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ORIGINAL ARTICLES

NOTES ON THREE CASES OF PROSTATECTOMY.

By Dr. H. H. Chown, Surgeon to the Winnipeg General Hospital.

Case I.—J. M., age 56, a farmer, entered the hospital on October 4th, 1897, complaining of all the symptoms produced by a large prostate, with accompanying cystitis. He had to use the catheter nearly every hour, and only had relief from pain for a few minutes after each catheterization. His early history is unimportant and throws no light on the case. In 1891 he had an attack of pain in the back and lower abdomen, accompanied by chills and fever, after which his urinary troubles began. At first simple increase in frequency of micturition was noticed. He passed urine every two hours during the day and every four hours at night, each act being followed by smarting at the neck of the bladder. On account of increased difficulty he had to resort to the use of the catheter in 1894, and has continued its use up to the time of operation. As no care was employed to keep the catheter clean, all the painful and distressing symptoms of cystitis were added to his other troubles. In 1895, after

an attack of severe pain in the lower part of the abdomen, accompanied by chills and fever, he had double epididymitis. The first blood noticed in the urine was in December, 1896, and this usually preceded the flow of urine, therefore, in all probability, coming from the prostate. The pains, tenesmus and constant desire to urinate increased to such an extent that he sought surgical aid last spring. He submitted to unilateral castration, external urethrotomy and internal urethrotomy with very little benefit. When he entered the hospital, under Dr. Chown, in October, he was in such misery that he readily accepted the proposal to try removal of the prostatic outgrowths. On October 10th the bladder was opened suprapubically. Both lateral lobes were greatly enlarged, although the right was at least twice the size of the left. The posterior lobe was also hypertrophied, but to a less extent. The three protruding masses were enucleated, and then encysted behind the prostate a stone as large as an unshelled almond was found and removed. The hemorrhage was slight. Although the wound in the bladder filled in more slowly than usual, it is now closed, and the patient has power to pass urine naturally and almost without pain.

Case II.—F. F., age 70, a farmer, enter-

ed the hospital on July 8th, 1897, under Dr. A. J. Macdonell. His first urinary troubles began with an attack of retention five years before, and similar attacks have marked the history of the case ever since. Frequency of micturition soon appeared, and was followed by all the distressing symptoms of prostatic hypertrophy, with accompanying cystitis. When he entered the hospital he was compelled to urinate every twenty or thirty minutes. Catheterization showed a large quantity of residual urine, but unfortunately no note of the amount was made. On July 13th Dr. Macdonnell removed the left testicle and excised two inches of the right vas deferens. The improvement was slow, but the catheter had to be used less and less frequently up to the time he left the hospital on August 13th. On August 21st he re-visited the hospital and stated that he only passed urine every four hours and felt twenty years younger. He re-entered the hospital on Nov. 8th and reported that he had remained well until six weeks before, when the old pain, tenesmus and frequent desire returned. On Nov. 11th Dr. Chown did a supra-pubic prostatectomy. The lateral lobes were greatly hypertrophied, the masses removed measuring not less than $1\frac{1}{2}$ inches in diameter. The posterior lobe was normal. The bleeding was pretty free, and continued moderately for twenty-four hours. As the edges of the incision in the bladder were turned in and sutured, except for a small central drainage opening, the healing has been rapid and the patient can now pass urine naturally and without pain.

Case III.—T. M., aged 60, a farmer, was seized early in October, 1897, with an attack of retention of urine. An enlarged prostate was recognized as the cause, and a suprapubic opening made in his bladder, but no effort made to remove the enlargement. He entered the hospital on Nov. 19th, suffering from a fistulous opening, through which all his urine passed. This kept him in such a wretched state that he was anxious for relief. The opening was

enlarged and the posterior lobe of the prostate found very much hypertrophied, while the lateral lobes had escaped. The difficulty of removal in this case was much greater than in the other two, as only a portion of the outgrowth came away at the first effort. The balance had to be slowly enucleated by fingers and scissors, and the hemorrhage was consequently pretty free. The patient is now progressing very favorably, but sufficient time has not elapsed to state the final result.

Notes.—These three cases were submitted to the great risks of prostatectomy on what were believed to be justifiable grounds. In the first case, unilateral castration produced no favorable result, and the presence of stone in addition to the hypertrophy precluded any satisfactory progress, even if the other testicle had been sacrificed. Stone had been repeatedly sought, but without success, because of its encystment behind the enlarged posterior lobe. In the second case castration and excision of the vas undoubtedly gave great relief for about six weeks, but the cause of the increased ease of micturition, as well as the cause of the return of the old symptoms, seem equally difficult of explanation. In the third case the cure of the urinary fistula seemed to depend upon the removal of the prostatic growth, though it is possible that double castration might have removed the cause, and thus produced a cure. In the first case all three lobes were enlarged; in the second the lateral ones, and in the third the posterior lobe only.

We are indebted to Messrs. D. G. Ross, B. A., H. W. Riggs and J. B. Chambers, B. A., for the histories in the above cases.

AUTOMATISM OF DRUNKARDS.

By J. R. Jones, M.D., Physician to the
Winnipeg General Hospital.

During a recent election in the city of Winnipeg an interesting case, from a medical point of view, of personation occurred which was disposed of in one of our courts, the prisoner being sent to the

provincial penitentiary for five years. The defense alleged the personator committed his lawless acts while under the influence of liquor, and that he was irresponsible, as he had no remembrance of the acts so committed. The medical evidence in support of this contention designated the disease as "Alcoholic Neuritis," a most unfortunate expression, as by it the conduct of the personator could not be satisfactorily explained. It is sometimes difficult and often impossible to give a name to groups of nervous phenomena to which undoubtedly this case belongs.

I will start with the assertion of the possibility of elaborate automatic acts being performed by drunkards, and there may be no subsequent recollection of them.

Coming to the specific case which has suggested this article, is it possible for a personator to go from one polling booth to another, voting falsely, giving correct, or rather incorrect, replies to scrutineers, personating repeatedly, and yet the next day and thereafter be perfectly oblivious of the whole nefarious business without a shred of recollection of a single link in the whole chain of fraud?

On the principle of mental automatism caused by the suspension of the higher (inhibitory) centres such an act can be explained and understood. One can imagine the sneering incredulity with which this hypothesis would be received by a judge and that conglomerate mass of matter called the jury.

Analogous conditions produced by such diseases as epilepsy, acute insanity, sudden intracranial hemorrhage, and by certain drugs, opium and belladonna assist us in elucidating the automatism of drunkards. During acute temporary insanity of epileptics crimes have been carefully planned and skilfully executed, the prisoners escaping, eluding with equal skill the officers of the law. Yet, when confronted with their crimes they have no recollection of them whatever.

When alcohol is taken in intoxicating, not comatosing, doses, a certain number

of victims is reduced to a mere automatic condition. The general doctrine involved in all these cases is the abolition of the influence of the highly evolved inhibitory centres, allowing the lower and grosser centres full unrestrained play. The result is automatic language and movement apart from consciousness.

The action of opium varies, like alcohol, according to individual temperament and the amount administered. Speaking of the effects of opium, Anstie writes: "The apparent exaltation of certain faculties should be ascribed rather to the removal of controlling influences than to the positive stimulation of the faculties themselves or of the physical machinery by which they work."

In like manner the boisterous conduct, the silly behaviour, the maudlin sentiment, the boastful prowess, and the lewd songs of the drunkard are all due to involvement of the higher centres presiding over the highest mind processes, the more automatic faculties running riot.

I can produce numerous instances of mental automatism as complicated and elaborate as in the case of the personator alluded to.

A Cambridge don, while under the influence of liquor, gave a brilliant lecture upon his subject which elicited the surprise and admiration of his class, and the next day and thereafter he had no recollection of the event. He did not know he had given the lecture or that he had been present in the lecture room.

A friend of mine of wide information and considerable intellectual endowments, has no recollection of his doings while under the influence of liquor. When told of his sustained arguments, brilliant repartee and various peregrinations while having a night of it, he is amazed and states he remembers nothing.

As to the legal responsibility of persons influenced by drink, that is no affair of the medical profession, still the doctrine enunciated may be used in mitigation of punishment.

SELECTED ARTICLES

AN INTERESTING CASE OF ACUTE BRIGHT'S DISEASE

By Joseph A. Silverman, Ph.G., M.D., Butte, Mont.

