 or 8. There is a difference of opinion as to the employment of this

liquid. Sciolla, Bard, and other physicians use pure guaiacol, while others, like Desplats, mix it with glycerine or alcohol. In several cases of advanced phthisis a marked reduction of two degrees has been obtained by painting the entire surface of the front of the thorax with pure guaiacol. Unfortunately, the effects of this treatment are only temporary, not lasting more than three or four days. Sometimes, also, applications of this kind produce a marked rise in temperature—in one case two degrees. It is necessary, then, in making use of this procedure to ascertain the susceptibility of the patient, and to use at first small and then progressively large There have been of late years interesting attempts in the employment of this procedure. Casasovici and Miron Sigalea have used guaiacol mixed with tincture of iodine, in the treatment of pleurisy, in the following proportion: Tincture of iodine, 385 grs.; guaiacol, 75 grs. This quantity is used in a single application, and the diseased parts are thoroughly and extensively painted with it every night. These applications cause a considerable reduction of temperature, profuse perspiration, and an increased flow of urine, followed soon after by complete resorption. These results seem to have been obtained, particularly in one case, where there was abundant pleuritic effusion on the left side, in which tapping had not been followed by any relief, but had caused a considerable rise in temperature, by the application of iodized guaiacol, the fever disappearing in a few days and the effusion becoming resorbed.

M. Desplats has recently conceived the idea of applying guaiacol in the treatment of painful rheumatic inflammation of the joints, after having observed a case in which applications of guaiacol had been used with excellent results. He had used a mixture of equal parts of guaiacol and pure glycerine. The joints were thoroughly painted with this mixture and afterwards covered with a dry dressing. In one case of acute rheumatism and in three others of arthritis deformans with sharp pains the results were excellent. The pain was completely subdued, and in the first case the patient recovered rapidly. This procedure has recently been employed in applying guaiacol for articular neuralgia of the shoulder, which was very puinful, in a tuberculous patient, who experienced marked relief. It is easily employed, and not dangerous if the indications mentioned are conformed to.—New York Medical Journal.

GUAIACOL AS A TOPICAL APPLICATION IN THE TREATMENT OF ACUTE
TONSILLITIS.

Raymond (*Medical Record*), as a result of experience, found that the application of guaiacol is somewhat unpleasant and is attended with quite a little smarting, but as its duration is only from one to five minutes in

most cases (although in some instances it lasted for several hours), the relief caused by the application more than overbalanced the pain. However, it is frequently no more painful than nitrate of silver or many other remedies commonly used, and possesses many advantages over them, the cardinal one being as a curative measure or as an abortifacient. It was thought that a thorough application of cocaine (ten per cent. solution) prior to the application of guaiacol would lessen the degree of smarting, but it seemed to aggravate it. The applications were made by means of a cotton swab dipped into pure guaiacol, and applied over the surface of the tonsils, care being taken to prevent it from getting into the larynx. To keep the throat moistened, troches of althea, or guaiac, or gargles were given. In every case where marked febrile symptoms were noted, the temperature was found to drop from one degree to normal within a few hours. In one case where it registered 103.5° F., it fell to normal in four hours.

In the superficial or lacunar variety, the inflammation was terminated far more speedily than in the phlegmonous.

In a number of cases with a history of having had quinsy, and where every evidence of a recurrent attack was present, it was found that not more than two applications were necessary to abort the disease, and in many instances it did not last more than forty-eight hours, and in none did suppuration occur. In many cases where patients were unable to swallow without intense pain, they were able to do so within ten minutes. In a few patients suffering from a primary attack, swelling was seen to subside within a few hours.

THE VALUE OF GUAJACOL AS AN ANTIPVRETIC.

Thayer, of Baltimore, contributes a valuable therapeutic summary on this topic to the *Medical News*, and concludes from the few experiments which he has made, and from a consideration of the results obtained by other observers, that we are, perhaps, justified in asserting that guaiacol applied to the skin is readily absorbed into the economy; that its application is followed in most instances of fever by a gradual reduction in temperature, which reaches its lowest point generally between three and four hours after the application; that this fall of temperature is almost always associated with disagreeably profuse sweating; at a variable period, usually a short time after the lowest point is reached, the temperature rises rapidly, generally in association with marked chilly sensations, if not with an actual chill; that a dose of more than 2 cubic centimeters is rarely advisable; that exactly similar results are produced by the absorption of guaiacol through any other channel (the rectum or the subcutaneous tissues);

that the antipyretic action is exactly similar to that which has been previously observed to follow a corresponding use of creosote and carbolic acid; that, owing to the disagreeable effects of the immediate application of guaiacol (sweating and chilliness) and the weakening effects of the continued use, its employment as an antipyretic, as in the case of carbolic acid and creosote, will probably have but a limited application.—Therapeutic Gazette.

TRICHLORACETIC ACID AS AN IDEAL CAUTERANT.

The January, 1894, Monatsschrift fur Ohrenheilkunde contains an enthusiastic paper by Von Stein, of Moscow, in furtherance of his primary claims for this medicament. Some of the advantages urged can hardly be claimed for anything else, and the methods seem to deserve full trial. Admitting that it is more painful than chromic acid and less vigorous than galvano-cautery, he differentiates the non-fibrous hypertrophies as the true field for its use as a cauterant; but claims, as the result of clinical and laboratory experience, to have demonstrated that it is an adjuvant of the greatest value to the other forms of cauterization, increasing the efficiency and lessening the reaction. The application of the crystals or concentrated solution to a bare or eschared surface prevents all putrefactive changes, almost wholly does away with febrile consequences, and promotes rapid, comfortable healing. Further, his employment of it in ozæna cases has not only speedily controlled the odor, reduced crust formation, and hastened improvement, but has even led to so decided a hypertrophic tendency of the sclerosing surfaces as to demand at times reduction by decided cauterization. In acute coryza he has employed weak solutions (1 to 1,000 to 2,000) by instillation or spray, with prompt and safe resolution after the brief increase of secretion; otitic consequences have seemed especially rare in cases thus antiseptically treated. He cautions against strong applications until the tolerance and inadequacy of weaker solutions have been proved; and others will do well to be more conservative than he now is, since he sometimes insufflates crystals into the Highmore or ethmoid sinuses. While the conditions which he selects for its use as a cauterant seem those in which still milder measures would succeed, and his view is generally rather roseate, trichloracetic acid would seem to have a special place as an aid in other cauterizations, and may prove our most valuable medicament in combating the obstinate ozenatous conditions.

[Note.—We have used trichloracetic acid very frequently during the past two years, and have nothing but praise to bestow on it. The pain produced by its application is controlled entirely by the previous use of a a two per cent. solution of cocaine. The eschar is dry and separates readily.]

OBSTETRICS

IN CHARGE OF

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AIR EMBOLISM IN PLACENTA PREVIA.

Henck (Zeitschr. f. Geb., u. Gyn., Band xiviii., 1 H.), Olshausen, in a recent paper on this subject, has suggested that the sudden deaths frequently observed during version in placenta previa are probably due to air embolism. Kramer and Kruckenberg have each published a case in which the cause of death was found in the entrance of air into the veins. The author has recently encountered a similar experience. The patient was a primipara twenty-eight years of age. Hemorrhage began in the seventh month. On admission to the hospital the cervix was found dilated sufficiently to admit one finger, and the placenta presenting centrally over the os internum. Owing to repeated recurrence of hemorrhage, version was done under chloroform. The entire hand was carried into the vagina. Two fingers were passed into the uterus, one edge of the placenta separated, and the membranes broken. A foot was brought down with difficulty with the aid of external pressure. The chloroform was then discontinued. A violent pain occurred, and the woman suddenly became pulseless and profoundly cyanotic. Various restorative measures, including rhythmical pressure over the cardiac region and artificial respiration, were tried, but to no purpose. The respiratory movements became slower and slower, and finally ceased altogether, within from three to five minutes after the pulse stopped. The child, which was dead, was still undelivered. At the autopsy, two hours after death, air bubbles as large as a hazel nut were found in the right jugular vein. Bubbles of air were demonstrated in the right heart by opening its cavities under water. The coronary vessels contained air. The myocardium was not impaired. Air bubbles were also to be seen in the right spermatic vein. The author believes that the air introduced into the uterus with the hand was forced into the venous sinuses on the occurrence of vigorous uterine contractions.

Henck thinks the possibility of air embolism fully established by his own and the other two cases to which he alludes. The fact that after similar deaths air has not always been found in the heart and veins is due, he believes, to faulty methods of examination.—*Brooklyn Medical Journal*.

FATAL NAUSEA AND VOMITING OF PREGNANCY.

Dr. E. P. Davis, of Philadelphia, read a paper on this subject before the American Gynecological Society. He reported three fatal cases which had come under his observation. In two he had not seen the patients in time to bring on an abortion before the anemia had become pernicious; in the third the patient left his care and died in the hands of another physician. His conclusions were (New York Medical Record): "Nausea and vomiting of pregnancy is dangerous in proportion as it induces pernicious anemia. The condition of danger is to be recognized by studying the cases in the light thrown upon them by the pathology of anemia. Immediately pernicious anemia was present the condition was dangerous; and if the symptoms did not cease at once by local or other treatment the uterus should be emptied by modern surgical methods. In the case related death was preceded for a time by streaks of coffee ground in the vomited matter, by substernal pain, by bud change, which in one case showed itself in purpuric spots; and in one at autopsy many organs as well as the heart were in a state of fatty degeneration.

RESULTS OF TREATMENT OF UTERINE HEMORRHAGE BY HYDRASTININ. (KALLMORGEN.)

The results were obtained by the observation and treatment of 100 patients during two and a half years at the University Hospital for Women at Berlin. According to the author's review of the literature of the subject, hydrastinin, an alkaloid obtained from the oxidation of hydrastin, was first employed therapeutically by E. Falk in 1890. Several series of observations are mentioned, of which the results agree to an unusual extent.

The medicine was administered by the mouth at first, in the form of trochisci and afterwards in pill, the dose varying from ½ to 1 grain three times a day. The by-effects were only slight, occasional stomach-ache, or nausea. No other therapeutic treatment accompanied that of hydrastinin.

The women were out-patients, and were seen only two or three times a month. They were usually advised to take the pills when the bleeding came on; in cases of typical menorrhagia, the medicine was begun two or three days before the appearance of the menses. Considerable care appears to have been taken to follow up the after history of the cases.

The best results were obtained in the cases of hemorrhage following hematocele (100 per cent. cured); in "simple menorrhagia," 85 per cent.; in hemorrhage after abortion, 83 per cent.; and in the hemorrhage depending upon disorders of the tubes and ovaries, 75 per cent.

Less satisfactory was the treatment of chronic endometritis, and little or no influence of the drug could be observed in cases of hemorrhage during pregnancy, or of hemorrhage from myoma and carcinoma.—

Manchester Medical Chronicle.

THE EFFECTS OF QUININE ON PREGNANCY.

A collective investigation of this subject is published in the *Indian Medico-Chirurgical Review* for February, 1894, the results of which are as follows:

- (1) The existence of pregnancy is no bar to the administration of quinine.
- (2) For fevers and other affections during pregnancy in which quinine is indicated, the effects of the drug are more marked than those of any other.
- (3) That abortion following the administration of quinine is either the result of the original malady or the effect of idiosyncrasy.
- (4) That allowing for an idiosyncrasy, in cases in which a tendency to abortion exists, and in others as a matter of precaution, quinine is best administered combined with a sedative (opium).
- (5) Hence the old-standing view of the action of quinine on the duration of pregnancy is not borne out by the clinical experience collected in the replies.—Therapeutic Gazette.

THE PREVENTION OF CRACKED NIPPLES.

