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# THE CANADA MEDICAL RECORD.

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### *Original Communications.*

#### LETTER FROM THE HUB.

*Editors CANADA MEDICAL RECORD.*

DEAR SIRS:—A hospital is not only an indication of the liberality and benevolence of the inhabitants of a city, but also a good means of judging of the standing of its medical fraternity. If it be well appointed and arranged, and thoroughly up to modern requirements in its internal management and detail, if it be all that a hospital should be in everything that goes to make up a hospital, then will the medical profession be of equally as high a standard. It has been said that it is the medical men that make the hospital, this cannot be gainsayed; but I think the hospital does a great deal in making the medical men. Honors are about even, however. Distinction is conferred in both cases. Judged in this light the citizens of Boston have reason to be proud of the efficiency of its hospitals and the high status of its medical men. I shall refer to the medical profession anon, and wish at present solely to confine myself to the hospitals. Boston has a goodly number of hospitals and dispensaries. It would be scarcely possible within the limits of a letter to do justice to them. I can, therefore, but mention their more prominent features. The Massachusetts General is the oldest hospital in Boston. It dates a great many years back, in the small numbers of the century. A great many of the most eminent physicians and surgeons in Boston have gained their experience there. The main edifice is a large grey stone building, with a portico in front

supported by massive ionic pillars. This is the original building of the hospital, and although of a considerable age, it has not become "dim with the mist of years," but its stonework looks as fresh, I should think, as the day when it was first erected. While we must call, in the strict sense of the word, the Massachusetts an old hospital, yet it has had so many additions and improvements that it has become a thoroughly modern one, equipped according to the latest views. New wards have been built and the old ones renovated. The main building (the old part of the hospital) consisted of one long building without any wings; now there are several other buildings, each entirely separate and connected with the others by passageways, whose sides consist of a series of glass windows making them light and cheerful, in which convalescent patients sometimes sit. The hospital contains over 200 beds. It is controlled and supported by private individuals. It is wealthy and excellently managed. The wards are large, well ventilated and kept scrupulously clean. In the main building the larger wards have a large chimney in the centre with grates. The bath-rooms and lavatories are well isolated from the wards, and perfect in their appointments and conveniences. A small kitchen is attached to each ward, to which the meals are brought from the main kitchen and distributed to the patients. The floor and stairs of the two main halls are of stone, and reminds one somewhat of some ancient castle you might see in Great Britain, such as the Tower of London, etc. There is an elevator in the main building. There is one ward consisting of a series of separate rooms. Noisy or troublesome, and

contagious or infectious patients are kept there. On either side of this ward are glass sitting-rooms, which make it extremely cheerful for the patients. The Massachusetts seems to have solved the difficulty of heating hospitals in winter. The wards are heated by steam by indirect radiation, the corridors by direct. There is a large engine room with several huge boilers in it. This supplies steam to all the hospital by a network of pipes running beneath the floor of each ward. Registers are distributed over the wards. Hot or cold air can be had at will. The temperature can be regulated to a nicety. In the London hospitals the open grate is the means used for heating, which is not only the best way of heating but also of ventilating. This is all very well for the mild winter of England; but in a country where Jack Frost reigns supreme it is out of the question. It would well repay those thinking of building or improving a hospital to make a visit to the Massachusetts and get an insight into its facilities for heating. The out-patient department and amphitheatre are in a separate red brick building of two stories. All the various divisions of medicine have a separate room, the women are separate from the men. There are large waiting-rooms for the patients. The operating theatre is capable of holding 400 students. It is well equipped with instruments; Bigelow's apparatus is to be seen here, and is in frequent use. Under one of the cases may be seen an object of considerable historic interest, to wit, the sponge with which ether was first administered. On one side is the Etherizing room, and leading off this are several rooms in which patients are put until they come out of ether. Saturday is the regular operating day, at 11 o'clock. The first row of the amphitheatre is reserved for physicians. The most noted operators here are Homans, Porter, Warren, Beach, Cabot, Richardson, etc.