Saturday evening, June 29th, Dr. H., of this city, attended an entertainment and sat in an open window, with a draught blowing directly on his back. He was suddenly taken with a violent "cramp" in his neck, along the course of the sternocleido-mastoid muscle, but thought nothing more of it. The next day, while attending to his duties, he was seized with a malaise, and upon taking his temperature he found it to be 103° F. He immediately went home and to bed, first having taken a dose of quinine hydrochloride. The doctor having suffered for some years with external and internal piles, which were easily replaced in the rectum, found that after having taken a small dose of calomel he could not replace the piles as usual, and that they were much swollen and enlarged. He sent for a physician to do something for them, at the same time telling the physician of his temperature and malaise. The physician immediately prescribed five grains of salol to be given every two hours, and injected the external piles with pure carbolic acid. The next day the patient was suddenly taken with heart failure, and the attending physician was immediately sent for. He came some hours later, and found his patient very much collapsed and with no pulse at the wrist. With hypodermic injections of digitalin and strychnine he succeeded in a few days in bringing the heart almost to its normal state, the temperature subsiding to 101° F. The patient now noticed that he was having some difficulty in passing his urine, that it came in small quantities, and in a short time he was compelled to use a catheter, which he had no trouble in passing, but only getting about a teaspoonful of urine. Simultaneously with the absence of urine the patient complained of great itching in the piles. The itching spread all over his

body, and upon examination of his body the skin was found to be covered with an eruption resembling very much the eruption of urticaria—large red wheals and blotches—which itched very much. To relieve the itching of the piles the patient placed thereon a piece of gauze saturated with a strong solution of cocaiæ and took a hot bath, which brought a flow of urine, the eruption of the skin disappearing at the same time, but the heart failed rapidly from the effects of the cocaine, and the patient was thought to be dying. The attending physician again administered the digitalin and strychnine and the heart returned to almost a normal condition, but the patient still suffered alternate attacks of lack of a diuretic flow and the eruption, which at first left petechial spots after disappearing.

On Friday evening, July 16th, I was called in, and upon questioning the patient got the history related above. I found him suffering from the eruption, and was told that he had passed only about three or four ounces of urine in the past twelve hours. The hands and ankles were swollen and the eyelids puffed. He complained of headache, backache, flashes of light from the eyes, and dizziness, and I immediately made a diagnosis of acute nephritis, taking a specimen of the urine with me, but prescribing five-grain doses of acetate of potassium, to be given every three hours, and a tablespoonful of the infusion digitalis, three times a day. I then went to my office and examined the urine. It was highly loaded with albumin and contained about a quarter of 1 per cent. of sugar. Upon visiting my patient that evening I found that the eruption had disappeared and that he had passed considerable urine voluntarily. I then prescribed a milk diet, hot baths, and a hot-water bottle over the kidneys, and substituted ten drops of the tincture of juniper berries for the potassium acetate.

Saturday, July 17th.—Upon seeing my patient I learned that he had had a good night and had passed about 35 ounces of

urine in the twelve hours; there was no eruption, and the headache and backache had left him. I ordered the treatment continued. The urine showed a much smaller quantity of albumin and no sugar.

Sunday, July 18th.—Found my patient resting easy. Quantity of urine almost normal and very small traces of albumin; no itching or eruption; no elevation of temperature; pulse, 100.

Monday, July 19th.—Patient much improved and wished to sit up. Quantity of urine, no albumin, no sugar, and no other symptoms. Piles had become smaller and could be again replaced, although much burned by carbolic acid and sloughing.—New York Medical Journal.

DIPHThERIA

Our notions of epidemics have been enlarged in an interesting direction of late, especially in regard to epidemics of diphtheria. Fibeger, of Copenhagen, in an interesting paper published in the Berliner Klinische Wochenschrift of August 30, points out the fact that in most, if not all, epidemics those sick with the disease are a small proportion of the infected. Soon after the discovery of the germ, it was found that convalescents carried it in their throats for a varying time, probably several weeks after recovery from the symptoms. Further investigations show that during an epidemic absolutely healthy persons in considerable numbers have the germ in their throats. These latter may, or may not, develop the disease. The visible epidemic is supplemented by a larger invisible one about the edge, like the invisible rays in the ultra-violet end of the spectrum. The obvious inference is that all persons whose throats contain diphtheria germs should be considered as dangerous to the community. If observations confirm this idea, the fact is one of the greatest importance with regard to prevention, and hosts of cases are explained whose origin has hitherto been impossible to discover. Observations are supplied by Fibeger in sufficient numbers

to fairly well establish the truth of his assertion.

Of special interest is the epidemic observed by Hollstrom in Stockholm. In a regiment of life-guards in that place several cases of diphtheria appeared. Soon after this, a servant from the town was brought into the hospital with well-marked diphtheria. Her case was one of those which are very difficult to explain. There was no diphtheria in the family in which she was working, nor in that part of the town, and she had come in contact with no diphtheria patients so far as could be ascertained. It was found, however, that she was engaged to be married to one of the members of the infected regiment, who was, however, apparently quite well. Examination showed abundant diphtheria germs in his throat. The task was then undertaken on the first of March of examining the whole regiment. Of 786 members germs were found in the throats of 151. Those men were at once isolated. After such isolation no more cases developed in the garrison except three among the 151 already infected. A daughter of one of the isolated men who was not sick with diphtheria, within a moderate time developed the disease, and it was found on examination that his wife had germs in her throat. Vigorous enquiry revealed the fact that the man had made two visits to his home in spite of all the precautions that could be taken. At the end of June, the regiment, now numbering 1,011 men, was examined, and only three of them were infected. These three were isolated, and this closed the epidemic.

The difficulty of handling such epidemics in large communities is obvious. Fibeger's observations, however, constitute a notable addition to our knowledge of epidemics, and the method by which they should be handled. Although it might not be feasible to make a bacteriologic examination of all the members of a community, this could be done with the people who come in contact with diphtheria cases, and no doubt in this way epidemics might be cut much shorter than is

possible at present.—Cleveland Journal of Medicine.

OTITIS MEDIA SUBCUEIVA ACUTA, FROM SWALLOWING A PIN.

By F. Pierce Hoover, M.D., Lecturer in Otology,
New York Polyclinic; Assistant Surgeon,
Manhattan Eye and Ear Hospital.

The case I desire to make public is one of the most interesting of ear affections I have met during the whole of my experience, and the only one of the kind I have seen as the result of swallowing a pin. In January of this year, Mrs. M. brought her baby girl, two years old, to me with the complaint of "a discharging left ear, which had lasted four days; previous to that the child suffered great pain in that ear for several days, which was somewhat relieved after the ear began to run, but at night she would cry repeatedly and slept only when the pain seemed to ease up, also if she lay down on that side at any time; this had been the case for several weeks." I found upon inspection that the patient was well nourished, and took food regularly, her mother said, except when the paroxysms of pain came on; she thought possibly it was all due to teething through the gums. She said the child had never been sick, with the exception of a slight cold, or diarrhea occasionally, but in the early part of November, two months before calling on me, her baby swallowed a pin. A doctor was quickly summoned, who administered an emetic, which produced excessive vomiting; the family afterward looked for the pin, which they hoped had been expelled, but could not find it. The mother presumed, as no further unpleasant symptoms followed except a sore throat, that possibly the foreign body did come out and fell on the floor; it could not be found, however, she did not for a moment imagine that the pain in the ear was the result of the pin.

After cleansing the ear and wiping it dry, I took a look at the ruptured drum and saw a very small perforation just below the malleus handle, from which pus would ooze. I came to the conclusion

it was an acute suppuration and treated it accordingly, also recommending warm water containing a little salt to be syringed in the ear three times a day. The patient was brought back to my office next day; she had not slept any during the night, and cried continually. I made a careful examination of the throat, but could see nothing to cause pain from that quarter.

A slight swelling had made its appearance behind the left ear, which was prominent upon pressure, but percussion demonstrated no pus. After the ear was washed out with warm water and I was wiping it dry with a pledget of cotton on the end of an applicator, I noticed that the cotton caught on something. Passing in a probe, I touched a small object in the posterior part of the drum membrane, which decided me to explore further. The mother acquiescing, I gave the patient some chloroform on my handkerchief to inhale, producing slight anesthesia. I then enlarged the opening in the drum membrane with a small Graefe knife, and again with a probe felt something which I was able to move, and with a pair of alligator forceps I caught hold of and extracted a pin; it was a small one, the kind used to stick in tape or ribbon, about a quarter of an inch long; when it was removed it came out point first. I am of the opinion that in some way the pin passed into the Eustachian tube, possibly when vomiting after an emetic, and worked its way to the place whence I took it. I do not believe it was pushed through the external canal into the drum, basing my supposition upon the position of the of the pin, the head being inward when it was removed.

The after-treatment consisted in syringing the ear three times a day with warm water and salt, and in eight days the discharge entirely ceased. The swelling behind the ear disappeared the day after the removal of the foreign body, and in two weeks the patient entirely recovered.

April 2nd.—Mrs. M. brought her child to me with bronchitis, and informed me that her baby had never had any discomfort with her ear since the removal, three

months before, of the pin.—New York Medical Journal.