The Lancet's Paris correspondent says: "The direct relation of mammary abscess occurring during the period of suckling and excoriations of the nipple is now fully admitted. Many mothers object to suckling their infants on account of the dread of this complication. Artificial feeding, with its frequent failures, is then resorted to, and the child suffers. Antiseptic washing of the nipples has greatly diminished the frequency of abscess of the breast, but cracked nipples continue to be of common occurrence. For the last ten years Professor Pinard has been in the habit of advising nurses, as a matter of routine, to keep the nipples covered with a compress saturated with a solution of boric acid. This precaution has had the effect of markedly diminishing the frequency of lymphangitis, but

instances of an increase of temperature in young mothers due to microbian infection of the nipples are still numerous. M. Lepage strongly recommends that the nipples should be regularly washed with the following solution: Red iodide of mercury, 10 to 20 centigrammes (2 to 4 grains); spirit of wine, 50 grammes (11/2 ounces); glycerin, 500 grammes (1 pint); distilled water, 450 grammes (1 pint). If, after using this for a few days, the ulceration disappears, substitute a solution of boric acid. that may develop is covered with tarlatan moistened with the mercuric The following figures appear to confirm M. Lepage's good opinion of the comparative value of his method. In three hundred and thirty-one cases of lying-in women whose breasts were treated by the Pinard method there was an increase of temperature in sixty-seven, the corresponding figures in M. Lepage's cases being twenty-three out of four hundred and forty. Moreover, the healing of the cracks is said to be expedited and the pain greatly diminished by the mercurial treatment."--New York Medical Journal.

ASEPTIC DRESSING OF THE UMBILICAL CORD.

The necessity for and the method of aseptic dressing of the umbilical stump are clearly set forth by Dr. Joseph McAllen in the *American Journal of Obstetrics* for April, 1894.

The infecting micro-organisms and ptomaines, giving rise to septic diseases in the newborn, gain entrance into the system through the umbilicus, and, therefore, the greatest care in the dressing of the cord must be taken.

Physiologically, the process of separation is a desiccation, and not, as many suppose, a putrefaction or ulceration. The dressing that keeps out microbic and other infection and hastens desiccation is the one best adapted for the purpose. The cord is secured by a clamp or ligature about two and a half inches from the abdomen, and the child turned over to the nurse to be washed. The cervix cascosa should be thoroughly removed, rubbing the child with pure olive oil and then washing with warm boiled water and pure white castile soap.

The hands of the accoucheur having been made perfectly aseptic, the funis and abdomen of the child should be wiped off with a 1-1000 bichloride of mercury solution. The cord is again cut about one and a half inches from the abdomen, and stripped after Goodell's method, so as to press out all its gelatinous material, and a sterilized ligature is then applied. The cut end of the cord is touched with a bichloride tablet.

The stump is now enveloped in sterilized gauze, not sublimated, but saturated with pure glycerine. This is turned up upon the abdomen, and

another pad, soaked in glycerine, placed over it, and the whole kept in place by a sterilized bandage.

Chemically pure glycerine is especially indicated as a dressing for the stump, as it is bland, unirritating, antiseptic, and has great hygroscopic properties.

If the umbilicus ulcerates, repeated irrigations with hydrogen peroxide should be used, afterwards applying the stick of nitrate of silver thoroughly, and dusting the parts with aristol, and covering with sterilized gauze and bandage.

MYOMECTOMY DURING PREGNANCY.

Stavely (Johns Hopkins Hospital Bulletin, 1894, No. 38) states that myoma complicating pregnancy is rather uncommon, on account of the tendency of this growth to cause sterility, or, in the event of pregnancy, early abortion. Virchow and Scanzoni state that fully 50 per cent. of women bearing myomata are sterile. If pregnancy occurs, notwithstanding the existence of this growth, the necessity for surgical interference must be considered, and depends upon the individual peculiarities of each case. Thus, a small myoma may not complicate the course of pregnancy or interfere with labor, no matter where situated. An interstitial myoma of the upper zone of the uterus, even though of considerable size, usually offers no mechanical obstruction to labor, and, unless symptoms arise which render an operation necessary, should not be touched. Tumors which are situated in the early months of pregnancy in the lower part of the uterus may gradually ascend from the pelvis and occupy such a position at term that labor is in no way complicated.

A pedunculated myoma blocking the pelvis and causing severe pressure symptoms may frequently be freed from its confined position by careful manipulation, and this may be accomplished more readily by placing the patient in the knee-chest position. Manipulation may either fail on account of the cramped environment of the tumor, or on account of the adhesions which bind it so firmly in the pelvis that attempts at separation may be attended by disastrous consequences, as the cases cited by Phillips and Handfield-Jones prove.

The dangers from surgical operation in these cases are shock, abortion, hemorrhage, intestinal obstruction, and infection. On the contrary, in non-interference, abortion, hemorrhage, sepsis, rupture of the uterus, pressure symptoms, intestinal obstruction, and mechanical obstruction to labor may occur.

The author draws the following conclusions from an analysis of the cases operated on: (1) Operations performed during the last eight years

have been attended with much better results than in former years; (2) operations upon sessile myomata are more disastrous to the fetus than are those of pedunculated tumors; and (3) myomectomy, for pedunculated or sessile myomata, is comparatively safe and thoroughly justifiable in properly selected cases.

INFLAMED BREAST: GALACTOPHORITIS IN MOTHER AND CHILD.

Macé (Bulletins et Mémoires de la Société Obstét. et Gynéc. de Paris, March, 1894) states that a woman, aged 32, in her second pregnancy, was naturally delivered of a female child on January 28th. The nipples soon became sore. Compresses of one-fifth alcohol solution were applied, and the patient was directed to wash the nipples with boracic lotion after each act of suckling. The right nipple was partly retracted. On February 8th rigors and pain in the right breast occurred. Lymphangitis and galactophoritis of the right nipple were detected, and some of the outer and lower lobules of the gland were tender. Sublimate compresses were applied. The pain abated; nothing issued from the nipple on pressure. The patient persisted in suckling the child with the right breast; in consequence it lost weight, and passed unhealthy motions. On February 11th the mother took to nursing with the left, or healthy breast, only, and the child was further fed on sterilized milk. In the evening ous was pressed out of the right nipple; there was suspicious induration around the affected lobules. Sublimate compresses were applied, and the expression of pus continued; in consequence mastitis was averted, and the breast soon recovered. On February 13th, the infant's right breast was found to be swollen; the axillary glands were not enlarged. On gentle pressure, milk mixed with pus and then pure pus escaped from the nipple. Sublimate compresses were applied; the expression of pus was continued daily as in the mother's case; in two days the breast was well, but the compresses were continued for a few days longer. disease in the child's case was probably due to direct infection In Arbel's case the by contact of pus from the mother's breast. woman who suckled the child had ophthalmia. Fournel believed that the breast might become infected when passing through the mother's vagina. Karlinsky, the author observes, has shown that an infant's breast has been known to become inflamed through ingestion of impure milk. In Mace's case the child was not so seriously ill as to raise suspicion of this indirect manner of infection.—British Medical Journal.

SURGERY

IN CHARGE OF

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SYMMETRICAL GANGRENE. (JACQUES BORELIUS.)

Poor farmer, æt. 33, formerly having bronchitis with anemia, having cerebral and vertebral lesions, with vertigo and headache of long standing, was attacked by typhoid fever with loss of consciousness during three weeks. On regaining consciousness he complained of pains in the lower extremities and an unbearable burning in four of his right toes and in three of the small toes of his left foot. All seven toes became gangrenous. Recovery. It appears to the observer that this symmetrical gangrene was not a disease of itself, but only a symptom of trouble in the cord, that might take place in many other affections, in chronic affections of the nervous system, or even under other circumstances.—Revue Internationale.

J.A.A.

Conclusions Arrived at From a Study of Appendicitis Obliterana by Dr. Senn.

- (1) Appendicitis obliterans is a comparatively frequent form of relapsing inflammation of the appendix vermiformis.
- (2) It is characterized by progressive obliteration of the lumen of the appendix, by the gradual disappearance of the epithelial lining and glandular tissue, and the production of granulation tissue from the submucous connective tissue, which by transformation into connective tissue and cicatricial contraction starves out remnants of glandular tissue, and finally results in obliteration.
- (3) The obliterating process manifests a progressive tendency, and may finally result in complete destruction of all glandular tissue, and obliteration of the entire lumen.

- (4) The incipient pathologic changes occur either in the mucous membrane of the appendix, in the form of superficial ulceration, or as an interstitial process following lymphatic infection.
- (5) The most constant symptoms which attend this form of appendicitis are relapsing acute exacerbations, of short duration, moderate or no appreciable swelling at the seat of disease, and persistence of soreness and tenderness in the region of the appendix during the intermissions.
- (6) The process of obliteration may begin at the distal or proximal end, or at any place between, or it may commence simultaneously, or in succession at different points.
- (7) Obliteration on the proximal side gives rise to retention of septic material, which finds an outlet through the lymphatics, giving rise to non-suppurative lymphangitis and lymphadenitis.
- (8) Circumscribed plastic peritonitis is an almost constant concomitant of appendicitis obliterans, and hastens the process of obliteration.
- (9) Complete obliteration of the lumen of the appendix results in a spontaneous and permanent cure.
- (10) In view of the prolonged suffering incident to a spontaneous cure by progressive obliteration and the possible dangers attending it, a radical operation is indicated, and should be resorted to as soon as a positive diagnosis can be made.—The Journal of the American Medical Association.

RESECTION OF THE LIVER.

John Berg reports the case of an unmarried woman, aged 45 years, thin and delicate, but not cachectic. A solid, movable tumor, not quite as large as a hen's egg, was felt in the epigastrium. Laparotomy showed this to be a retention cyst, situated toward the anterior portion of the inferior border of the left lobe of the liver. It was removed by two incisions in the base of the "liver-tongue," placed so as to form a wedge-shaped wound surface about ten centimeters in length. There was moderate bleeding, but ligature was unnecessary. Catgut sutures were applied close to one another. Perfect recovery followed.—Hygiea, vol. lv., 12, pp. 590-602.

THE USE OF STRONG CARBOLIC ACID IN SURGERY.

At a recent meeting of the Philadelphia Academy of Surgery, Dr. Oscar H. Allis read letters received by him from distant physicians detailing the favorable effects observed by them from the application of carbolic acid in full strength in burns, buboes, boils, and inflamed glands. He himself called special attention to the use of liquid carbolic acid, full strength, or, if the crystals are used, only enough water added to make a solution, as an

immediate application to all varieties of burns. To think of applying to a raw and agonizing burn that which would scald a healthy cutaneous surface would seem to the unreflective mind a reckless and wantonly cruel act. But when we consider that a raw burned surface is painful from its exposed nerve-filaments, and that the strong acid combining with the albumen of the tissues forms a coating that excludes the air, while, at the same time, it benumbs—paralyzes—each terminal exposed nerve-filament, the remedy seems to be the result of a happy inspiration.

He urged a careful use of the drug in deep sinuses, no matter in what direction they run nor how deep they may penetrate.—Annals of Surgery.

DESCRIPTION OF A NEW METHOD OF MAKING THE INCISION IN THE ABDOMINAL WALL IN CASES OF APPENDICITIS.

Dr. Chas. McBurney, in a recent number of the *Annals of Surgery*, suggests a new method of making the opening in the abdominal wall in operating for appendicitis. Inasmuch as there is no division of muscular fibres in operating by this method, the danger of eversion of the peritoneum and the formation of a hernial pouch would appear to be lessened.

The skin incision should be made in the usual way, directly over the appendix. The section of the external oblique muscle and aponeurosis should correspond, great care being taken to separate these tissues in the same line, not cutting any fibres across. This is easily accomplished.

When the edges of the wound in the external oblique are now strongly pulled apart with retractors, a considerable expanse of the internal oblique muscle is seen, the fibres of which cross somewhat obliquely the opening formed by these retractors. With a blunt instrument, such as the handle of a knife or closed scissors, the fibres of the internal oblique and transversalis muscles can now be *separated*, without cutting more than an occasional fibre, in a line parallel with their course—that is, nearly at right angles to the incision in the external oblique aponeurosis. Blunt retractors should now be introduced into this in turn and the edges separated.

The transversalis fascia is thus well exposed, and is then divided in the same line. Last of all, the section of the peritoneum is made.