The main kitchen and laundry are in a separate building. During the past year 2,327 patients were treated in the wards, and 17,016 in the out-patient department. The skin, the throat, eye, ear, gynaecology, etc., are all well represented. Dr. J. C. White has his famous skin clinique at the Massachusetts. There is a considerable ground around the hospital, a neat lodge marks the entrance. A training school for nurses is connected with the hospital, nurses are also specially instructed in the care of the insane, the McClean Insane Asylum being connected with the hospital.

The City Hospital is considered by many the finest in Boston. It certainly is the largest. It is built on the pavillion system, and is situated on Harison avenue, New Worcester square. It has a very imposing appearance as you approach it. In the centre is a square building with a fine dome. The view from this is superb. It has a large portico with corinthian pillars. There are also corinthian pillars at the back. Massive stone steps lead up to the main entrance. This building is devoted almost entirely to official business. The main hall is spacious with marble floor, on the left hand side is the reception room, on the right the superintendent's and the assistant superintendent's office and parlors. Behind these are the dining-rooms and matron's room, on the second floor are sleeping apartments for officials. The operator's room was originally in the Dome; it is still there, but no operations are performed in it. In front of the main entrance is a large piece of ground which in summer is highly cultivated. Leading off this building are two open passageways; that on the right goes to the medical side, that on the left to the surgical. The left leads into a hall from which you enter the amphitheatre; this is well built and holds a large number of students. On the wall hangs a picture of the late Dr. Thorndyke, formerly one of the leading surgeons here. On the ground floor are chairs for the staff to witness the operations. As in the Massachusetts the first row of the amphitheatre is reserved for physicians. The operating tables and mode of carrying the patients to and from the room are perfect. Patients are etherized in a room leading into the operating-room and then brought into the theatre. The surgical instruments are kept in the theatre under glass cases, every instrument desired is at hand. There is a splendid arrangement for irrigating; at the side of the theatre is a shelf on which are placed bottles containing the different solutions used, as carbolic acid, etc. These bottles are connected by rubber tubing to one main tube; this is carried out by means of a brass rod, which is made to swing in various directions and brought right over the operating table, from this hangs the rubber tubing with nozzle, and gives a considerable fall of fluid. By turning the tap connected with each bottle you can have any solution you wish. The conveniences, such as dressings, apparatus, appliances, etc., are everything that one could wish for. Two nurses are in attendance at each operation. After the operation the patient is taken into a

separate room and remains until he recovers from the ether; there are 3 or 4 rooms specially devoted to this, then they are taken back to the wards. Off the operating room is a splint room, containing every variety of splint; there is also in this a carpenter's table and tools to make splints with, etc., as required. It is not unusual to see two operations going on at the same time. Friday at 11 o'clock is the usual operating day, a large variety of operations may be seen here. The surgeons of note are Cheever, Gay, Bradford, Bolles, Burrell, etc., you are almost always sure to see one of Boston's noted surgeons here watching the operations. A list of operations is now posted up at the lodge where you enter, so that you may see the programme for the day. One is also kept in the operating room and checked off as the operations are completed. Listerism is adopted here without the spray. Esmark's band is used for controlling hemorrhage. Patients are bound down to the operating table by a strong leather strap which buckles, it surrounds the limbs and table; this does away with the necessity of having assistants to hold the limbs. In the same building as the amphitheatre is a receiving room for surgical cases, the surgeon's private or consulting room, the house surgeon's waiting-room or library. Another passage-way leads from the building into the surgical pavillion. This consists of three large wards, each containing 28 beds. The wards are beautifully fresh and clean, light, airy, and cheerful, the beds are all of iron; the heating is by indirect radiation. Off each ward are bath rooms and lavatories, hopper closets, places for the dejecta, etc., and guarded with strictest sanitary precaution. There is also a small kitchen, and nurse's room; in the hall are cupboards for keeping the medicine, and a small stock of the most important drugs are at hand ready for immediate use. The surgeons make their visits in the morning at about half past nine or ten; in fact the morning is the time physicians and surgeons do their work at all the hospitals in Boston. Going back to the operating room we leave this building again from the back part by an open passage-way, and come to a surgical ward, the largest and finest in the hospital; this is extremely well ventilated, off this is a plaster room for making bandages, etc., this completes the surgical wards. Starting from the main building again and going to the right we come to the medical side. The space corresponding to the