THE TREATMENT OF GOUT

In the Journal of the American Medical Association for July 31st, Dr. H. C. Wood, of Philadelphia, remarks that in treating gout we should rid ourselves of false ideas and recognize the importance of this great principle, not to attempt to treat gout at all, but to treat the individual.

Concerning the question of diet, he states that he has seen gouty patients in whom a single piece of ordinary red roast beef would bring on a furious attack, and, on the other hand, others who did not get well until they were put upon a red-meat diet. Again, he has seen gouty patients who went right down if they took starch or sugars, and those who had to take both starch and sugars in order to be built up. There is no diet for gout, he says, it is diet for the individual; therefore, the first principle in the diet of gouty subjects is to adapt it to the individual.

Concerning the treatment of gout by exercise, this is the one thing which does more good than anything else in almost every case, provided, says Dr. Wood, the right amount of exercise is taken. Massage is a form of exercise, and it may be all that a patient can endure. The whole secret of exercise in gouty persons, he says, is to keep within the point of causing exhaustion and gradually increase the amount each day if necessary, and it will do more good than any drug. Dr. Wood, in this connection, speaks a good word for the bicycle, and calls it the "great calisthenic of the world."

With regard to drugs, Dr. Wood does not believe that salicylates cure gout or rheumatism, but that they simply aid in keeping down the diathesis; if there is any cure, he thinks it is exercise. In certain cases, he says, which approach typical gout, rarely seen in America, colchicum does much more good than the sal-

icylates; sometimes the best results may be obtained by a combination of colchicum with the salicylates.

Dr. Wood considers sodium salicylate the worst salt that can be used, although it is, perhaps, not so bad as salicylic acid; it is, however, much more apt to burn the stomach, and is less effective and more depressing than other salicylates. The two salts which he considers truly useful are the ammonium and the strontium salts; the former acts immediately and severely, and the latter acts slowly. In an acute case he advises the strontium salicylate or the two combined. The strontium salt, he says, has the advantage of not deranging the digestion, and sometimes has the best effect on the intestinal condition. In a large majority of cases, continues Dr. Wood, the salicylates produce depression and perhaps a little nausea and general wretchedness, in which case these effects can be overcome by combining the salicylates with digitalis and strychnine.

Baths, says the author, can not cure a diathesis, but they are useful. Hot baths, steam baths, and Turkish baths should be employed, the latter once a week, by gouty patients. Kidney disease and atheroma, he says, will be far less rife if we use the hot bath more than we do. The baths eliminate and give temporary relief.

Regarding the Tallman-Sheffield apparatus, or dry heat method, says Dr. Wood, this is not going to cure the gouty diathesis any more than other applications. In his experience he has found that it has very little value in rheumatoid arthritis and in chronic inflammations in the joints, even if they are of a purely gouty character. On the other hand, he says, if there are deposits in the tendons and outside the joints, if there is traumatic synovitis, whether in baseball men or other persons, the results of this treatment seem almost marvellous. Also in acute strains and tendinous inflammation this dry heat is of great value. In subacute rheumatism Dr. Wood thinks it is of

value owing to its sweating and other local action, but, in his experience, not in chronic cases of rheumatoid arthritis, and it is of very little use in rheumatism of the joints.

ARIEL TRANSMISSION OF TYPHOID FEVER

Investigations in this direction, says Germano (*Zeitschrift für Hygiene und Infektionskrankheiten*, 1897; *Presse médicale*, July 28, 1897.) have been made in the following manner: A certain quantity of typhoid cultures in bouillon or agar were mixed either with the dust taken from the sick room, with fine sand, with earth, or with the faecal matter of diarrhoea, all of these substances having been previously sterilized. Each mixture was then distributed in three Petri boxes, one of which was placed in a damp room; another was left air-tight on a table in the laboratory, and the third was also left on a table in the laboratory, but, in order to obtain more rapid desiccation, the mass was uniformly distributed on the walls of the box with a sterilized glass rod. At various intervals as much as would lodge on a platinum loop was taken from each receptacle and sown on a proper medium.

These experiments proved that, in the earth and the dust, under the influence of slow desiccation, as in the second box, or accelerated desiccation as in the third box, the typhoid bacillus ordinarily succumbed at the end of twenty-four hours, and that, occasionally only, it still gave cultures in bouillon after having been in the air-tight box for two or three days. In the faecal matter, under the same conditions of desiccation, the life of the typhoid bacillus was much longer; on agar no cultures were obtained at the end of six days, but in bouillon the cultures could still be made at the end of twenty-five days. This difference is attributed by the author to the fact that it is very difficult to dry the typhoid bacillus in faecal matter. He says that, in any case, if typhoid

fever is to be transmitted by the air, the desiccation of the bacilli in the faecal matter would have to be such that they would no longer be alive.

In another series of experiments the cultures were deposited on pieces of cloth and linen. In these conditions, in spite of the progressive desiccation in the boxes, the typhoid bacilli still preserved their vitality at the end of sixty days and sometimes even longer. The author explained this fact saying that the fibres of the tissues protected the bacilli against desiccation.

From all these experiments the author concludes that the doctrine of the transmission of typhoid fever by the air is scarcely admissible. In order that the air may carry particles to which the bacilli adhere, it is necessary that they should be found in a condition of desiccation which is scarcely compatible with the vitality of the bacillus. On the other hand, the danger of transmission by objects, such as clothing, woods, etc., soiled by the dejecta is very real.

TYPHOID FEVER

The Department of Health announces that typhoid fever is unusually prevalent in this city this fall. If the cases were no more numerous than appears from the weekly reports of that department, this announcement would not be justifiable, for reference to this report shows that beginning with the week ending September 4th and including that ending October 2d the cases reported were 9, 10, 16, 9, and 7, or 51 for five weeks. This is not a large number for a population of 1,600,000. But, unfortunately, these figures do not begin to represent the truth. If we turn to the portion of the report in which the deaths are recorded, we find that in these same weeks the deaths from typhoid fever were 1, 6, 8, 9, and 5, or 32 in all. In the week ending September 25th, 9 cases were reported, and there were 9 deaths. As is well-known, the death-rate in typhoid varies considerably. In 18,612 cases aggregated by Murchison, the mortality was

18.62 per cent. In a series of 73 cases analyzed by Austin Flint, the mortality was about 24 per cent. More recent statistics show a far greater percentage of recoveries. In the Plymouth epidemic 1,104 persons were attacked, of whom 114, or 10.3 per cent. died. It may, therefore, for our present purposes, be safe to place the mortality at 10 per cent. This being so, it would indicate that in the five weeks already referred to the actual number of cases of typhoid in Brooklyn was 320, of which only 51 were reported. The neglect of physicians to report typhoid fever cases to the Department of Health is, we believe, based on the assumption that such reports are not required, but this is an error. Section 123 of the Sanitary Ordinances requires that all contagious diseases be reported within twenty-four hours, and Section 5 declares "that the phrase contagious disease shall be held to include * * * * cholera, yellow fever, smallpox, diphtheria, ship or typhus, typhoid, etc." The Department of Health, in a circular letter to the profession, requests that physicians report promptly cases of typhoid, stating that beyond leaving at the house where cases occur instructions as to the disinfection of stools and the taking of other sanitary precautions, it is not the purpose of the department to interfere, as it is not considered that isolation or exclusion from school is called for. Of course, the "isolation" here referred to is not that of the patient, but of other members of the household.

The circular which is left at each house where typhoid exists deals with matters so essential to the preservation of the public health that we here quote it in full :

Typhoid fever is an infectious disease which is usually communicated from person to person by means of substances used for food and drink, which have become contaminated by the discharges from the bowels of those having the disease. It is, therefore, largely preventable by proper measures of cleanliness and disinfection.

During the prevalence of typhoid fever it is a wise precaution to boil all the water used for drinking or for washing dishes or cooking utensils. A patient having typhoid fever should be isolated from the rest of the family, preferably on the top floor, and nursed, as far as possible, by one or two persons. It is best to have a rubber sheet over the mattress. The dishes, knives, forks, spoons, underclothing, and other articles used by the patient should not be used by any one else, and should not be removed from the room until they have been disinfected. This can be done by placing them for one hour in a solution of carbolic acid, six ounces of the acid to one gallon of water, and then boiling them in water. The manner of disposing of the discharges from the bowels is of the utmost importance. In the vessel receiving the discharge there should be a quantity of good chloride of lime, and after the discharge is received it should be covered with at least a quart of a solution of chloride of lime, in the proportion of six ounces of the chloride of lime to one gallon of water. It should be allowed to stand for 1½ hours, and be thoroughly mixed, before being thrown into the closet. The hands of those caring for the sick, and the portions of the patient's body that have become soiled with the discharges should be frequently disinfected with a carbolic solution. The carbolic solution above described can be diluted with water one-half for this purpose.