Two sets of retractors must be in use, one holding open the superficial wound from side to side, the other separating the edges of the deeper wound from above downward. A considerable opening is thus formed, through which, in suitable cases, the caput coli can be easily handled, and the appendix removed. The appendix having been taken away, the wound in the peritoneum, which is transverse, is then closed by suture. The similar wound in the fascia transversalis is also sutured. The fibres of the internal oblique and transversalis muscles fall together as soon as the

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retractors are withdrawn, and with a couple of fine catgut stitches the closure can be made more complete. The wound in the external oblique aponeurosis is sewed with catgut from end to end. When the operation is completed, it will be seen that the gridironlike arrangement of the muscular and tendinous fibres, to which the abdominal wall largely owes its strength, is restored almost as completely as if no operation had been done. In performing this operation I have noticed several advantages.

In the first place, muscular and tendinous fibres are separated, but not divided, so that muscular action cannot tend to draw the edges of the wound Excepting during the inapart, but rather to actively approximate them. cision of the skin, almost no bleeding occurs. The fascia transversalis not being drawn away by the retraction of the deepest layer of muscular fibres, this fascia is easily completely sutured, and thus greater strength of repair is assured. No muscular fibres or larger nerves having been divided, pain after operation is almost absent. The operation requires rather more time than the usual one, and a larger number of assistants is needed, for four retractors are in use during part of the time. The opening into the peritoneal cavity is not large, but may be made larger, if necessary, by continuing the separation of the fibres of the internal oblique and transversalis, and dividing the conjoined aponeurosis in the same line with scissors. In the opposite direction the separation of muscular fibres may be carried as far as the crest of the ilium.

I present the method now, hoping that others may be induced to give it a trial.

This operation does not appear to be suitable for cases accompanied by suppuration about the appendix, which require to be treated by extensive packing with gauze, nor in cases non-suppurative which require during operation a large intra-abdominal dissection.

It is not an easy operation, and should not be attempted by those who are unfamiliar with operations upon the appendix, and I again call attention to the fact that in performing it two extra assistants will be occupied part of the time with retractors.

THE USE OF SULPHUR IN SURGERY.

In the Lancet for April 7, Mr. W. Arbuthnot Lane, assistant surgeon to Guy's Hospital and to the Hospital for Sick Children, London, refers to a short paper published by him in the Medical Week for December 8, 1893, entitled "How far is sulphur likely to be of service to the surgeon?" wherein he had described two cases of very extensive tuberculous disease of the hip and elbow in which sulphur had been used with very satisfactory results, since both patients had recovered rapidly and perfectly. Mr.

Lane now repeats the summarized conclusions of that paper as follows:

(1) Sulphur applied locally appears to exert no deleterious effect on the health of the individual. (2) It gives rise to products which are powerfully caustic in their action; therefore it must be used in small quantities and with discretion. (3) It destroys all organisms, whether free in a space or growing in the surrounding tissues. (4) It acts much more powerfully upon recently incised structures than upon granulating surfaces. (5) Its action is rendered more uniform and general and less violent by mixing it with glycerine. (6) If used in any quantity, the drug must be removed within a day or two, and irrigation subsequently adopted.

Mr. Lane states that since he wrote that paper he has used sulphur very largely, not only in tuberculous conditions, but in other infective processes, and with the most satisfactory results. In the treatment of extensive tuberculous disease, with much destruction of bone, his rule is, if there is a well-defined cavity in the bone, to pack it with iodoform in the way described by him in the Lancet for July 15, 1893; if there is no such suitable space, and if it is impossible to remove all tuberculous material with certainty, he places an emulsion of glycerine and sulphur in the cavity, allows it to remain for twenty-four hours, and then irrigates daily for a time with a weak solution of mercury bichloride or with a sterile normal saline solution. He thinks its action is seen to the best advantage, perhaps, in recent foul wounds, with extensive laceration and bruising. He relates a case illustrative of this. A man, thirty years old, was admitted into Guy's Hospital, under his care, on February 11. While cleaning a window he had fallen forty feet. His forearm had been transfixed on a spike of the area railing, and he had been suspended upon it. The skin and muscles of the forearm were found extensively lacerated along the whole of its length, and portions of the man's coat, which was very dirty, were found imbedded among the "pulped" muscles. Such portions of the muscles as were very much mashed and soiled were removed. The ulnar artery was not injured. The damage to the soft parts was so extensive and the fouling so considerable that the author believed that, however thoroughly the parts might be washed with germicidal lotions alone, amputation would soon become necessary. Therefore, after cutting away some parts, cleaning up others, and removing the foreign matter present, he introduced everywhere into and between the lacerated tissues gauze saturated with an emulsion of sulphur and glycerine. At the end of twenty-four hours this was removed; the wound was then found to give out a decided odor of sulphuretted hydrogen, and the tissues were covered with a soft, black slough. Irrigation with a weak bichlorideof-mercury solution was used daily, and the intervals in and between the lacerated muscles were packed with cyanide gauze. The slough soon separated, leaving a healthy granulating surface. The highest temperature recorded was 100.6° F., during the evening following the operation. The author says there is little or no doubt in his mind that such a result could not have been obtained by means of the germicides in general use.

Mr. Lane's experience is that there is no topical remedy so perfectly satisfactory in its results in cases of lupus as sulphur, whether in the form of powder, emulsion, or ointment. In every case in which he has used it a rapid cure has resulted, with practically no destruction of tissue other than the lupus tissue. In case of cancerous or sarcomatous ulceration, he says the destruction of the soft parts can be regulated and determined very accurately. Unlike the escharotics in common use, sulphur has practically no effect on healthy cutaneous or mucous surfaces, but requires the action of a granulating raw surface to determine the formation of sulphurous and sulphuric acids, which are apparently the agents that influence the vitality of the organisms and tissues with which they come in contact. Mr. Lane has also found sulphur most useful in the foul ulcerative stomatitis which is so common among the children of the poor, and so obstinately resists the local treatment usually adopted. In such cases, if gauze or wool dusted abundantly with the finely powdered drug is retained in firm contact with the foul ulcerated surface for an hour or two, sufficient destruction results to clear the surface of its infective organisms, and it then heals rapidly. Should one application not produce a sufficient result, others may be resorted to, the number depending on the extent and locality of the ulceration, the facility with which the plug can be retained in position, etc. He has found applications of sulphur equally effectual in destroying the micro-organisms that produce the foul impetiginous ulcers seen in children. Sulphur, like iodoform, says Mr. Lane, becomes active as a germicide, and is very considerably more powerful in its action than iodoform, only when in immediate contact with a raw surface, the living tissue causing it to form certain combinations with hydrogen and oxygen. In this connection the author refers to Dr. Ray-Pailhade's experimental researches on philothion, a substance which that writer infers to exist in living tissue and to be capable of combining with sulphur. - New York Medical Tournal.

GENITO-URINARY AND RECTAL SURGERY

IN CHARGE OF

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VARIOCELE AND ITS RADICAL CURE. (SAMUEL MILLIKEN, 1894.)

The author prefers the excision of the veins to their subcutaneous ligature. He recommends the use of only absorbable ligatures and sutures, strict antisepsis, and no drain. The patient should remain in bed a week.—Revue Internationale.

PEPTONURIA.

The occasional occurrence of peptone in the urine has long been recognized, but its exact diagnostic and prognostic importance has been uncertain. With a view to throwing some light upon this subject, Robitschek (Zeitschr. f. klin. Med., 1894, xxiv., 556) has examined carefully the urine of 121 patients suffering from various disorders, with the result of finding peptone in the urine of 60 of them. He believes that peptonuria occurs physiologically only during the puerperium, and that its occurrence at any other time is to be regarded as pathological. As a rule, it is indicative of tissue degeneration, as the result of which peptone finds its way into the blood, and is excreted by the kidneys. The mere presence of peptone in the blood and in the urine seems to have no special symptoms associated with it; and, as it occurs in a great variety of conditions of which tissue degeneration is a part, its diagnostic significance is thought to be but slight.

An Operation for the Radical Cure of Fistula.

Dr. Augustin H. Goelet, of New York, in the American Medico-Surgical Bulletin, July 1st, describes an improved operation for fistula in ano which does away with the usual troublesome after-treatment in these cases by securing primary union, and affords complete retentive power even if

there are two fistulæ and the sphincters must be divided in two places. This result he obtains by carefully uniting the raw surfaces by means of sutures, introducing first buried catgut continuous sutures for the deeper structures, including the muscles, and separate, interrupted sutures of chromic gut for the mucous membrane and perineum.

He emphasizes the importance of previous divulsion of the sphincter, strict asepsis, thorough curettage of all fistulous tracks, the use of buried sutures for uniting the deeper structures and separate superficial sutures for the mucous membrane only, and inactivity of the bowels for five days following the operation.

In favor of this method of suturing, as against the introduction of sutures through the mucous membrane of the rectum to include the deeper structures, the danger of infection by leakage along the track of the suture is avoided, as well as obstruction to the circulation and consequent edema, which would interfere with primary union.

OPERATIVE INDICATIONS IN TRAUMATIC STRICTURE OF THE URETHRA.

Drs. Legueu and Cestan gave the results of their observations on cases seen in the service of Professor Guyon. There were seventeen cases in the wards almost simultaneously. The lesion most often sustained is as follows: The ruptured portion of the urethra is usually on its lower wall, and the upper is either intact or else there is at least a strip of unruptured mucous membrane at this point. On this account operations are not to he done in these cases which contemplate a complete division of the canal. The obstruction in old cases comes at times from fibrous masses which are separated from the urethral canal by a less dense tissue, thus allowing of their removal without injuring the urethra. Excision en masse is to be avoided for the same reason. When there is no fibrous mass to be felt in the perineum, then dilatation may be tried; but when they exist, then dilatation is only to be used as an adjunct to other measures. urethrotomy may be done as a primary measure when dilatation is impossible, or it may be employed as a secondary measure after dilatation has failed. Internal urethrotomy is not regarded as curative, it being often followed by a return of the obstruction. In the milder cases, in which the stricture is small in extent, it sometimes succeeds admirably. In performing external urethrotomy, when the wound is deep and it is impossible to find the urethra, one of two courses may be pursued: One is to allow the patient to recover, and watch, when he urinates, where the urine comes from, and the other is to do a suprapubic cystotomy and retrograde catheterization at once. The latter is mentioned favorably. Resection of a part of the urethra and immediate suture are advised when the two parts are not separated too widely, too deeply situated, or too much surrounded by hard cicatricial tissue. In some cases a new urethra is constructed by uniting the sound tissues over a catheter. This is left in place three to five days. The surrounding callosities must all have been carefully removed, and all granulations carefully curetted away.—University Medical Magazine.

GERSUNY'S OPERATION FOR INCONTINENCE OF URINE IN WOMEN.

This operation consists in freeing the anterior portion of the mucous membrane of the urethra from the surrounding parts by an incision, twisting it more or less, and fixing it in its twisted condition by means of sutures. At a recent meeting of the K. k. Gesellschaft der Aerzte, of Vienna, a report of which appears in the Wiener klinische Wochenschrift for May 10th, Dr. Hofmokl related the case of a woman, twenty-seven years old, on whom he had performed this operation, twisting the urethra to the extent of 180°. Up to the time of the report, about a month after the operation, she had had perfect control of the urine. In the discussion Dr. von Frisch mentioned several cases in which the operation had been performed, in one of which, done by himself, the twisting had been carried to the extent of a complete turn. In this case the benefit of the operation had lasted for about six weeks. It seems from this and his further reports that the good effect of the operation is apt to be only temporary.—New York Medical Journal.

THE OPERATIVE TREATMENT OF TUMORS OF THE BLADDER.

Dr. Frisch believes that the best information concerning the position the diagnosis, and operativity of tumors of the bladder can be obtained by the cystoscope. Benign tumors, even when they are multiple, and have their seat in the lower portion of the bladder and around the opening of the ureters, are operable and the prognosis is good. There are also forms of carcinoma, in which the infiltration is limited to the walls of the bladder, that are operable. Naturally, all operative measures are of the nature of resection, perhaps eventually total extirpation of the bladder. The prognosis in all forms of carcinoma of the bladder is doubtful. The wholly inoperable are those in which there is not alone infiltration of the bladder-wall, but the tissues around the bladder. He believes that the chances for recovery in operations on the bladder for carcinoma are becoming more favorable every year.—Report of the Society of Physicians, Vienna, in New York Medical Record.