amphitheatre is occupied by a medical ward. In this building are receiving rooms for medical cases, the physician's consulting room, and house physician's waiting room. Leaving this we come to the medical pavillion, which corresponds in size; number of wards, cleanliness, etc., to the surgical wards. Open landings or bridge-like ways connect these buildings. Leaving the medical pavillion from the top ward, we go to the top story of the first medical building. In this is a large gynæcological ward. Next this is an operating room for gynæcological operations, with 3 or 4 tables in it, and a good assortment of instruments. In this building are a number of private wards for paying patients. Going from the medical building by a landing we come to a large medical ward of 28 beds; this corresponds to the surgical ward in the opposite side; from this we go by an enclosed corridor into a building devoted to isolating wards. There are a series of separate rooms. Two wards are in this building, male and female; from this we go to view the boiler room; immense engines and boilers supply the whole hospital with steam; near this is the morgue where sudden deaths and unrecognized persons are brought. There are several tables with marble slabs on which the bodies are laid. Above is the autopsy room, which is large and well appointed; there is a small museum in this where pathological specimens are kept; autopsies are not as readily obtained as with you. Near this is the laundry, worked almost entirely by steam. After going through a corridor we come to the main kitchen. The cooking is done entirely by men. I was fortunate in seeing it when they were serving out meals. It is managed by the steward, who keeps all the provisions for the hospital, and has charge of the diet table, etc. The ice house and various larders are remarkably neat and well stocked; off the main kitchen is a smaller kitchen, which is used to fill special orders and prepare delicacies for the patients; near this is a large green-house, where plants are kept to supply the surrounding gardens of the hospital. In the summer months there are a number of canvas tents or wards spread over a considerable space of ground, these work splendidly, and are very happy in their results. Two isolated wards for infectious diseases are in course of erection. The total number of beds at present is 425, but when the new wards above mentioned are completed, 60 more beds will be added. In the wards 3,550 patients have been treated, and 8,271 in out-patient department dur-

ing the year, average cost of each patient \$7.64, per week. The out-patient department is small and not in keeping with the other sections of the hospital. They are about to build a new out-patient department. All the branches of medicine are represented. Dr. Williams, Boston's celebrated ophthalmologist, is still attached to the eye clinique here. In the Massachusetts and City hospitals all the various details of admitting and dismissing patients, registration of diseases, etc., are excellently conducted. Each has an ambulance corps attached to it, conducted by a medical officer; each have also large convalescent homes in the country. Connected with the city hospital is a magnificent home for nurses, the finest on this continent. The building is next the hospital and is of fine architecture and admirably fitted out. There is a splendid training school for nurses in connection with the hospital. The nurses resemble those you see in the London hospitals, and are equally as good. The Massachusetts and City Hospitals will compare favorably with any other the world over. There are hospitals larger in size and grander in architecture, such as St. Thomas' in London, the Hotel Dieu in Paris, the Edinburgh Infirmary, etc., but there are none better kept and managed or more thoroughly equipped; and there is a sweetness and absence of odor about them which you do not generally find in hospitals. The staff of each is drawn from the most eminent and rising men in Boston.

The Carney Hospital is situated in South Boston. Its location is the most delightful of any hospital in the city, being on a high hill, and commanding a lovely view of the harbor and surrounding country. It numbers about 150 beds; it is not completed, as yet only a single wing being finished; other buildings are to be put up shortly; the wards are large, well kept, and remarkably well-lighted; they are divided into medical and surgical, it has a good out-patient department; the hospital has a large number of private wards. Boston physicians frequently send their cases there; the air is very pure, consumptives are admitted to the hospital. The Carney may be said to be the cradle of ovariectomy in Boston. There are two special rooms devoted to ovarian operations. Dr. Homans, the eminent Boston ovariectomist, gained his experience here, he does not believe in Listerism. The culinary department and laundry are neat and well attended to. The dispensing is done by the sisters, they also have charge of the hospital; they

are extremely pleasant in showing visitors around. The medical staff consists of rising young Boston physicians.