After death or recovery, woolen blankets, woolen garments, bedding, and carpets can, if desired, be referred to the Department of Health for disinfection by steam, free of cost.

Z. TAYLOR EMERY, M. D.,

Commissioner.

—Brooklyn Medical Journal.

Boiled potatoes are much slower to digest than roasted or baked, the former requiring 3½ hours, and the latter from 2 to 2½.

THE RADICAL CURE OF FEMORAL HERNIA

By George Ryerson Fowler, M.D., Professor of Surgery in the New York Polyclinic.

A Clinical Lecture delivered at the Methodist Episcopal Hospital, June 5, 1897.

Gentlemen: The patient before us, a female, thirty-five years of age, is the subject of a left-sided femoral hernia. The hernia first made its appearance eight years ago, and developed gradually until it attained its present size. When first discovered it would return upon lying down, and was readily retained by a truss. For the past five years she has neglected to wear a truss; adhesions have formed within the sac, and as a consequence the hernia has become irreducible.

In consequence of this latter circumstance the hernia has become a dangerous feature of the environment, for the reason that constant risks of strangulation confront her. This has been explained to her, and she has consented to confront the comparatively slight dangers of an operation for radical cure.

The protrusion presents itself as an ovoid swelling, about the size of a hen's egg, located at the inner side of the large vessels which pass over the brim of the pelvis to the thigh. It is semi-elastic, almost fluctuating to the feel, and dull on percussion. The fact that it is irreducible is at once manifest when an attempt is made to return its contents to the abdominal cavity. A slight impulse is present when the patient coughs.

These facts in the history are sufficient to establish a diagnosis of hernia, in the vast majority of cases. The fact that it is a femoral rather than an inguinal hernia is established by the position of the protrusion in its relation to the lines of Poupart's ligament. The fact of its occurrence in the female is likewise suggestive of the variety of hernia at hand, for the reason that this variety occurs with far greater frequency in the female than in the male. Its anatomical relations to Poupart's ligament may be established by drawing a line from the anterior superior

spinous process of the ilium to the spine of the pubes. The first-named is determined without difficulty, but the pubic spine is not always so easily located. If you will remember that the latter is placed upon the same level as the greater trochanters, you will be able to locate it without difficulty. A tape passed around the body so as to lie upon both trochanters, will cross the pelvis at the level of the pubic spine. With the exception of scrotal hernias in males, any hernia the bulk of which lies below a line drawn from the anterior superior spinous process of the ilium to the pubic spine is femoral in its origin.

The attacks of cramping, colicky pains are worthy of notice. These come on suddenly and are relieved by lying down. This is suggestive of the occasional occurrence of what is known as "partial enterocele," or Richter's hernia, sometimes, although improperly, designated a Littré's hernia. Richter's hernia is the imprisonment of a portion of the convex surface of the intestine in the hernial orifice. The portion thus engaged is situated directly opposite the mesenteric attachment. On the other hand, the hernia which Littré described consists in the passage of a Meckel's diverticulum into the hernial sac. When a Richter's hernia occurs, either the hernial orifice is too small to permit of the passage of a complete loop of intestine, or the mesentery is too short to permit the latter to reach and enter the sac. Partial enterocele occurs with far greater frequency in femoral hernia, and it is this circumstance which suggests the latter explanation. The attacks of abdominal pain to which this patient has been subject are probably due to the occasional occurrence of a partial enterocele.

As the hernia presents itself to us at the present time it is probably a pure epiplocele; that is to say, it contains only omentum, which finds its way into a small hernial opening more readily than intestine. When both intestine and omentum

are present in the sac the hernia is known as an entero-epiplocele.

Heretofore the treatment of femoral hernia by means of an operation designed to effect a radical cure has not been so successful as in the case of inguinal hernia. The more frequent occurrence of the latter has directed attention particularly to its needs, and has led to development of several operative procedures, each one of which has met with a fair success in accomplishing the result arrived at.

In the case before us we will apply one of the most recently devised, and probably the most effective operations for the radical cure of femoral hernia. The method is known as that of Fabricius, and its technic includes the following stages:—

1. The incision is planned so as to expose the insertion of that portion of the aponeurosis of the external oblique known as Poupart's ligament at the spine of the pubes, and the line where that structure blends with the fascial structures of the thigh, as well as the sheath of the vessels at the crural opening.

2. The sac of the hernia is exposed and cleared to its neck.

3. The sac is opened and emptied, after which it is ligated at its neck, and the latter, in suitable cases, inverted toward the abdominal cavity.

4. The edge of the aponeurosis of the external oblique is forced backward to the level of the upper margin of the horizontal ramus of the pubes, and there sutured to the periosteum and the origin of the pectineus muscle. By this means the space between the bone and the downward projection of the aponeurosis, in which space a femoral hernia forms before making its appearance externally, is obliterated.

The patient is placed in the Trendelenburg position, the intestines thus being caused to gravitate to the upper portion of the abdominal cavity, where they are out of harm's way during the steps of the manipulation subsequent to opening the sac. The incision commences at the spine of the pubic bone, and is carried parallel

with Poupart's ligament for a distance of from four and a half to five inches, or sufficiently far to reach a point well to the outer side of the femoral vessels. (Fig. 1.) The skin, fat, and superficial fascia are divided, the superficial epigastric vein, as it passes in a vertical direction, being sometimes sufficiently large to come into sight before division, in which case it is divided between two ligatures.

The hernial sac, in some instances, projects directly beneath the lesser calciform process, in which case it comes into view with its coverings at this stage of the operation. In other cases, however, it lies beneath the superficial layer of the deep fascia of the thigh, or the fascia lata, as it is called, because of its broad ramifications. Under these circumstances it will be found to be covered by the cribriform fascia, which must also be incised.

The sac being exposed and isolated well down to its neck, it is opened and its contents reduced. (Fig. 2.) In the case before us the sac is found to contain a portion of omentum which has become adherent, and some fluid. The presence of the latter explains the sense of fluctuation imparted when the protrusion was palpitated. The distal portion of the omentum is free within the sac, and acts as a ball valve, thus preventing the fluid which has been secreted by the sac from being forced into the peritoneal cavity when pressure was made upon the protrusion. This condition constitutes what is known as a "hydrocele of the sac." Lifting up this ball valve arrangement of the omentum the orifice of the hernial sac is readily disclosed.

The adherent omentum is now freed and the sac emptied. The latter is drawn forward, its neck ligated with catgut, and the ligated portion of the sac cut away. (Fig. 3.) In order to more fully expose the crural canal preparatory to its obliteration, the attachment of Poupart's ligament at the spine of the pubes is first detached, and the separation carried on in an outward direction until this structure is separated from the superficial layer

of the fascia lata up to the crural sheath. At the latter point, although this layer of the fascia of the thigh is somewhat tense, yet it does not lie directly upon the vessels. With the index finger introduced to guard the vessels the separation of the fascia lata from Poupart's ligament is completed with the scissors and the former structure reflected in a downward direction. (Fig. 4.) In a strangulated case this stage of the operation should precede the one last described, for the reason that relief of the constriction follows at once when Poupart's ligament and the remainder of the aponeurosis of the external oblique has been detached and freed.

A funnel-shaped cavity formed by the recession of the horizontal ramus of the pubic bone is now revealed, constituting the femoral canal. This now contains the ligated neck of the sac, some fatty and areolar tissue, and a lymphatic gland or two. These latter are to be removed. In cases of old unreduced hernia the peritoneum has become stretched, and bulges forward considerably at this point. Grasping the neck of the sac, this is drawn forward and a portion of the superfluous tissues, consisting of peritoneum and subperitoneal fat, removed, a transverse peritoneal section resulting. This is not a part of the original operation of Fabricius, but I have thought it best to add it in cases where it is indicated. Such a condition exists in this case, and we will proceed to execute the maneuver.

The gap thus made is now sutured. The edges are grasped with catch forceps and drawn forward so as to secure broad approximation of the peritoneal surfaces. The method employed by myself in accomplishing this is to hold the surfaces in contact, and sew through and through, and not over and over, as peritoneum is usually sutured.

The essential and important step of the operation is now to be taken. This consists in attaching Poupart's ligament to the point of origin of the pectineus muscle and the periosteum of the horizontal

ramus of the pubes. By this maneuver Poupart's ligament is made to describe a backward curve, to follow the recession of the bone at this point, imitating in this respect that portion of this structure which is reflected obliquely outward and backward after its insertion into the spine of the pubes, and known as Gimbernat's ligament. In this manner the femoral canal, or space which lies normally between Poupart's ligament and the bone, is obliterated.