PEROXIDE OF HYDROGEN FOR THE PREVENTION OF SYPHILIS AND CHANCROID.

The experiments of Krowczyueski, Uhma, and Swiatkrewicz are based upon the fact that the secretions from chancroids and recent syphilides are alkaline, and that soft chancres, and especially primary syphilitic ulcers, are rare inside of the prepuce, since the normal secretion there is acid. The experimenters, therefore, tried a mixture which was acid and strongly disinfectant without being a caustic agent. Ulcer-secretion was mixed with 1 to 4 drops of a 6 to 8 per cent. solution of peroxide of hydrogen and inoculated in the forearm. Fourteen out of fifteen such inoculations did not "take," whereas the same persons inoculated with chancresecretion without the mixture all "took." In a person inoculated with chancre-secretion, mixed with peroxide of hydrogen, rendered alkaline by potash-lye, a chancre was produced. Inoculations with the secretion from primary syphilitic ulcers and syphilitic warts mixed with the original acid compound failed. Two healthy physicians allowed themselves to be thus inoculated, and syphilis did not follow.—Medycyna, No. 1, pp. 11, 12, T.A.A. 1893.

ALBUMINOID SUBSTANCES OF MILK. (ARTHURS.)

Milk contains albuminoid substances other than caseine, so say Hammarsten and Sibelien, contrary to the opinion of M. Duclaux. Among other proofs, milk treated with a moderate quantity of acetic acid precipitates the caseine; the filtered fluid gives a coagulum with heat; the coagulum is insoluble in fluorate of sodium, and is not caseine (cow's and goat's milk). Milk fluorated at 1 per cent., subjected to dialysis in the presence of distilled water, precipitates its caseine. The fluid separated from this precipitate contains other albuminoid substances. Boiled, it produces flakes, which, separated by filtration and washed, are insoluble in sodium fluorate. It is, therefore, not caseine (cow's milk). These coagulable substances are an albumin and a globulin.—Revue Internationale.

PATHOLOGY

IN CHARGE OF

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FEVER.

With the development of our knowledge of the acute infectious diseases has arisen the theory that the fever occurring as a part of their clinical picture is the result of the action on the body of certain diffusible products of bacteria which are their cause. With a view to adding definiteness to this theory, Centanni (Deutsch. med. Woch., 1894, Nos. 7 and 8) has undertaken an exhaustive study of the fever of the infectious diseases, his investigation being directed to the determination of the following points: (1) What are the agents which cause the fever in these diseases? (2) What is the mechanism by which they act? (3) What therapeutic deductions are possible from the facts developed? The work is not yet completed, but a number of facts bearing upon the first question have been discovered, and form the basis of a preliminary paper upon the "Fever-producing Poison of the Bacteria."

The investigation extended to seventeen pathogenic species, seven non-pathogenic, and to cultures made from air, water, putrefying animal matter, and urine, without any attempt to separate or identify the several species. From cultures of these germs, devoid of peptone, Centanni obtained, by repeated precipitation with alcohol and dialysis, a substance whose chemical properties are quite distinct from those of the bacterial poisons heretofore described (ptomaïnes, enzymes, toxalbumins), which, when injected into animals, causes fever, prostration, loss of flesh, and finally death, if continued. This substance, which Centanni believed to be the same in all species of bacteria, is designated by him "pyrotoxina bacterica." It is believed to be in some way derived from the protoplasm of the germs, or to be elaborated by it, and its production is thought to be

a quality of all bacteria. He is led to believe that the fever accompanying the acute infectious diseases in man is due to an intoxication of the system by this poison, and explains the irregular course of the fever in the different diseases by the theory that the poison depends for its elaboration upon variable conditions, and that it is these conditions which are different in the various diseases, and at different times in the same disease, not the poison.—American Journal of the Medical Sciences.

Comparison of the Blood of the Inferior Vena Cava with Arterial Blood as to Quantity of Fibrin Each is Capable of Producing. (Dastre.)

The blood from the inferior vena cava supplied quite a notably smaller quantity of fibrin than arterial blood (0.260 instead of 0.385, and 0.728 instead of 0.869). It is notably poorer in globulin-fibrinogen than in arterial blood.—Revue Internationale.

Comparative Toxicity of the Blood and Venom of the Viper. (Phisalix and Bertrand.)

These researches confirm the results obtained by the authors on the toad and salamander, and allow of the following conclusions being drawn. The blood of the viper, as of these other animals, contains toxic principles analogous to those found in the venom, having the same chemical properties (insoluble in alcohol), and physiological (troubles in the nervous system, particularly vaso-motor, progressive cardiac weakening, lowering of blood pressure following the general vaso-dilation, interference with exertion, pyrexia). As in the toad, we can admit that the immunity of the viper to its own venom is due to some of its own secretions, by special glands, active principles that impregnate the organism and produce a habit to excessive doses of this terrible poison.—Revue Internationale.

CUTANEOUS ABSORPTION. (FUBINI AND PIERINI.)

The various experiments done by the authors go to show that the healthy skin does not absorb non-volatile substances. After immersions of both arms and forearms for half an hour in five per cent. solutions of sodium salicylate, and five per cent. solutions of potassium iodide, the urine contained neither salicylic acid nor iodine. The posterior extremities of guinea pigs were immersed for one hour in a two per cent. solution of nitrate of strychnine and a 1 in 400 solution of sulphate of atropine without strychninic symptoms, and without mydriasis.—Revue Internationale.

FASTING, THE PANCREAS AND THE SPLEEN. (HARZEN.)

Apropos of an article by M. Dastre on the dissociation of the amyolitic and proteolitic ferments of the pancreas, M. Harzen recalls some facts observed by M. Schiff and himself, which cause them to allow of an influence of the spleen on the peptonizing action of the pancreatic juice, or on an infusion of the pancreas. Active trypsine does not begin to become abundant in the pancreatic juice until four or five hours after the ingestion of food, exactly at the time that the spleen habitually begins to become congested, and lacks when the spleen is extirpated. The addition of an infusion of congested spleen or of venous blood of a congested spleen to an infusion of pancreas that is digesting slowly causes the pancreatic infusion to digest rapidly.—Revue Internationale.

Unna-Tanzer's Method of Finding Elastic Fibres in Sputa. (G. Gatti.)

This observer has compared Unna-Tanzer's method with the method by potash and Fenwick method with potash and boiling as to results. The following is his technique. A good quantity of sputum is placed on a slide, and dehydrated for a few hours in absolute alcohol, then left for three hours in Unna's fluid: Orceine, grs. 0.1; alcohol, at 90°, 22 c.c.; hydrochloric acid, eight to ten drops. Wash in water; absolute alcohol, xytol, balsam. This method is much superior to those previously used to find elastic fibres, in the clinic and in finer pathological research.

- (1) He found elastic fibres in one out of three cases of emphysema, an affection in which they had not before been mentioned.
- (2) In two out of three cases he made them out in resolving pneumonia (Jakoch).
- (3) He found them in four cases where the other methods had not brought them out.
- (4) When they are made out by the other methods, they are, by this one, more surely made out, and are seen to be more abundant. Another advantage over the Fenwick method, which requires twenty-four hours, is its comparative brevity, requiring only a few hours.—Revue Internationale.

Excessive Intestinal Putrefaction.

Dr. C. A. Herter read a paper with this title. He stated that the facts brought to light two years ago, regarding the occurrence of excessive intestinal putrefaction in epileptics, had stimulated an inquiry into the occurrence and character of putrefactive processes in the intestine in other conditions than epilepsy. This inquiry made it clear that deviations from the normal character and degree of this putrefaction were met with in

association with a variety of morbid states. It had long been known that a variety of aromatic substances, including indol, phenol, etc., were produced by the action of anaërobic bacteria upon the proteids, and also that this process occurred normally, to some extent, in the intestine when nitrogenous food was introduced. Careful observations were made, with the aid of an expert chemist, upon the ethereal sulphates in forty cases of epilepsy, eight of melancholia, and eight of Bright's disease, and in a number of cases of anemia, pernicious anemia, leucocythemia, catarrhal jaundice, exophthalmic goitre, and many other diseases. The author deduced the following conclusions, as a result of his investigations: (1) An excess of the ethereal sulphates in the urine was evidence of excessive putre action of proteids in the intestine, the exceptions to this being in cases of suppuration with free drainage, and where such drugs as creasote and salol had been administered. (2) The indigo-blue of the urine was not necessarily proportional to the ethereal sulphates, and was to be regarded as due to a special form of putrefactive decomposition. (3) The regular occurrence of more than a trace of indigo-blue was to be regarded as pathological, although in robust persons there might be very little evidence of disordered digestion for a time. (4) The presence of indigoblue in the urine of children was no evidence of the existence of a tuberculous process. (5) Intestinal flatulence was oftener associated with intestinal putrefaction than any other symptom of intestinal indigestion. Epigastric pain and tenderness, the sense of emptiness and nausea, bore no relation to the ethereal sulphates. (6) Both constipation and starvation might increase the putrefactive products in the urine. (7) Epilepsy, acute melancholia, and chronic Bright's disease were usually associated with excessive intestinal putrefaction. (8) The treatment of excessive intestinal putrefaction by means of drugs was at present unsatisfactory. (9) The use of rare beef and of milk, and the exclusion, as far as possible, of vegetable nitrogenous food, were important and effective means of reducing intestinal putrefaction, and of relieving symptoms of intestinal indigestion.
(10) The relief of intestinal symptoms could not be ascribed wholly to the effects of a milk-and-beef diet, for such diets reduced the excess of uric acid, which was observed in many cases of intestinal indigestion. (11) The treatment of epilepsy by means directed to the intestinal condition led, in many cases, to a reduction in the number of seizures, and to marked improvement in the general health. (12) It was probable that in some cases of epilepsy in children the early seizures were determined by intestinal derangement, and that certain treatment directed to the correction of the putrefactive excess might greatly improve or even cure some cases, in the sense of preventing the establishment of the epileptic habit.

HYGIENE AND PUBLIC HEALTH

IN CHARGE OF

WILLIAM OLDRIGHT, M.A., M.D. Tor.,

Professor of Hygiene in the University of Toronto; Surgeon to St. Michael's Hospital;

AND

E. HERBERT ADAMS, M.D., D.D.S.

TORONTO'S SEWAGE SYSTEM AND WATER SUPPLY.

The question of a trunk sewer and improvements in Toronto's water supply are again attracting considerable attention among some of Toronto's leading citizens, and a public meeting has been called to discuss the situation. There is no time better than the present for building a trunk sewer, or, indeed, for starting any other needed public work, as it will afford work for a large number of the unemployed of the city. Mayor Kennedy is heartily in sympathy with the idea of a trunk sewer, and it is to be hoped that this great sanitary need for Toronto will shortly be satisfactorily accomplished.

THE PURIFICATION OF SEWAGE

is evidently on the eve of great extension in this country, writes Colonel Waring (Century for April), and its success requires that the importance of making it as thorough as possible should be generally appreciated. If the work is to be done at all, it is worth while to do it well. Half-way measures, like chemical precipitation, may satisfy present legal demands, and they may, in exceptional cases, be advisable; but they will not meet the requirements of the better informed public opinion that is now growing up. The means for entire purification are within reach, and imperfect results will not long be accepted as sufficient.—Sanitarian.

THE SEWAGE OF PARIS.

A bill is now before the Chamber of Deputies to enable the city of Paris to negotiate a loan of 117,000,000 francs for the purpose of develop-

ing a sewage farm, and for the construction of sewers therewith. By this it is proposed to prevent the pollution of the Seine, and thus remove a fruitful source of disease.

The authorities have the wisdom to discern that if Paris shall continue to be, as she is now, a great centre of attraction for pleasure-seekers, she must be not only a city of beauty, but a city of health. For the securing of this end any needful amount of expenditure will be fully warranted.—

Sanitarian.