Some substantial suture material must be employed at this stage. While catgut may be used in suturing the peritoneal surfaces, this is far too unstable to serve our present purpose. My own preference is for kangaroo tendon. Kangaroo tendons placed in "U"-shaped glass tubes, with ninety-five per cent. alcohol, hermetically sealed and afterward sterilized by exposure to a temperature of about 300° F., a method devised originally by myself, are now prepared by the Ellwood Lee Company, Conshohocken, Pa., and are reliable for all the purposes of a hernia suture. (See the Brooklyn Medical Journal, vol. vi, page 164, 1892.) According to Coley, of New York, who has had a large experience with this material, it will hold with unimpaired strength for a sufficiently long time for the purposes of hernia operations, disappearing only after a period of months.

In applying the suture the crural sheath and its contained vessels should be displaced well to the outer side, and above the iliopectineal eminence, and there held by the operator's disengaged index-finger or a blunt hook in the hands of an assistant. (Fig. 5.) In this manner an increased area for the attachment of Poupart's ligament to the horizontal ramus of the pubes is made available. The obturator artery and vein may come into view, and care should be taken not to injure these.

A stout and strongly curved needle, with a sharp point, is armed with a strand of the kangaroo tendon, and passed through the aponeurosis of the external

oblique about three-eighths of an inch from its edge, so as to secure a good hold. It is then passed through the periosteum at the point of origin of the pectineus muscle, emerging about one-half an inch from the point of the entrance upon the upper margin of the bone.

This suturing is the most important step of the operation, and upon the care with which it is done depends the entire success of the procedure. If the periosteum and bony attachment of the pectineus are caught well up by the needle, a good hold will be secured upon the structures, and firm and solid attachment of Pott's ligament in its new position effected. All the sutures are first laid, and after cleansing the parts each is separately and securely tied. As we proceed with the sutures toward the median line we must avoid injury to the deep epigastric artery and vein. Five or six sutures are usually required. (Fig. 6.)

This portion of the technic accomplishes for the femoral canal what suturing of the pillars does for the inguinal canal in the operation for the radical cure of inguinal hernia. To suture the margins of the crural ring to each other, or to Pott's or Gimbernat's ligament, as in the older operations for the radical cure of femoral hernia, would be analogous to suturing the margins of the external ring in inguinal hernia after ligating the neck of the sac and leaving the latter in the inguinal canal, without attempting to obliterate the canal itself. This, as you can readily see, would be a serious error, and likely to lead to a recurrence.

In order that the closure may be sufficiently solid, it is advisable, although not always necessary, to re-attach the superficial layer of the fascia by means of sutures to the aponeurosis of the external oblique. (Fig. 7.)

The remainder of the wound is now closed. If the superficial fascial structures reflected from the abdominal wall to those of the thigh present themselves with well-marked edges, these may be sutured separately with a continuous catgut sut-

ure. Usually, however, these may be disregarded and the skin-wound closed at once. This may be done by any method which the operator may fancy. To employ drainage is an acknowledgment on the part of the operator that the demands of asepsis have not been fulfilled.

In closing the wound I have derived great satisfaction from the use of the subcuticular suture employed after the Franks-Marcy method. This is applied by catching the skin upon its under surface and about three-sixteenths of an inch from the edge, with a curved needle armed either with silk or linen thread. I employ the latter on account of its smooth surface, which facilitates removal. The direction taken by the needle is parallel with, and at right angles to the skin edge. Care should be exercised not to pass the needle through the entire thickness of the skin, as this would defeat one of the principal objects of this method of applying a suture, namely, the avoidance of the risk of infecting the suture line—an infection likely to follow in cases in which bacteria, impossible of destruction by the ordinary methods of disinfection, exist in the outer layer of the skin.

The stitch is passed back and forth across the gap from one edge of the skin to the other, the loops being drawn taut every two or three turns of the suture, until the wound is closed. Sterilized gauze dressings are applied, and the whole secured in position by a spica bandage. In children, in whom restlessness may disturb the dressings, a plaster-of-Paris spica may be supplied for additional security.

The patient should be kept in the recumbent position for at least fourteen days, at the end of which time some freedom of movement may be permitted in the upright position. The subcuticular suture is removed at the end of ten days by simply drawing on one of the free ends. A spica, with an underlying supporting pad of gauze, may be worn for two or three weeks longer. A truss should not be worn.

THE LANCET

IMPORTANT LEGAL DECISION

A legal decision of great interest to the medical profession has just been given in the Court of Queen's Bench in this city. The case was an appeal from a judgment given in the County Court, in *Dixon vs. Heatley and others*. The plaintiff, Dixon, got judgment in several cases. But on bringing these parties up on judgment summonses Judge Walker held that as Dixon was only the assignee of the tradesmen to whom these debts for necessities were due, as such he was not entitled to issue judgment summonses, and dismissed the cases. The test case for the appeal was for a debt due to Dr. Macdonnel and assigned by him to Dixon. In his ruling, the learned judge says:—"The act provides that any party having an unsatisfied judgment, or order for the payment of any debt incurred for necessities, may procure a judgment summons. Parties to whom such debts are due are now authorized by law to assign them, and their assignees are entitled to recover judgment thereon. They constitute property which the merchant or other supplying them the necessities should be allowed to deal with fully, and which circumstances, induced by failure of his debtors to pay their debts, may oblige him to raise money upon." Judge Killam allowed the appeal and referred back the summons to the County Court for hearing. Medical men are not tradesmen, but the law very logically allows that medical care and attendance is embraced under the heading of necessities of life. If a person requires medical aid, and is unable to pay for it, public charities for the relief of his sufferings are open to him. But any one summoning medical aid is responsible pecuniarily for the services rendered, and, what is more, it is the duty of every medical man, a duty which he owes to his professional brethren, to send in all his accounts, compel those that can pay to do so, and to

those who are objects of charity send in the account, but let it be receipted. The laxity of medical men in rendering their accounts has been taken advantage of by many to cheat the doctor, and they become such adepts at the business that they go the rounds of the profession without the slightest intention, much less desire, to pay for the services rendered. When one physician tires of unremunerated work, they transfer their undesirable patronage to another, and thus go on from year to year. Very strict attendants at their places of worship, and not improbably the loudest performers in the hymn service, but nevertheless at heart dishonest. The disinclination of the profession in Manitoba to sue for the recovery of fees is well known, and largely taken advantage of.

Medical men occupying high professional positions in Europe do not hesitate to employ legal measures in recovering fees justly due to them, and there is neither reason, common sense, or justice in not doing so in every part of the world. Every medical man during his active life does a great deal of gratuitous practice, the only profession that does so. It is then but fair and just that those who are able to pay should not in any instance hesitate to do so. At the next meeting of the profession Judge Killam's decision and a rule for the combined action of the profession in the province will be a very fitting subject for discussion.

Mr. Thomas and Mrs. Wilson, formerly connected with the Grand Union hotel, and after the destruction of that premises with the Manor house, but who have been living in Mine Centre for some time, returned to the city about two days ago. Wednesday Mrs. Wilson complained of a pain in the groin, which had previously troubled her in Mine Centre and where she procured a prescription for a medicine, small tablets, containing morphine. Mr. Wilson had the prescription re-filled by a local druggist Wednesday

afternoon, and some time after Mrs. Wilson was found in an unconscious condition, when Dr. Neilson was called in. On examination only one of the tablets could be found, so it is inferred that Mrs. Wilson swallowed five. The lady never recovered consciousness and died about 3 o'clock yesterday. Coroner Benson was informed of the matter, and did not think it necessary to have a post-mortem examination. Deceased was 36 years of age, and a native of Prince Edward County, Ontario, and the remains were shipped there at noon yesterday by Thomson & Co., Mr. Wilson accompanying the body east.

The above appeared in an October issue of the Free Press, and it is presumed to be an accurate report of the case. Could there be a more lamentable instance of the suspension of justice towards the public, the relations and all parties concerned? The cause of death was inferred, save that the woman was dead (and it is to be hoped of this there was no doubt). What the cause of death was gives unbounded scope for the proverb, "Quot Homines tot sententie." The grounds, or rather want of grounds, of this inference as to the cause of death in this case, boiled down, are as follows: A woman suffers from some internal pain, for which she is supposed to have been ordered morphia, which presumably relieved her. After a journey to Winnipeg she is seized with similar pain, and it is supposed sends for the same prescription. Again it is supposed that she took the medicine, and shortly after, the time is not stated, she was found in a dying condition. It would appear from the newspaper report that six tablets were purchased, and as only one could be found, it was again supposed that she took the other five. There is no evidence that her death was caused by morphia poisoning further than the unconscious condition she was found in. There is no evidence that the five tablets, if she did swallow them, was a toxic dose. There was no evidence that the prescription was

properly dispensed. As the woman was consigned to the grave on mere conjecture as to the cause of her death, the public may, on the same grounds, infer that the tablets ordered were the usual ones, which contain from one-eighth to one-quarter of a grain of sulphate of morphia. Even five lozenges, containing the latter quantity of a quarter grain each, though dangerous, would, with prompt measures after swallowing, not necessarily be a fatal dose. With an eighth of a grain it would certainly, except some idiosyncrasy existed, not be so. Again, would any medical man order quarter grain doses of sulphate of morphia without warning the patient of their action, and strictly limiting the number that could with safety be taken in a given time? This lady was not taking the drug for the first time, and must have known its effects, and therefore, unless for an intentional purpose, it is not likely she would have swallowed five out of six of the tablets at one time.

In our October number we drew attention to the culpable neglect of holding inquests in this province, and in a few days afterwards this glaring instance startles the public mind. Here is a case where there might have been foul play. Medicine might have been wrongly dispensed. Was the tablet analyzed to ascertain the amount of morphia contained in it? The deceased may not have died from the effects of this poison. The cause of her death is a matter of supposition. It is possible, nay probable, that the supposition was correct. But when the loss of human life is concerned, inference or supposition, when direct evidence is attainable, should never satisfy the authorities, and never will content the public.

The coroner's inquest is one of the public's most valuable safeguards, and its abeyance in this province is to be deplored and condemned. We do not blame the coroner, as we are aware he is unable to exercise his own judgment. But it is to be regretted that any member of our profession will hold the office under

the humiliating conditions prevailing in Manitoba.

In an editorial in the July issue of this journal, criticizing a letter of Dr. Patterson's, the sentence, "We are aware that Dr. Patterson is adverse to helping young men in their first start in life," was intended to apply solely to the suggestion, that the proposed bonus of \$400 a year to the Victorian nurses should be given to a young medical man to induce him to settle in a sparsely settled and out of the way district. Dr. Patterson considered, and so stated, that in his opinion the nurse scheme was the most preferable, and was adverse to bonusing young medical men instead of nurses, grounding his opinion on the assumption that there were too many medical men already, and that such a scheme would interfere with those now practising in the province. In no other connection was the above remark made, and though we differ entirely with Dr. Patterson on this question, we would be sorry that any remark in our editorial columns should admit of misconstruction injurious to a brother professional.

MISCELLANEOUS

ADHESIVE PLASTER FOR STITCH IN THE SIDE.

Solberg (*Norsk Magazin for Lægevidenskaben*, 1896, No. 9; *Deutsche Medizinisch-Zeitung*, August 5, 1897,) reports that, in a case of pneumonia with severe pain in the side in which he could not resort to the injection of morphine, he applied a strip of adhesive plaster, and the result was surprizingly prompt, as in cases of fracture of a rib. He has since employed the plaster in six other cases of severe pain in the side occurring in the course of pneumonia. In four of them, in which the inflammation was in the lower lobe, the improvement was not-

able. In another case, in which the "stitch" was really in the scapular region, alleviation was effected by applying the strip of plaster directly beneath the axilla. In the sixth case, in which the "stitch" was not severe and the strip was removed at the end of a day because the patient felt a little constrained by it, it was applied again at the patient's request. Even the dyspnoea and the cough seemed to be mitigated, according to Solberg's observation and the patient's own statements. The strip used was of American adhesive plaster, not more than an inch and a half wide, applied as in cases of fractured ribs.

THE PREVENTION OF GONORRHEA

A. Neisser recommends the method proposed by Blodasewski. It consists in instilling (not injecting) a few drops of a 2 per cent. solution of nitrate of silver into the meatus after coitus, a drop also being allowed to flow over the fraenum. Experiments have shown that a 2 per cent. solution of silver nitrate kills the gonococcus.—*Medical and Surgical Reporter*.

THE ACTION OF SULPHATE OF QUININE AS AN OXYTONIC.

Sulphate of Quinine (Schwab, *L'Obstetrique*, February, 1897,) is considered by many authorities to have a distinct effect in increasing the contraction of the uterus during labor. Schwab states that in every case in which he has given it for uterine inertia contractions have rapidly come on. He records two cases in detail. In his opinion the drug is a powerful stimulant to the uterine muscle. It is only efficacious, however, during labor, and whilst contractions of the uterus are going on. It will not bring on labor or abortion. The contractions set up by quinine are intermittent, thus preserving their physiological character, and hence there is no additional risk to the mother or child attending its administration. The amount should not be less than fifteen

grains, given in two doses, at ten minutes interval. The effect on the pains is produced in 20-30 minutes. It may be prescribed with benefit during the weak pains in the first stage of labor, and more especially in cases of premature rupture of the membranes. M. Schwab has also given quinine in cases of retention of the placenta after labor or abortion. In three cases quoted the placenta was expelled a short time after the administration of quinine.—*Medical Chronicle*.

A FRENCH SURGEON ARRESTED FOR NOT DISINFECTING HIS INSTRUMENTS.

Dr. Laporte, who is known to many American tourists as having spent ten years of his professional career on board the French line of transatlantics as ship's surgeon, has been arrested for performing a surgical operation upon a lady with instruments that had not been properly disinfected. It is true that the patient has been ill of blood-poisoning, but until his arrest few people even in the medical profession were aware of the existence of any law exacting the disinfection of a surgeon's instruments before he used them. The offense is a technical one, and is punishable by two years' imprisonment. The Parisian hair-dressers and barbers are up in arms against the Prefect of Police, who is endeavoring, on the demand of the government hygienic council of the Department of the Seine, to enforce an equally peculiar law providing for the cleansing and disinfection of combs, razors, powder puffs, brushes, sponges and scissors before use on each individual, the object of this grandmotherly regulation being to prevent the propagation of microbes and germs of disease. The Parisian barbers declare that they have neither the time nor the inclination to obey the order, and that sooner than conform thereto they will strike and leave the male portion of the population of the most elegant metropolis in the world to go unshaven and unshorn. It is felt there that while there is a certain amount of justice

in the arrest of Dr. Laporte, the authorities are going too far in endeavoring to enforce the regulations concerning the barbers, whom it is moreover injudicious to antagonize, since these shops and establishments constitute the scene of so much political discussion and gossip.

THE LIGHT RAYS OF THE FIRE-FLY (SPECIES ?)

Prof. Muraoko, a Japanese savant, has communicated to *Wiedemann's Annalen* the results of some observations made on the light emitted by the firefly. He finds that this light, if transmitted through black paper, acquires properties similar to those of the X rays. Like the Becquerel, they are intermediate between the X rays and the ultra-violet. The firefly rays are capable of reflection, but whether they are susceptible of refraction, polarisation, and interference, it has not yet been demonstrated.

In a recent editorial in the *Denver Medical Times*, Dr. T. H. Hawkins prophesies evil things about the future of his state if the present influx of consumptives continues. He appeals to the people to have such laws passed as will benefit not only the consumptives but also the healthy persons with whom they come in contact. He says if some measures are not taken to guard the people from infection, "Colorado will become a pest-hole and a most thoroughly undesirable place of abode."

A sensational story has been started by a New York daily to the effect that Henry M. Stanley is gradually turning black—becoming a negro in fact! That his skin is already a mulatto-colored and taking a deeper hue daily. It is added that "this remarkable occurrence is attributable to the transferring of African (negro) blood into his veins on several occasions, while in the wilds, for the purpose of immunizing him against the dense miasm so prevalent in the low lands of the Dark Continent."—*Medical Times*.

PHARMACEUTICAL

We would suggest to the Pharmaceutical Association of Manitoba that they should seek an amendment to their Act at the next sitting of the Local Legislature. Inasmuch as they acquire their profession at considerable outlay of time and money, and, further, have to pay certain yearly fees. It is unjust to admit storekeepers and grocers to vend medicines, proprietary or otherwise, without first obtaining a license so to do. These medicines frequently contain ingredients of a poisonous nature, of which the storekeeper is, of course, unaware. We believe the Pharmacists have a good case to present to the Legislature, and if properly conducted it would be attended with success.—Ed.

THE PHYSICIAN AND PROPRIETARY MEDICINES

The paper read by Dr. Fotheringham at the recent B. M. A. meeting, is one which should be carefully perused by every physician and pharmacist. The sentiments expressed with regard to the flood of specialties now on the market will appeal to every druggist as being eminently fitting to the occasion.

There can be no doubt that the art of prescribing, and the knowledge of materia medica and therapeutics, are gradually becoming beyond the reach of the average physician, since all the labor of prescribing has been taken out of his hands by the enterprising manufacturer, who puts into the hands of the physicians ready-made prescriptions to suit any and all cases.