M. Pasteur, in speaking recently at the Paris Council of Hygiene, remarked that "it is proposed not to conduct to the sea the pathogenic germs of the numerous contagious diseases which decimate all our population, but to accumulate them each year more and more on the fields situate at the gate of the great town, and these fields will be cultivated. It would be better if the fields remained uncultivated, for then you would not incur the risk of bringing the germs back."

THE UTILIZATION OF GARBAGE.

Dr. Bruno Terne, in a paper read before the clinical section of the Franklin Institute, advocates the utilization of garbage as a fertilizer. He says that for the sake of convenience we pollute our rivers, and choose rather to suffer the consequences of drinking polluted water than to adopt rational measures to save for the enrichment of our fields the products which the law of nature has provided for the very purpose. He admits that cremation is unquestionably the most complete system for destroying all organic substances, and, doubtless, to the extreme sanitarian, the only method that should be adopted.

But what about economical results? The daily operation of the furnace requires labor and fuel; the product of a crematory is a small quantity of ashes, and worthless at that. Four or five per cent. of ashes is all that remains of the garbage when incinerated. He considers that there is no danger to the public health in the conduct of a rational system for the utilization of garbage, as all microbic carriers of contagious sicknesses are destroyed by a temperature of 212° F., and the dry product produced is as harmless to the public health as the flour in the barrel.

A New System of Disposing of Household Refuse.

A new system of disposing of household refuse is being tried in Chicago. Instead of taking the refuse to the destructor, the destructor is brought to the refuse. This destructor is mounted on four wheels, and

consists of a cylindrical body constructed out of wrought iron, and containing the furnace proper and drying chamber, in which the refuse undergoes a preliminary desiccation, and an ashpit. The fuel used is crude petroleum, with which a very high and easily regulated temperature is obtained. It is reported that the destruction of the refuse is complete, and that one of these portable destructors is capable of replacing fifteen of the collecting carts hitherto in use.—Sanitary Record.

A DISEASE-PROOF SUIT OF CLOTHES.

A "disease proof" suit of clothes, intended to be worn by an operating surgeon, has been patented at Washington. According to the description given of it, it is a complete suit of rubber armor, resembling the dress of an ordinary diver, and is constructed on air-tight principles, so that no disease germs can enter. There is a small pair of bellows beneath each foot, which, being compressed by the action of walking, blows fresh air in an ingenious manner through the armor. This air enters and is filtered through a germ-proof diaphragm under each of the feet, passing upward and out through another diaphragm arranged at the top of the head.

NATIONAL REGISTRATION OF PLUMBERS.

There are many reasons in favor of the national registration of plumbers. The healthiness of the houses in which we live is to a great extent dependent upon the efficiency of the plumbing work connected with them. For plumbers themselves national registration offers great advantages; to the public at large it offers still greater advantages. A registered plumber may confidently expect to be chosen rather than one who is unregistered, and the public, in employing registered men, have a guarantee that they are employing men who know their work. We observe that Mr. Edwin Steward, in a communication to a conference of sanitary authorities, points out that "architects should aim at using their opportunities for advancing the plumbing craft by endeavoring to employ registered plumbers, both masters and operatives."—Sanitary Record.

Editorials.

INDEPENDENCE OF PARLIAMENT.

[463, 40], 43]

N incident that recently occurred at Ottawa shows that the Parliament of Canada, with all its faults-and some say they are manyhas certain ideas as to honor and rectitude in its relations with its members which are supposed to meet with general approval. Mr. Harry Corby, M.P., West Hastings, is the owner of a large distillery in Belleville, and it happened in the ordinary course of business that his clerks, without his knowledge, supplied the Department of the Inland Revenue with a comparatively small amount of methylated spirits. When he accidentally discovered that the mistake had been made, he went at once from Montreal (where he happened to be staying) to Ottawa, appeared before Parliament, apologized for his unintentional error, and immediately thereafter handed in his resignation. This appears to have been considered the right thing to do. We will not discuss the matter, but will simply ask the Ontario Medical Council if there is any special reason why the medical parliament at Toronto should not be kept as decent and respectable as the larger Parliament at Ottawa?

DR. SANGSTER AND THE EX-PRESIDENT OF THE COUNCIL.

R. CAMPBELL, the retiring president, delivered an address at the last meeting of the council. Dr. Sangster, the secretary of the Defence Association, has published a letter in reply. Both of these productions are able in their way, but for scorching satire and biting sarcasm Dr. Sangster's communication surpasses anything we have seen in Canadian literature for some time. His writings are always able, although sometimes rather verbose, but are often tinged with a bitterness which is quite unnecessary, and frequently foreign to his main line of argument. His insinuation as to the presumption and audacity of Dr. Campbell, a homeopathist, in addressing the regular profession, is scarcely courteous or just. Dr. Campbell was speaking to the profession of this province, not as a homeopathist, but as president of the College of Physicians and

Surgeons of Ontario, and, as such, had a right to defend the body over whom he presided, if he thought it worthy of a defence, and criticize the arguments and actions of its opponents, if he thought fit.

Apart from purely professional considerations, the ex-president is a man of undoubted respectability and acknowledged ability. His recent address was good, but he appeared to consider it his duty to defend all the actions of the outgoing council, whether right or wrong. He spoke as an advocate with a brief in his hand, not as a judge who should review all matters from every point of view. Dr. Sangster replies as an opposing counsel, and is equally extreme in his methods of reasoning. It is a fight without gloves between the government and the opposition. If both sides are well represented in the next council, the fight will, probably, go merrily on, and, if it does nothing better, will at least furnish plenty of amusement for "the gallery."

ATTENDING PHYSICIANS AND CONSULTATION FEES.

THE Philadelphia Medical News (June 16th, 1894) expresses the opinion that in consultations the attending physician is entitled to a consultation fee in addition to his ordinary visiting fee. Many physicians, on the other hand, entertain the opinion that the attending physician, under these circumstances, is only entitled to his fee for an ordinary visit. It is hard to lay down any fixed rule on the subject, but it is only fair that the attending physician should receive some extra remuneration for a consultation, because he has to come at a fixed hour; he has to remain a longer time than usual; he assumes a serious responsibility (as the News says), because, in case of irreconcilable opinion, it is his opinion that must prevail if he remains in attendance.

The following opinion expressed by the News is worthy of serious consideration: "The whole visiting fee system is ridiculous, and no other body of professional men would submit to it. The physician should charge, as does the lawyer or the architect, in proportion to the importance of the case, the skill possessed and required, and the time, labor, and anxiety involved. Surgeons, at least the tip-top ones in city and country, do this for operative work, and physicians should do the same in medical cases. A fee that may be large for the treatment of a case of simple diarrhea may be ridiculously small for a grave case of typhoid fever or pneumonia. A single visit by a man who is able to diagnosticate a case—let us say of concealed aortic aneurism—is worth more than hundreds of visits by a man who mistakes the case—let us say for laryngitis. The man who removes a diseased uterus has not rendered any greater service than the man who restores to function a diseased lung, and the latter should be equally well paid."

CONTRACT AND LODGE PRACTICE.

It will be noticed, by referring to the last issue, that a special committee was appointed at the meeting of the Ontario Medical Association to report on the matter of lodge practice. After considering the question carefully, the committee presented their report to the effect that club, lodge, and contract practice were evils that should be abolished as soon as possible. A friendly and interesting discussion followed, and the report was adopted.

We are glad that there is a general feeling of opposition to certain classes of club and lodge practice, if not to all kinds of such practice. But there seems to be a certain amount of difficulty in deciding definitely as to what classes of contract practice are objectionable. As far as we understand the meaning of the word "contract," every member of the profession in actual practice enters into contracts. The surgeon undertakes to perform an operation, the accoucheur undertakes to conduct a case of midwifery, each for a fixed sum. The surgeon or physician of an asylum or gaol undertakes to treat all the patients in one or other for a fixed sum. The surgeon of a railway company undertakes to do certain work for a sum which may be fixed or may vary according to circum-These will be generally considered as contracts which are justifiable. We believe, however, it will be generally conceded that no physician or surgeon of any corporation has a right to interfere with the private practice of a brother practitioner. Take, for instance, the surgeon of an accident insurance company. Such a surgeon should certainly be allowed to see the patient, and report for his company; but he should always respect the rights of the practitioner in attendance. Friction frequently arises in such cases, and unpleasant results not unusually follow. effort should be made on both sides to avoid even the appearance of selfish or unprofessional conduct.

CANADIAN MEDICAL ASSOCIATION.

LABORATE preparations are being made in St. John, N.B., for the reception of the Canadian Medical Association on August 22nd and 23rd next. The gathering will probably be one of the largest the association has ever had. From reports that come in from time to time, it is believed that the profession of the Maritime Provinces will turn out almost to a man. From Montreal, Toronto, and points further west there will be large delegations.

The following are some of the papers promised: "Cases in Practice," R. J. McKechnie, Nanaimo, B.C.; "A Year's Experience in

Appendicitis," Jas. Bell, Montreal; "A Case of Tuberculosis of the Arm of Fourteen Years' Standing Cured by Inoculation with Erysipelas," W. S. Muir, Truro, N.S.; "The Treatment of Diseases of the Ovaries and Fallopian Tubes," A. Lapthorn Smith, Montreal; "Intestinal Antisepsis in Typhoid Fever," D. A. Campbell, Halifax, N.S.; "The Use and Abuse of the Various Cautery Agents in the Treatment of Nasal Affections," E. A. Kirkpatrick, Halifax, N.S.; "The Present Status of Asthenopia," F. Buller, Montreal; "Eye-strain Headaches," J. H. Morrison, St. John, N.B.; "Note on Epilepsy," W. H. Hattie, Halifax, N.S.; "Influence of Mind on Disease," J. A. McLeay, Watford, Ont.; "Miners' Heart," R. A. H. MacKeen, Cow Bay, Cape Breton, N.S.; "Address in Surgery," J. F. Black, Halifax, N.S.; paper (title not at hand), E. A. Praeger, Nanaimo, B.C.; "Some Functional Derangements of the Liver," J. E. Graham, Toronto; "Treatment of Certain Forms of Uterine Hemorrhage," F. T. Bibby, Port Hope; "Address in Medicine," Wm. Bayard, St. John, N.B.; "Ophthalmic and Aural Cases," Stephen Dodge, Halifax, N.S.; "Notes on Treatment of Typhoid Fever," Dr. W. H. B. Aikins, Toronto.

Papers will be read in the order in which they are received by the secretary. It is important that those intending to contribute papers will communicate with the secretary at an early date.

THE ONTARIO MEDICAL COUNCIL.

THE Medical Council has been in rather a peculiar position during the last two or three years. It has been bitterly attacked by a large and powerful association, containing within its ranks many able and influential physicians. It has been defended by a medical journal, subsidized for the purpose, and edited by one of its own members. The combat has been a farce—hot loaded leaden bullets, well aimed, on the one side; blank cartridge, fired at random, on the other side. The ignominious defeat of the council is so patent to all impartial observers that extended comment now is needless. The friends of the council were sorry that negotiations between its officers and representatives of the Defence Association two years ago did not end in a compromise fairly satisfactory to all parties. The want of tact and good judgment which was exhibited on that occasion was almost stupendous in its grossness.

We have no intention at the present time to again discuss these matters in detail; but we desire to say a few words as to the general results of the council's legislation. It is only fair to urge that much good has been accomplished by this body since it came into existence. Notwithstanding

all that has been said to the contrary, there is no doubt that it has very materially raised the standard of medical education in this province. It has also done more than most people imagine in the way of repressing rank quackery. Some, while agreeing, at least in part, with this statement, say it should have done more. Perhaps, but remember the public dearly loves the arrant and loud-mouthed quack; it wants free trade in medicine; it delights to make a martyr of any impudent charlatan that is pursued too vigorously by our medical legislators. After watching the work of the Discipline Committee for the last few years, we have no hesitation in saying that it has done its work admirably, considering all the adverse circumstances with which it has had to contend.

The Education Committee has also, as a rule, done good work. The regulations and requirements of the curriculum, as they now stand, are a credit to the council, and will not suffer by comparison with those of any corporate body in any part of the world. The college contains a number of able and conscientious men, and, at the same time, a number about whom charity forbids us to speak. We hope the good ones will come back after the coming elections. Many new members will be elected, and the general impression appears to be that the next council will be an improvement on the last.