But it is particularly the relations between the pharmacist and physician that are of most interest to us. Dr. Fotheringham says: "When we specify the name of any maker we might, so far as the proper function of the chemist is concerned, just as well have the prescribed

article sold at the grocer's, as the chemist's function becomes purely mechanical, and by this habit, we are assisting in placing ourselves more fully in the hands of the manufacturers, and in killing off our best assistant, the retail chemist." Again: "What I wish to point out is that the interest of the physician and his patients are usually more nearly identical with those of the retailer than with those of the large manufacturer, and that while in regard to certain preparations we cannot dispense with the services of the wholesale manufacturer, we need not, therefore, transfer our whole patronage to him and force the retail chemist to be merely a handler of the goods of his richer rival." This is sound common sense, but, unfortunately, many physicians do not see it in the same light, with the result that they are simply tools in the hands of manufacturers, and have lost all right to the name of physicians.

There is no doubt that much of the advances in therapeutics in recent years is due to the enterprise of certain manufacturing houses by the introduction of new drugs, upon which they have spent large sums of money: but there is one class of concerns which prey upon the gullibility and ignorance of physicians—concerns which, by their push and enterprise, have foisted worthless or simple mixtures of well-known drugs upon the profession as wonderful "coal tar compounds of the benzene series," ammoniated, phosphorated, and various other high-sounding titles, the basis of all of which is simply acetanilid with ammonium carbonate, etc., which are valuable only to the manufacturers: or the host of preparations ending in "ine" or "ol," sold with labels on which appear so-called formula specially designed for the purpose of misleading the physician ignorant enough to prescribe them. These are preparations to which physicians should give a wide berth, and the sooner this matter is taken up and acted upon by medical societies the better it will be for medicine in general. — *Canadian Pharmaceutical Journal.*

ON THE THERAPEUTIC PROPERTIES
OF ALCOHOL

By S. N. Davis, A.M., M.D., LL.D.

Purely ethyl alcohol, undiluted, is regarded by all chemists and intelligent physicians as an active poison, rapidly destructive of both vegetable and animal life whenever brought into contact with either. The presence of absolute alcohol in contact with any living tissue immediately arrests all natural metabolic and vital processes in such tissue, and causes it to become corrugated or shrunken and dead. Swallowing absolute alcohol, undiluted, as quickly destroys the vitality of the membranes of the mouth, throat and stomach, and kills the individual, as does pure carbonic acid. Consequently, alcohol, in its pure and undiluted state, is not capable of being used as a medicine, but when largely diluted with water, as it is in all the fermented and distilled beverages, its direct corrosive or corrugating effect upon the membranes it comes in contact with is so much diminished that it is capable of being absorbed and conveyed in the blood to all parts of the living body. In this diluted condition, therefore, it early begins to be used both as a medicine and as a popular drink; and as the most readily appreciable effect was to diminish the individual's consciousness of impressions, not only from without, but also from within, it soon came to be regarded as a universal tonic and restorative. Its supposed tonic and restorative effects were based wholly on the sensations and movements of patients or individuals under the influence of moderate doses, for it soon demonstrated that large doses directly diminished strength, sensibility and action. But when, under the influence of moderate doses, the patient said he felt less weak or weary, felt the sensation of cold or heat as painless, felt lighter or more buoyant, and his heart was found to beat faster, it was perfectly natural for both physician and patient to think the alcohol was acting as a tonic or stimulant and general restorative. It was not until the advancement in analytic

chemistry and the physiology of all parts of the nerve structures of man, coupled with the researches in physics and biology of the last half century, that we have had it in our power to prove the incorrectness of these conclusions founded on the sensations and actions of the patient under its influence. The more recent chemico-physiologic researches have shown clearly the composition of the blood and the various tissues of the body, and especially the existence and functions of the hæmoglobin, leucocytes and other corpuscular elements of both blood and tissues, and the part each plays in the reception and internal distribution of oxygen, with its effects on all the metabolic changes in living bodies. By the same class of researches it is shown that alcohol, diluted with water and taken into the stomach, is rapidly absorbed by the capillaries and is conveyed in the blood to every tissue in the body, and by its presence retards the natural metabolic changes, lessens the processes of oxidation and elimination, diminishes nerve sensibility and, when repeated from day to day, induces cell and tissue degeneration. By the more recent studies in the anatomy and physiology of the several parts of the nervous system, it has been shown not only that the action of the heart and the movement of the blood in the vessels are directly under the control of the cardiac and vasomotor nerves, some of the fibres of which are exciters of action, while others are inhibitors, by which uniformity and harmony is maintained in the circulation of the blood, but also that our voluntary movements and sensations are manifested by the cerebro-spinal nerves, having their exciters and inhibitors by which we are enabled to co-ordinate muscular contractions and relaxations in executing all complex movements, and equally so it is that our mental actions, manifested through the convulsions of the brain, are regulated by exciters and inhibitors. Every individual whose brain is in its normal condition has frequent sensations, impulses or exciters of mental actions which he promptly inhibits or dis-

regards. Indeed, it is on the proper development of this mental inhibition that every person's self-control and sense of propriety depends.

If it is true, as has been already stated, that alcohol, when taken into the living system in large doses, is an active poison, quickly destroying animal life, and in smaller doses is an anaesthetic, directly diminishing cerebral sensibility and mental consciousness and retarding all metabolic changes, both in the blood and tissues, it follows as a logical and necessary inference that, if administered as medicine, it should be done with the same care and exactness in regard to purity, dose and time that we exercise in prescribing morphine, quinine, aconite, arsenic or any other active drug. This cannot be done by using any of the various fermented and distilled liquors ordered either from drug stores or liquor dealers, since they are kept at no uniform standard of either strength or purity. The present Pharmacopœia recognizes as medicines, *vinum* or wine, *spiritus frumenti* or whiskey, and *spiritus vini gallici* or brandy, but does not give a definite official standard of alcoholic strength for either of them. Neither does it give any reliable and readily available tests by which the strength and purity of the articles can be determined by the ordinary practitioner of medicine. Repeated analyses have shown that the amount of alcohol in different samples of wine varies from 6 to 25 per cent.; in whiskey, from 35 to 50 per cent., and in brandy, from 40 to 60 per cent. Such variations in the strength of any other medicine would quickly cause its standard to be corrected, or its exclusion from the official list of drugs. As alcohol is the only important therapeutic agent in all these liquors, why not let pure alcohol of fixed strength be officially recognized to the exclusion of all the varieties of both fermented and distilled drinks? Then every practitioner desiring to give alcohol as a remedy could order it with any desired degree of dilution with water, and he would know what his

patient was getting and how much, and the pharmacist would no longer need to pay for a license to sell liquors, or to be classed with the ordinary dealers in such beverages. One of the most important improvements in modern pharmacology consists in the separation of the active therapeutic agents from the more complex or crude drugs, and thereby enables the physician to administer them with far greater convenience and certainty. Very few intelligent physicians of the present day would think of prescribing crude opium when they desired to produce only the anodyne effects of the morphine it contained, certainly not without knowing what per cent. of morphine would be in the crude drug. Why, then, should he prescribe the uncertain mixtures called beer, wine, whiskey or brandy, when his sole object is to obtain the therapeutic effects of alcohol? If it is claimed that these several fermented and distilled liquors contain other therapeutic agents in addition to the alcohol, we answer that, so far as any such agents exist, their proportionate quantity and quality are far more variable and uncertain than is their per cent. of alcohol. Almost the only constituents found in whiskey and brandy, besides the alcohol and water, are very variable quantities of fusel oil, tannin and, in very old specimens, a trace of some ethereal substance to which connoisseurs attribute the special bouquet. So far from adding to the therapeutic value, the first two substances are regarded as very undesirable impurities, and the last named has never been isolated in sufficient quantity to have its medical qualities tried. Much has been said and written concerning valuable nutritive constituents in the different varieties of wine, but the numerous analyses on record show only very variable quantities of fecula, saccharine matter, tannin, some vegetable acids and potassium salts, in addition to the alcohol and water. Of these extra ingredients the fecula and saccharine matter are the only ones that could be classed as nutritive or capable of being converted into

any natural element of the blood or tissues of the body.

The quantity of these in any variety of wine is so limited that it would require several barrels of the wine to furnish the equivalent of a pound of bread. Consequently, it would be far more economic, as well as scientifically accurate, for every physician to prescribe such doses of pure alcohol and water to be given with such quantity of sugar, milk or meat broth, as he thought his patient might need. The physician who cannot do this, and thereby accurately adjust the proportion of all the elements his patient may need, has certainly received a very defective professional education. It would be a long and very important step in advance, both in the interests of scientific accuracy and of humanity, if all physicians, when they thought alcohol was needed, would prescribe it in the manner just indicated and if in the next revision of the Pharmacopœia, only alcohol of standard strength was retained to the exclusion of all fermented and distilled liquors. If these changes were adopted and carried into general practice, the result would be a more complete separation of both pharmacist and physician from connection with, or responsibility for, the general traffic in and uses of the various alcoholic liquors in popular use.—*Journal of Pharmacy.*

THE DRUGGIST AND HIS LIMITATIONS

No greater responsibilities rest upon any member of a community than upon the druggist. On his skill and care both physician and patient implicitly rely. So well recognized is this that the State has assumed the power to determine who shall and who shall not perform the duties of the position. But he has, or should have, his limitations. The determination of what should be given to a patient and in what doses, rests with the physician, and with this the druggist has no more to do than has the driver of the doctor's carriage with carrying out his

orders to drive to a given locality. If the druggist thinks that the doctor has made a mistake in his dosage, it is his duty to call the attention of the prescriber to the matter and to wait for further instructions, just as it would be the duty of the driver to notify his employer if he had directed him to drive to a house and in the only road leading thereto was a dangerous excavation. The druggist would not escape censure if he recognized the doctor's error and put up a fatal dose of medicine, nor would the driver be exonerated if he knowingly jeopardized the life of the carriage's occupant. But beyond acting in such rare instances, the druggist should not go; he has his duties, but, important as they are, they are limited.

We are led to make the above remarks because we are informed that some pharmacists of the city feel it to be a part of their duty to caution patients as to the necessity for care in taking physicians' prescriptions which they have compounded for them, and which contain what they regard as dangerous ingredients. One physician lost a family because, having occasion to prescribe strychnine for one of its members, the druggist told the one who called at the pharmacy to have the prescription compounded to be careful, as the mixture contained strychnia, which was a poison; and this, too, when the dose was far below the maximum. If the druggist has any doubt in his mind, let him call for instructions from the doctor, but let him also bear in mind that, having received the doctor's further instructions, he is relieved from all responsibility. If an error has been made by the physician, he will be only too grateful for having his attention called to it in time to have it rectified, but if druggists are to caution every one for whom poisons are prescribed, we fear that with our present *materia medica* few mixtures will be dispensed without a caution. It is the duty of the physician to prescribe the remedies, and that of the druggist to carry out the physician's instructions. Both duties are too important and too serious to be

expressed in words, but they are distinct.
—Brooklyn Medical Journal.

ANALYSIS OF A BLACK SILK DRESS

By Dr. T. L. Phipson, formerly of the University of Brussels and the Laboratoire de Chimie Pratique, Paris.

A lady paid a visit to my laboratory a short time ago and enquired whether I had ever made an analysis of a black silk dress. I confessed that among the many hundreds of various things examined in the course of a long series of years, I had only been called upon hitherto to discover the nature of certain poisonous colors applied to silk gloves and silk stockings, but I could find no analysis of a silk dress on my books.

Nevertheless, my fair visitor was anxious that I would undertake this analysis for her, and also expressed the desire that I would publish the results in the *Chemical News*, a journal which, she said, she was in the habit of reading.

Her husband was interested in the silk trade, but had little knowledge of chemistry, whilst she herself had gone through a course of practical science, and wished to convince him that the value of silk material might be ascertained by analysis. She explained, moreover, that the material she placed in my hands was intended for a silk blouse, that it was a medium quality of silk (neither the most expensive nor the cheapest), and she had heard that certain black silks, when stored in large bulk, in dry hot weather, were liable to spontaneous combustion, that two such cases were already known (one in Paris and one in New York), and she was therefore anxious that her husband should increase his insurance upon his stock of silk goods.

The following days I devoted myself to the work in question, and I found that the material contained a very large amount of substance that was not silk at all; in fact, that it was considerably "weighted," as all silks are to a greater or less extent. It would not burn with flame, but smouldered away like tinder,

and left a large amount of ash, the principal ingredient of which was oxide of tin. Indeed, I have examined specimens of poor tin ore from Cornwall that did not contain more tin than this material for a lady's blouse; and I at once realized the fact that the silk dresses worn by the ladies we see daily parading in Regent street and Bond street, taken together, would represent a Cornish mine of very fair quality.

But this enquiry has brought to light a new and powerful application of chemical analysis—already one of the greatest powers in the hands of man—namely, that the duration or wear of a silk dress can be determined by analysis. It used to be said that a garment of pure silk would last a lifetime; but I happen to be acquainted with a very clever young milliner, who has assured me that the silk material I have examined, if worn every day, would not last more than three months—meaning, of course, that by that time it would be "utterly shabby, greasy-looking and showing the threads."

The figures obtained in my analysis are as follows:—

Water	11.43
Ash (mostly tin oxide and silica)	14.30
Real silk	28.14
Organic matter, etc., not silk	46.13
	100.00
Nitrogen	4.76

The weighing of silk is now carried on to so great an extent in France, Germany, and Switzerland, that some foreign silks get shabby with a few weeks' wear; and we are seriously told that the public prefer these cheap products, as the fashions of jackets, blouses, and skirts change so rapidly that it would be useless to purchase silk of better quality!—*Chemical News*.

SYNTHETIC REMEDIES

Lactophenin, according to Dr. George Thompson (*Universal Medical Journal*, August, 1897), possesses several advantages over phenacetin. As is well known, lactophenin is a definite chemical com-

pound, differing from phenacetin by containing lactic instead of acetic acid. The substitution of lactic acid, it is claimed, overcomes almost entirely the possibility of cardiac depression or the conversion of haemoglobin into methaemoglobin, an attribute only too frequently met with in antipyrine, acetanilid and phenacetin. As an analgesic it is equal, according to the author, to the best pain reliever in the materia medica, and it may be given with confidence in any neuralgia from any other cause than traumatic.

Thiol has been found by Dr. Wirz (Deut. Med. Wochenschrift, July, 1897.) to be superior to ichthyol in some hundreds of cases. It is odorless, so that patients who could not bear the odor of ichthyol improved under thiol. It can be used in every description of inflammation, in carbuncles, erysipelas, typhilitis, furunculosis, etc. The best results are obtained with liquid thiol as supplied by the manufacturers, not by that prepared from powdered thiol with an addition of water.

THE STRYCHNIA CURE OF ALCOHOLISM AND THE OPIUM HABIT.—Dana (*Post Graduate*, Vol. XI, No. 7,) publishes an interesting account of the plan followed in the alcoholic wards of Bellevue Hospital in the treatment of alcoholism and the opium habit. Selected patients after having passed through an attack of acute alcoholism, and are convalescent, are allowed to remain two days and take the "cure." Only persons who have reasonable intelligence and who show evidence of sincerity are chosen.

The following solutions are used :

(1) ℞ Strychnia nitrat., gr. $\frac{1}{15}$.
Atropia sulph., gr. $\frac{1}{300}$.
Aqua destil., m x.

M. Sig. Inject t. i. d.

First day injection.

(2) ℞ Strychnia nitrat., gr. $\frac{1}{10}$.
Atropia sulph., gr. $\frac{1}{200}$.
Aqua destil., m x.

M. Sig. Inject t. i. d.

Second day injection.

(3) ℞ Tinct. cinchonæ comp., m xv.
Tinct. capsici, m ss-j.
Tinct. solan corollineus m ij.
Vini ferri amari, q. s. ad ℥ j
M. Sig. Mistur. stomachic. Shake.
℥ j t.i.d.

One-half to one glass of milk (hot or peptonized), alternating with hot beef tea, is given every two hours. The first and second nights, if necessary, the following is given:

℞ Potass. bromid., gr. xxxij.
Chloral hydrat., gr. xvj.
Tinct. valerian, ℥ j.
Aque, q. s. ad ℥ iv.

M. Sig. ℥ j, repeated once, if needed.

The patients are given the injections 1 and 2 and "stomachic," 3, three times a day, with abundant nourishment, washing out the stomach, if necessary, to remove catarrhal accumulations.

The patient, during the treatment, is made to understand distinctly that he is taking a "cure," with all that that implies, but no mystery is made of its character or of the means used.

After the second day he is discharged. In most cases his craving is gone, but this generally occurs after a debauch. In fact the natural history of periodical alcoholism is that craving ceases at the spree from one to nine months.

On being discharged the patient is given the following mixture :

Tinct. Colomba, loz.
Tinct. Capsici, m xv.
Tinct. Nucis Vom. Drms. 9.
Apomorphine gr. $\frac{1}{2}$.
Tinct. Cinchon Co. oz. iv.

One teaspoonful three times a day for one month, and at once whenever craving develops.

TEST FOR FORMALDEHYD.

L. Kentmann (*Pharm. Gen. Anz.*, 1896, viii, 356.). If the suspected liquid is floated on an equal volume of a solution of 0.1 gram. of morphine hydrochloride in 1 c.c. of strong sulphuric acid, a red violet color is produced within a few minutes, provided the formalin exceeds one part per 6,000.—The Analyst.

Manitoba Medical College

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IN AFFILIATION WITH THE UNIVERSITY OF MANITOBA.

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