MEDICAL COLLEGES AND UNIVERSITIES IN RELATION TO THE ONTARIO MEDICAL COUNCIL.

THE secretary of the Medical Defence Association, in one of his let ters to the Toronto Empire, July 2nd, has again attacked the schools and universities. We quote the following sentence: "Will you show by your votes that you are worthy of independence, that you seek and are anxious to enjoy the blessings of self-government, that you are resolved to be no longer the serfs or bondsmen or helots of petty, moneymaking corporations or their appointees, or will you prove that, in your opinion, you cannot get along without the tutelage and stepmotherly oversight of medical schools and universities?" . . . "The Medical Council was created in 1866, and its powers were amplified in 1869, not to conserve the privileges of medical practitioners, or to advance the welfare or to guard the portals of the medical profession, but solely to further the interests of the medical schools. That benefits have incidentally accrued therefrom is undeniable, but to claim that we owe any gratitude to the schools or to the projectors of the Medical Act for a proceeding conceived and perfected in pure selfishness on their part is simply absurd is the outcome of mere sickly sentimentalism."

There is nothing new in these statements. Dr. Sangster has entertained us with them before. If he would kindly give some commonsense reasons for such bitter denunciations, it would relieve the monotony of his methods of warfare, and possibly throw some light on what appears to be a very dark subject. It is true that certain so-called "school men" did substantial work in the organization of the Medical Council. Dr. Henry H. Wright, of Toronto, probably did more than any other man. The late Dr. Dickson, of Kingston, materially assisted in the good work. We mention only these two names, because one has retired from school work, and the other is dead. Will any one have the assurance to contradict us when we say that two more honorable, unselfish, and highminded men never graced the medical profession in this or any other country? Is it not possible to conduct a campaign without reflecting so seriously on the motives of such as they?

We would like to hear some sound reason why the schools and universities were likely to receive any commercial benefit from the formation of a council with its central examining board. The tendency of such a central board has always been to curtail their powers and diminish the numbers of students. It has been found most difficult, in other countries, to get the universities and other corporations to make concessions such as were made by our corporate bodies in Ontario. We claim no peculiar virtues for school men, as a rule; but we do think that the actions of those representatives of universities and colleges who assisted in the formation of our council should command the highest respect from all fair-minded men.

According to the recent amendments the university and school representatives will have no voice regarding the annual assessment, and will be expected simply to consider matters pertaining to the curriculum and the examinations. The curtailment of their powers was a concession to the Defence Association, and, we thought, was generally considered satisfactory. It has not, however, satisfied Dr. Sangster. It may be that he is wise in attacking, in the lay press, members of our profession whom we respect; it may be that he will succeed in turning the love which so many of our medical graduates entertain for their alma mater into bitter hatred; it may be that he will exalt the tone of our profession by his methods; it may be that his writings will form the most effective sort of campaign literature that the Defence Association can provide. We know not, but may learn in time.

Correspondence.

LODGE PRACTICE.

To the Editor of The Canadian Practitioner:

SIR,—Your correspondent, Dr. Bibby, in the June issue, expresses a "desire to direct the attention of the medical profession to the pernicious system of lodge doctoring throughout the country."

By all means, if the doctor feels it his duty to engage in the home-mission labor of reforming medical practice, let his desire be granted; but let him not forget that the value of such mission work is not enhanced by misleading and absolutely false insinuations, nor is lodge practice pernicious because it pleases him to so style it. The pernicious element lies rather with him who is too obtuse to comprehend the difference between a business transaction and the abuse of its privileges. If Dr. Bibby wishes to read a lecture to the profession, let him first acquire a knowledge of the facts, and be guided to his conclusions in a logically honest manner. What interest is it to the profession of Ontario that the lodge system "has become a perfect craze" in Port Hope?

Does Port Hope represent the whole earth to your correspondent? and does he imagine that the entire province is to become entangled in the petty vexations of local animosities? If the people of Port Hope desire to unite in mutual fraternity for the benefit of their families, is it becoming to the dignity of the medical profession to frustrate those honorable endeavors by raising the absurd and false cry of "unprofessional conduct"?

Does Dr. Bibby advise that the profession to which he belongs shall thrust itself as an obstacle in the way of a great philanthropic organization? Does he foolishly imagine that the 2,200 or more physicians of Ontario hold in their grasp, as a puppet to play with at their pleasure, an organization of more than 15,000 C.O.F., more than 36,000 I.O.F.. besides thousands more I.O.O.F., A.O.U.W., S.K., K.P., and heaven only knows how many more? This a craze that has a wider spread than the limited corporation of Port Hope. As a great institution in this country, it has not grown by confining itself to narrow limits; and the men who control benefit societies may safely be classed among the broad-minded, prac-

tical business men of the day, who are untrammelled by the annoyance of local jealousies, and the childish hallucination of professional importance.

"There are a great many societies (in Port Hope), nearly all of which have lodge doctors galore." And suppose they have, are they not entitled to organize and conduct business without consulting the medical profession? And because they contract with a physician at a stated salary, shall he be obstructed in the discharge of legal duties because his professional business opponents decline to endorse his contract? And because that physician attends a member of the lodge for a dollar a year or less, how is the dignity of the profession endangered? Does the new popery base its dignity on its financial tariff? What must be the odium with which the profession is justly viewed by interested citizens! What the regret of all honest men that the noble profession of medicine has been degraded to the level of a mercenary brotherhood!

The \$1, or \$1.50, as the case may be, does not represent the physician's salary; it represents the member's share of that salary. And if there is any improper feature in the transaction, it is the accepting a fee where no services are rendered. Very few of the members of a lodge require professional attendance, yet they pay their share without complaint; while those severe sticklers for professional dignity clamor among themselves for greater remuneration where even the services are not increased.

"Why do doctors attend lodges at such low rates?" One naturally expects to be told that they attend for the salary they receive; but we are gratuitously informed by Dr. Bibby that they (the doctors) do so "because they expect to attend the families of members of the society, and thus recoup themselves."

Does Dr. Bibby know that to be a fact in one single instance? And if so, does he lack the courage to charge the actual offender before the proper tribunal? And is it a mark of a generous and manly intelligence to shift the responsibility upon unoffending physicians for irregularities that he himself has not the manliness to prefer? Does Dr. Bibby know every lodge physician in Ontario, and the motives by which his life is actuated? If he does know them all, he knows then that his assertion is as ungenerous as it is false; if he does not, on the contrary, know them all, then his statement is a reckless generalization that does no credit to the character of a man who would presume to lecture his peers.

He asks, "Can anything be more unprofessional than such tactics and such underhand methods of obtaining patients?" to which I answer emphatically, Yes. The assumption that contract physicians engage in business through unworthy motives, the insinuation that lodge physicians are guilty of dishonorable dealing, is a thousand times meaner and more con-

temptible than any amount of paltry alleged irregularities in society practice. A lecture on professional morality from a man who delights in indiscriminate complaints without the shadow of a fact upon which to base his objections comes with a very bad grace to those men who can safely defy Dr. Bibby, or any other man, to point to any professional act that justifies the reproach of "unprofessional."

A. G. BOWERMAN, M.B., Court Physician, 434 C.O.F

LETTER FROM GORE BAY.

To the Editor of THE CANADIAN PRACTITIONER:

SIR,—The other day a rather interesting case of cure by nature came under my notice. The person alluded to had been working-closely confined-night and day for some considerable time, with the physical result of a run-down constitution, evidenced most painfully by intense neuralgic headaches. Nature undertook the relief of this affection at the expense of the nerve involved, viz., the right supraorbital. Evidently a neuritis ensued, with enough damage to close off the needful supply of nourishment to the nerve itself, and the tissue toned up by its activity, leading to a certain suspension of its vitality, sufficient remaining, however, to form a fibrous scar throughout the course of the nerve, which can in that way be traced, so to speak, as nicely as in a neat dissection. Commencing at its point of exit from the supraorbital notch, it passes upwards across the forehead and backwards over the scalp, leaving a line almost devoid of hair, traceable backwards. The forehead presents a streak, darkened in color, and somewhat scarified. The gentleman said that whenever his well-being was at a low ebb, this mark stood out in a darker outline, its vitality having been depressed by deficient nerve supply. This region, barometer-like, marks the condition of the system with regard to nourishment and tone. Complete relief from the neuralgic disturbance followed the primary appearance of this interesting outline.

Although this is one of the reputed results of neuritis, it is the first time I have had the opportunity of observing it, and so well-marked was it that I thought it might not be without interest to call to your attention, that one might judge the more readily of its frequency of occurrence.

Gore Bay, July 7th, 1894.

J.W.M.

Book Reviews.

A TEXT-BOOK OF THE DISEASES OF WOMEN. By Henry J. Garrigues, A.M., M.D., Professor of Obstetrics in the New York Post-Graduate Medical School and Hospital; Gynecologist to St. Mark's Hospital in New York City; Gynecologist to the German Dispensary in the City of New York; Consulting Obstetric Surgeon to the New York Maternity Hospital. Containing three hundred and ten engravings and colored plates. Philadelphia: W. B. Saunders, 925 Walnut Street. 1894.

Whether gynecology has advanced as much in modern times as some contend we will not undertake to say, but certainly we can affirm that it has expanded very considerably—some think, too much. Lots of books have been written on diseases of women during recent years, some very good, some very bad; some too large for the ordinary student and practitioner; some too small for anybody. This book is intended for senior students, and also for those in actual practice. The author tells us that his aim was to write a practical book without devoting much space to theoretical discussions, and to treat pathology very briefly. He gives minute details as to diagnosis and treatment. He does not pretend to describe all the methods of treating the various diseases, but he endeavors, and, we think, with success, to describe very clearly those modes which he considers the best. He writes separate chapters on hemorrhage, leucorrhea, and sterility, and, in so doing, he is dealing with symptoms rather than diseases; and, although it may be the most scientific plan, he think that, all things considered, it is the most practical and useful.

PAIN, in its Neuro-pathological, Diagnostic, Medico-legal, and Neuro-therapeutic relations. By J. L. Corning, A.M., M.D. 330 pages. Illustrated. Philadelphia: J. B. Lippincott Co. Price, \$1.75.

In the first part of the work the author, somewhat generally, describes the various diseases in which pain is a prominent symptom, with regard to their physiological, pathological, and clinical aspects. He dwells upon the great diagnostic value of pain, and thinks more attention should be paid to it.

The greater portion of the book is taken up with special therapeutics. Rest is laid down as a first principle in the treatment; it should be as complete as possible, in a quiet and darkened room. A full list of old and new remedies is given, each drug being separately discussed as to its therapeutic action. The author advocates local medication to the spine, by passing a gauged trocar nearly to the spinal canal, and injecting the drug with a hypo-

dermic syringe through the trocar. Strychnine, cocaine, and other drugs have been used with splendid results, especially in spinal irritation and functional disorders.

To increase the efficacy of his remedies, he has constructed an air-tight chamber, in which the atmospheric pressure can be raised. The increased pressure on the surface of the body drives the blood internally, and so the drug which has been absorbed by the blood comes into better contact with the brain and spinal cord. To aid this action, he cuts off the blood in the extremities with a tourniquet, and so the blood circulating through the nervous system has a greater amount of the drug in solution. These latter methods apply almost entirely to functional disorders of the nervous system.

Taken altogether, the work is of considerable interest, and would be a valuable addition to any library. The typography and presswork are both in the Messrs. Lippincott's usually good style.

AN INTERNATIONAL SYSTEM OF ELECTRO-THERAPEUTICS: For Students, General Practitioners, and Specialists. By Horatio R. Bigelow, M.D., and thirty-eight associate editors. Thoroughly illustrated. In one large royal octavo volume, 1160 pages, extra cloth, \$6.00 net; sheep, \$7.00 net; half Russia, \$7.50 net. Philadelphia: The F. A. Davis Co., publishers, 1914 and 1916 Cherry street.

The subject of electricity is at present occupying a considerable amount of professional attention. There is no great dearth of literature on the subject, but it is very scattered, and, in most instances, of a very elementary nature. The above work covers the whole subject in all its various applications, both medical and surgical. It is almost impossible at the present day for any one man to write a book embracing all the branches of a particular subject, yet an able editor may surround himself with such eminent collaborateurs that his work can be looked upon as an authority. This Dr. Bigelow has done.

The introductory chapter by Dr. Herdman, of Ann Arbor, contains advice that holds good in all branches of our profession, but especially so in the electrical studies. He pleads well for a thorough laboratory and clinical training of the students in the construction of batteries and of the therapeutical uses of electricity. Until the subject is recognized and taught, its practice will undoubtedly be empirical. The succeeding 380 pages are devoted to electrophysics, animal electricity, static electricity, magnetism, faradic current, and galvanism, all dealt with by different authors. Then comes chapter after chapter on the special uses of electricity on the different organs of the body, on the functions of the organs, and concerning the action of the current in electrolysis, etc., etc.

The work is thorough and complete. It should be on the shelves of all who use electricity for reference, and those who contemplate its use should also possess themselves of it for a similar purpose. It is of great advantage to the busy practitioner to have all the literature on any one subject at hand, and by these systems he is thus enabled to do so. The typography and binding are splendid, as all the books turned out by the F. A. Davis Company always are.

Annual of the Universal Medical Sciences. Edited by Charles E. Sajous, and seventy associate editors. Volume III. The following subjects are treated in this volume: General Therapeutics; Experimental Therapeutics; Electro-Therapeutics; Gynecological Therapeutics; Climatology; Balneology and Hydropathy; Hygiene and Epidemiology; Anomalies and Monstrosities; Anatomy and Physiology. Philadelphia: The F. A. Davis Co.

Contains articles on the surgery of the brain, spinal cord, nerves, thorax, abdomen, diseases of the rectum, anus, genito-urinary apparatus in the male, syphilis, orthopedics, amputations, excisions, fractures and dislocations, diseases of the arteries and veins, oral and facial surgery, surgical mycoses and diseases, surgical dressings, antiseptics and anesthetics.

Each section of this volume has been well written by its respective editor, and the whole is illustrated by a great many cuts, demonstrating the cases given.

Hernia occupies a prominent position in the section on abdominal surgery. The consensus of opinion seems to be to lessen the amount of taxis used, and to resort to operation more often. In gangrenous cases the formation of an artificial anus, or, better still, resection of the bowel, when practicable, has been found to give the best results. Bennett and many others advocate the radical cure of hernia, especially where trusses are inconvenient or useless, or where the patient's occupation is such as is inconsistent with a hernia.

Kelsey, of New York, discusses at some length the treatment of cancer of the rectum, advocating colotomy in preference to excision. From tables given the former certainly seems to give the patient more ease, and, although not curative, tends to lengthening of life, being a much less dangerous procedure.

Buch recommends Winternitz's method of relieving pain in an injured part, after the dressings or a plaster splint have been applied, by the application of cold. Ice bags, etc., are placed over and around the part without removing any necessary dressings. He has found it work very well, and by lessening the inflammation present has been able to keep on bandages, which otherwise would have had to be removed.

Syphilis in the Innocent (Syphilis Insontium), clinically and historically considered, with a plan for the legal control of the disease. By L. Duncan Bulkley, A.M., M.D., physician to the New York Skin and Cancer Hospital; consulting physician to the New York Hospital; lately Professor of Dermatology, New York Post-Graduate Medical School and Hospital, etc. The essay to which the College of Physicians of Philadelphia, in 1891, awarded the Alvarenga prize for the best memoir on any medical subject. 416 pages, eight volumes. Price, \$3.50. New York: Bailey & Fairchild.

This very elaborate compilation of statistics is difficult to review. It contains so much information on the subject of innocent infection of syphilis that one cannot appreciate the difficult and colossal undertaking of the author. The subject is treated of as venereal and non-venereal disease. Every phase of extra-genital chancre is considered, and hundreds of histories are given in full.

We clip the following from the introductions:

"This essay, the result of ten years' work, is presented as a contribution to the study of syphilis.

"Syphilis is not essentially a venereal disease. It has been too frequently regarded as being only such, and consequently some of its important features have been overlooked. Many able writers described well its clinical history, pathology, and treatment, as also its connection with prostitution; but the element of its non-venereal character, in many instances, has been relatively little considered, and no full presentation of the subject has ever been made. In the present essay the attempt is made to consider only this single aspect of the malady, namely, its innocent occurrence and the modes of infection whereby it is innocently acquired by means wholly unconnected with the venereal act.

"In the preparation of the work, writings in a dozen languages have been consulted directly, in addition to certain quotations or translations which may have occurred in print from other sources.

"Clinical records, more or less complete, are given of one hundred and sixteen original personal cases of extra-genital chancres, a greater number than has ever before been reported by any observer in the United States.

"A table has been prepared exhibiting the location of over 9,000 extragenital chancres, which have been collected from the items given in the Ana-

"Another table, as complete as possible, gives the epidemics of syphilis which have occurred from the year 1577 to the present time; this contains data relating to over one hundred epidemics, great and small, affecting over three thousand victims, in addition to the many instances where no definite statistics were given.

"The Analytical Bibliography covers about 150 pages, and refers to cases reported by 1,500 writers. A 'Synopsis of Facts and Literature' has been

added in which these are all analyzed."

The subject of innocent infection is a very pregnant one, and is liable to crop up in the practice of any physician. By having so complete a work as this in one's library, he could at any time be prepared to meet the difficulties of a diagnosis. We heartily recommend it, and congratulate the author on securing such competent publishers, who have turned out a really beautiful book.

AT the annual meeting of the Association of Railway Surgeons held in Galveston in May, it was decided to have an official organ, and The Railway Surgeon has just reached our table. It will be devoted to advancing the science of railway surgery, and we wish it success.

The following books have been received :-

DISEASES OF THE SKIN. An Outline of the Principles and Practice of Dermatology. By Malcolm Morris, Surgeon to the Skin Department, St. Mark's Hospital, London, etc., etc. Eight chromo-lithographs and 17 woodcuts; 556 pages. Philadelphia: Lea Brothers & Co.

SAUNDERS' QUESTION COMPENDS. No. 14. Essentials of Diseases of Eye, Nose, and Throat. By Edward Jackson, A.M., M.D., and E. B. Gleason, S.B., M.D. Second edition revised; 124 illustrations. Price, \$1.00. Philadelphia: W. B. Saunders.

Medical Items.

Dr. J. C. Burt, of Toronto, after a trip to Europe, returned to his home July 12th.

THERE is a popular belief in England that travelling on the electrical trolley cures rheumatism.

Dr. A. R. ROBINSON, of New York, is spending a holiday with his brother Dr. C. Robinson, in Brampton.

THE next International Congress of Gynecology will be held in Geneva, Switzerland, in September, 1896.

DRS. BRITTON, McPhedran, and J. L. Davison, of Toronto, left Montreal for England on Saturday, June 23rd.

HEMORRHOIDS, when prolapsed and inflamed, and operation is refused, paint daily with tincture of iodine.—Ivanoff.

DR. THEOPOLUS PARVAN has been elected an honorary member of the Obstetrical and Gynecological Society of Berlin.

DR. OLIVER WENDELL HOLMES is said to be writing an autobiography, which will not be published until after the author's death.

Dr. John Caven, Professor of Pathology in the University of Toronto, is working at bacteriology in the Laboratory of London, England.

WE have to announce, with deep regret, the death by drowning of the eldest son of Dr. Jas. H. Burns, of Toronto, at St. Catharines, June 30.

COMMENCING with the July issue, the Archives of Pediatrics will be edited by Dillon Brown, M.D., Adjunct Professor of Pediatrics at the New York Polyclinic.

DR. G. S. GLASSCO has resigned his position as resident physician of the City Hospital, Hamilton. We understand that Dr. K. McIlwraith has been appointed in his place.

IT is stated that Berlin is the healthiest city in the world, the death rate being 16.3 per thousand, while Alexandria is the unhealthiest city in the world, with a death rate of 52.9 per thousand.

DR. WM. L. BRIGGS, of Nashville, Tenn., died on June 14th, at the age of sixty-six. He was an ex-president of the American Medical Association, and also of the American Surgical Association.

DR. GERALD O'REILLY, formerly of Fergus, started for England on June 30th. After an extended visit to Great Britain and the continent, he will probably return to America, and commence practice in Detroit.

THE convention of the Medical Health Officers' Association of Ontario will be held at Chatham, August 14 and 15. The delegates will be given a banquet by the local committees on the evening of the second day.

It is said that the Czar of Russia is very much pleased with the decision to hold the next International Medical Congress in Russia, and has signified his intention of contributing fifty thousand roubles towards the expenses of the meeting.

THE British Medical Association will hold its sixty-second annual meeting in Bristol on Tuesday, Wednesday, Thursday, and Friday, July 31st, and August 1st, 2nd, and 3rd, under the presidency of Dr. George Hare Philipson, of Durham

THE following graduates ('94) have been placed on the resident staff of the Toronto General Hospital: University of Toronto—W. J. McCollum, J. Crawford, D. J. Armour, and J. P. Sinclair. Trinity University—C. B. Shuttleworth, C. D. Parfitt, T. G. Devitt, and Geo. H. Field.

AMERICAN ELECTRO-THERAPEUTIC ASSOCIATION.—The fourth annual meeting of the American Electro-Therapeutic Association will be held in New York. September 25th, 26th, and 27th, at the New York Academy of Medicine. Members of the medical profession are cordially invited to attend.

THE New York Medical Record, June 16th, tells us there were three successful Cæsarean sections in New York during the preceding four weeks. The operators were, respectively, Drs. Bolt, Coe, and Dudley. All the mothers and children were saved. In two of the cases the operations were performed for the second time.

Dr. S. N. Davis left Toronto on July 11th for the Georgian Bay District to visit Spanish River and other places in Manitoulin Island, and on the main shore, for the purpose of vaccinating those requiring the operation. He was sent by the Provincial Board of Health in accordance with a decision reached at an emergency meeting held July 11th.

DR. CASE, of Hamilton, is said to be the oldest physician living in Ontario. He graduated in medicine a little over seventy-two years ago, his age at that time being twenty-two. He is now ninety-four years of age, and is enjoying good health. He says himself he is just as strong to-day as ever he was, with the exception of a lame back. He has never tasted intoxicating liquors and has never eaten meat.

THE London Lancet is opposed to certain features of the income tax. It says there ought to be a great difference, for taxing purposes, between the incomes of men which are earned by hard and exhausting labor, dependent on the continuance of their health while engaged in the pursuit of an arduous and risky profession, and the incomes of men derived from investments which do not cease even with life itself.

THE regular quarterly meeting of the Huron and Bruce Medical Association was held in Seaforth, July 10. The chief event of the day was the delivery of an address on "The Treatment of Diphtheria" by Dr. George R. McDonagh, of Toronto. An interesting discussion ensued, after which Dr. McDonagh received the cordial thanks of the members present, and was elected an honorary member of the society by a unanimous vote.

SURGEONS' HANDS.—One can tell, nowadays, something of the amount of work which a surgeon does and the thoroughness with which he does it by looking at his hands. The strong bichloride and permanganate solutions with which the hands are sterilized (after the epithelium has been faithfully scrubbed off with a brush) make the hands rough and horny. The hands of some of the operators and nurses are practically incapacitated for work by this constant regime.

THE following references should have been given with Dr. A. McKinnon's paper on McGill's operation for prostatic enlargement, which was published in our last issue: British Medical Journal, Oct. 19, 1889, by Mr. McGill; American Journal of the Medical Sciences, November, 1890, by Belfield; British Medical Journal, 1st vol. for 1892, by Mansell Moullin, pp. 1185, 1250, 1294; British Medical Journal, 1st vol. for 1893, by Buckston Brown, pp. 513; British Medical Journal, 2nd vol. for 1893, by J. W. White, p. 575.

SIR JOSEPH LISTER.—The Council of the Society of Arts has, with the approval and sanction of the president, His Royal Highness the Prince of Wales, awarded the Albert Medal to Sir Joseph Lister "for the discovery and establishment of the antiseptic method of treating wounds and injuries, by which not only has the art of surgery been greatly promoted and human life saved in all parts of the world, but extensive industries have been created for the supply of materials for carrying the treatment into effect."

WE desire again to remind our readers that the next meeting of the Canadian Medical Association will be held in St. John, N.B., on August 22nd, 23rd, and 24th. We understand that a few of our Ontario physicians have decided to go, but we would like to hear of more. The month of August was chosen rather than that of September because it is thought it would better suit the convenience of the members. It is generally considered that there is no better time for a trip to the Maritime Provinces than the latter half of August.

DR. J. H. ROHÉ, of Katonsville, Maryland (formerly of Baltimore), attended the meeting of the Berlin Society of Obstetricians and Gynecologists, May 9th and 10th, as the official delegate from the American Association of Obstetricians and Gynecologists. He will return in time to attend the seventh annual meeting of the American Association of Obstetricians and Gynecologists, which will be held in Toronto, Wednesday, Thursday, and Friday, September 19th, 20th, and 21st. Dr. Rohé is the president of this association.

THE POPE AND AN AMATEUR PHYSICIAN.—The Gazette de Gynécologie for May states that a curate named Kneipp, renowned for his cures with cold water, was lately consulted by Pope Leo XIII. for certain pains attributed to

his advanced age. The curate advised the application of cold compresses to the knees and to the nape of the neck. This treatment produced most unfortunate results; the Pope took cold, and his knees became so swollen that he was obliged to call upon his ordinary physician. Monseignor Kneipp, says our contemporary, is no longer in the odor of sanctity at the Vatican.—New York Medical Journal.

PATHOLOGY AS SHE IS WROTE.—The following, under the caption of "Snakes in the Blood," is a reporter's idea of Filaria Sanguinis Hominis: "A discourse on the disease of which King Herod died entertained the doctors who gathered at the Section on General Medicine. It'was read by Dr. G. Laussure, of Charleston, S.C. In the disease described, little white snakes get into the blood and wriggle about until the patient dies. Several of these were exhibited. The doctors call the disease Filaris Hominis Sanguinis, and it occurs at the present time only rarely. The snakes, which are long, white substances, retire to the secluded organs of the body in the day, when the subject is moving about, but come into the veins and arteries at night when he is sleeping."—Medical Record.

THE EFFECTS OF MEDICAL LIFE ON THE PHYSICIAN HIMSELF.—In the great majority of cases the special influence of the medical life of the present day is to broaden the views of the man who lives it, to make him independent in judgment; rather sceptical as to the occurrence of the millennium in the near future; quite incredulous as to the truth of the maxim that "all men are born free and equal"; more inclined to consider and perform the immediate evident duty of the day and hour which lies just before him than to reflections upon the errors of other men; free from morbid fear of death, and of that which comes after death; and none the less a believer in the existence of a Supreme Being and in the fundamental principles of religion, although he may not consider them capable of scientific demonstration.—John S. Billings, in the International Journal of Ethics.

WHAT BECOMES OF PHYSICIANS' CASE-BOOKS ?- The question has been recently asked, in terms of anxiety not unmingled with suspicion, What becomes of the case-books of a consultant after his death? It is impossible for us, of course, to say what means have been taken to secure secrecy in all such cases, but we may safely infer the general practice from particular cases. The care which is taken by all physicians in large practice to protect their notes from curious persons is seen in such precautions as the private drawer and the padlocked cover. The disposal of such records after the death of the consultant is, no doubt, carefully regarded in all cases. Sometimes the records. are made over to a son, or other successor in practice, either to be used for the benefit of the patients, who may return for subsequent consultations, or for the purpose of scientific investigation, as in the instance of the notes of the late-In two other cases, well known to us, the note-books were con-Dr. Williams. signed to a medical friend for scientific uses, and in a third the volumes wereconsigned to the furnace of the plant houses by a member of the family. British Medical Journal.

THE seventh annual meeting of the Medical Alumni Society of the University of Toronto was held at the Royal Canadian Yacht Club (Island) on Thursday, June 14th. The evening of annual convocation, Dr. E. E. Kitchen, of St. George, who has been one of the most active and energetic presidents of the society, occupied the chair. After the necessary business had been transacted. the election of officers took place. Dr. A. A. Macdonald was nominated for president, but withdrew, and proposed Dr. Adam Wright, who was unanimously elected. The vice-presidents chosen were Drs. A. A. Macdonald, W. H. B. Aikins, J. F. W. Ross, L. McFarlane, and E. J. Barrick. Auditors, Drs. E. E. King and J. D. Thorburn; Treasurer, Dr. B. L. Riordan; Secretary, Dr. Harley Smith; Council, Drs. Geo. W. Jackes, A. J. Johnson, John Ferguson, C. J. Hastings, Price Brown, E. E. King, T. J. McMahon, J. A. Harrington, G. R. McDonagh, and C. J. Cuthbertson. The members present then sat down to an excellent dinner, served in the comfortable dining-room of the club. overlooking Toronto Harbor. It was noticeable how few of the members of the Medical Faculty were present; but, nevertheless, every one was in the best of spirits, and the evening went all too quickly. Vice-Chancellor Mulock graced the banquet with his presence, and gave a most eloquent reply to the toast of the alma mater. Other toasts were responded to by the retiring president. Dr. Kitchen, and others.

THE DEATH-WOUND OF CARNOT .- The death of the President of France by a stab of the liver is an instance of rare wound occurrence. We do not at present recall a similar case of fatal termination. Rupture of the liver from contusions and perforations of the substance of the organ by bullets are not very uncommon, but deep knife-wounds inflicted by an assassin are almost unheard of. It is quite evident that the wound in the case of the lamented victim was fatal from the moment of its infliction. The cablegrams state that the substance of the organ was penetrated, as shown by the autopsy, to the depth of five inches, that the aortic (evidently the cava ascendens) vein was wounded, and that two quarts of partly clotted blood were found in the peritoneal cavity. The distinguished victim died from the shock of sudden internal hemorrhage. Almost immediately after the thrust the mortal character of the wound was clearly indicated by the quick collapse. The futility of performing laparotomy for the arrest of such a condition was demonstrated by the results in this instance. It is still a question whether or not it is advisable to explore such wounds while the patient is in a condition of profound shock. If the hemorrhage from a wounded liver is of sufficient magnitude to induce rapid collapse, it seems quite clear that exploring the wound in the vain hope of securing a large vessel only adds to the gravity of the situation by intensifying the shock and proportionally reducing the ultimate chances of the patient. If, on the other hand, the bleeding is small enough to be controlled by tamponing the liver substance, it will do no special harm if left to itself. It is quite probable, however, that the bleeding was very rapid, that syncope occurred very quickly, and that the hemorrhage had ceased of itself long before death. At the worst, it was a mercy that it was so soon over.-Medical Record.

THE AMERICAN PUBLIC HEALTH ASSOCIATION.

The American Public Health Association will hold its twenty-second meeting in Montreal from the 25th to 28th September next. The association was organized in 1872 for the purpose of inaugurating measures for the restriction and prevention of contagious and infectious diseases, and for the diffusion of sanitary knowledge among the people. The growth of the association and the work it has accomplished more than justify its existence. Its membership has been augmented from year to year, until it now constitutes the larges t and strongest sanitary body in the world, and embraces in territorial extent the United States, the Dominion of Canada, and the Republic of Mexico. Under the impetus given by its work, state and local boards of health and sanitary associations have been organized, sanitary publications increased, and hygienic knowledge widely and extensively diffused.

Among its members may be found physicians, lawyers, ministers, civil and sanitary engineers, health officers, teachers, plumbers, merchants, etc.; in fact, every profession and many of the industries are represented in its list of members. The only qualifications required for membership are a good moral character, an interest in hygiene, and the endorsement of two members of the association. The membership fee is five dollars, which hardly covers the cost of the copy of the proceedings of the convention to which every member is entitled.

The local Committee of Arrangements is at work to insure a large and profitable meeting, and it is to be hoped that the number of Canadians who will join the association for this Canadian meeting will compare favorably with what has been done elsewhere.

The railways have reduced their rates to one fare and one-third, provided certificates of attendance be produced when leaving Montreal on the return trip. Special blanks for this purpose will be furnished on demand.

An excursion to Grosse Isle Quarantine Station (over 200 miles from Montreal) has been arranged by the local committee, leaving by boat on the afternoon of the 28th, to return early on the 30th, and will be most attractive both from a sanitary and scenic point of view, the quarantine station being well equipped and the route to Grosse Isle being through the most interesting part of the Province of Quebec.

For application blanks or further information, address Dr. Irving Watson, Concord, N.H., or Dr. E. Pelletier, Montreal.

The officers of the association are as follows: President, Dr. E. P. Lachapelle, Montreal; first vice-president, Dr. M. Carmonay Valle, Mexico, Mex.; second vice-president, Dr. J. M. McCormack, Bowling Green, Ky.; secretary, Dr. Irving A. Watson, Concord, N.H.; treasurer, Dr. Henry D. Holton, Brattleboro, Vt. Officers of Local Committee of Arrangements—Chairman, Dr. Robert Craik, Montreal; secretary, Dr. E. Pelletier (office, 76 St. Gabriel Street, Montreal). Representative of Ontario on the Local Committee of Membership—Dr. P. H. Bryce, secretary Provincial Board of Health, Toronto.

CREDIT TO WHOM CREDIT IS DUE.—At the nineteenth annual meeting of the United States Hay Fever Association, Dr. S. S. Bishop, of Chicago, obtained the prize for the best essay on the subject of hay fever, proposing the theory of uric-acid origin, with salicylate of soda for treatment. One year previous to the reading of the essay, Dr. Shawe Tyrrell of Toronto, read a paper before the Ontario Medical Society, entitled "A Predisposing Cause of Hay Fever," which was afterward published in the Canadian journals, setting forth the uric-acid origin of the affection, and its treatment by soda salicylate and a proper diet.—N.Y. Medical Record.

TO DO JUSTICE.—Dr. Seth Scott Bishop, M.D., of Chicago, writes: "Will you kindly do me the justice to publish my reply to your paragraph concerning me on page 597 of the *Record* for May 12th?

"My prize essay on hay fever for 1893 was written without any knowledge of Dr. Tyrrell's work. If I had known that he had written on the subject I should have gladly availed myself of any valuable facts brought to light, and should have given him full credit, as I did with the thirty-eight other authors quoted. Indeed, I stated that 'I had taken pains to give each investigator ample credit by liberal quotations.' After writing the essay I learned that Leflaive had preceded me in this line of study by at least four years, and gave him due credit, so that, happily, there is no occasion for any dispute between us concerning priority. We are both antedated. We have arrived at the same results through independent investigations, as often happens, and I do not want, and have not received, any credit to which I am not fairly entitled."—N.Y. Medical Record.

OBITUARY.

DR. WILLIAM AUGUSTUS BALDWIN.—Dr. Baldwin died at his home in Deer Park, Toronto, July 13, at the age of 53. He took his course in the Toronto School of Medicine, and received his certificate from that institution in 1868. He practised in Winnipeg for some years, but came to Toronto about three years ago.

DR. ROBERT H. HUNT, of Clarksburg, died at his home, July 4, from apoplexy. He had been in poor health for some time, and spent most of the last winter in California on account of incipient phthisis. He took his medical course in the Toronto School of Medicine, and graduated in the University of Toronto in 1868. He practised in Clarksburg for twenty-five years, and was very highly respected by all classes in that vicinity.

DR. GEORGE E. FENWICK was for many years known as one of the ablest surgeons of Montreal, and also one of the best teachers in McGill Medical College. His death, last month, caused deep regret among his many friends in all parts of Canada, who respected him for his great abilities, and loved him for his kindliness of heart and rare social virtues. He was born in Quebec in 1825, and passed his final examination in McGill in 1845. He was appointed demonstrator of anatomy in McGill in 1860, professor of clinical surgery in 1867, and professor of surgery in 1876.