The Children's hospital has but lately been erected, and is still in an unfinished state, another wing and out-patient building must be added ere it is completed. It contains at present about 60 or 70 beds, it is on Huntington avenue, near West Chester Park; two large wards are completed, when all is complete in will contain 100 beds. These wards are very fine and thoroughly equipped, each contains iron cots whose sides swing out; children are admitted from two years old to twelve. During the last year the number treated at the out-patient department was 908. At present the out-patient department is in the basement. The hospital has a nice little operating room, with etherizing and recovery rooms, and well filled dispensary. Although all the large hospitals in Boston have fine dispensaries attached to them, it is not required that Harvard students should go through a course of dispensing before graduating. This is compulsory in all English schools. It seems to me that a knowledge of the various medicines, their doses and how to put them up is a very necessary thing for a practitioner. The Children's Hospital has also connected with it a workshop, where splint and apparatus are made. The fixtures and appointments are of the best, there is a neatness and newness about the whole building. A convalescent home is connected with the hospital at Wellesly. The sisters of St. Margaret have charge of the hospital, it is well supplied with efficient nurses.

The Massachusetts eye and ear infirmary is the finest institution of its kind on this continent, and ranks, I am told, next to Moorfields; it is in a very desirable location, looks on the Charles river, and fronts on Charles St. It contains about 70 beds, and has several large rooms for treating out-patients, each room has one or two dark rooms for ophthalmoscopic examinations. One room is devoted entirely to vision testing; there is a large general waiting room for eye patients. The walls of the rooms are of painted brick. A room is specially devoted to ear cases, with waiting-room outside. In the basement is the Dispensary, upstairs are numerous wards; there is a large and well lighted operating room which commands a lovely view of the Charles river and surrounding country. Several darkened rooms are near this to receive patients after cataract operations, etc.; a large number of

operations are done in this institution. During the past year cocaine has entirely superseded the use of ether. The number of patients treated last year was 12,399, of this 8,558 were eye cases, and 3,261 ear; splendid opportunities for studying the eye and ear may be had here, although little clinical instruction is given. The staff consists of the most noted oculists of Boston. Dr. Hasket Derby, vice-president of the American Ophthalmological Society, is the senior ophthalmic surgeon. Dr. Chandler, a graduate of Bishops College, Montreal, is one of the Assistant Surgeons. The infirmary is excellently conducted and managed.

The Boston Dispensary may be found at the corner of Bennet and Ash St., a new building has been erected at a cost of \$50,000. During the past year 36,956 patients were treated. Two stories of the building are in use, there are 14 rooms devoted to all the different branches of Medicine and Surgery, the eye, ear, throat, disease of the skin, genito urinary surgery, Gynecology, orthopedic surgery, diseases of the rectum, etc., each room has a desk for the physician, a gynecological table, an open fire-grate, electric bell, and chemicals for testing urine and cupboard for coats. The chairs in the room are of the old puritan style, upstairs there is a large lecture room for giving clinics in. In both stories there is a large hall or waiting-room, with benches placed opposite each room, where the patients wait their turn. The women are separated from the men in most cases, The Dispensing room is large and well conducted. Patients pay 10cts for each bottle of medicine, and are given numbered cards for each room. There is splendid material in each department for clinical instruction. Attached to the Dispensary are a number of district physicians distributed over the various wards of the city. They attend the poor at their houses, and send prescriptions to the Dispensary to be made up. The poor of Boston are well supplied with diet, kitchen, etc. By getting an order from a physician a great many of these poor are given blankets, etc.

There is a capital arrangement in the gynecological room classes are held here the greater portion of the year. It is very embarrassing to a patient to confront a large number of students. This is avoided by having an iron bar, running across the middle of the room, to which is attached two curtains which draw together. The students sit behind the curtain and the patients enter in front, where they are placed on the gynecological table

by the nurse in attendance. The table is then pushed between the curtains; these are drawn around her above the hips. She is then examined by the physician and student without seeing either of them.

During the summer months a Polyclinic is established at the Dispensary, courses are given in every branch of medicine and surgery, and may be had by graduates or students at from \$20 to \$25 each course. They extend about six weeks.

The St. Elizabeth is a hospital devoted entirely to woman and her ailments. It is situated on a large square on West Brookline st. It numbers about 80 beds, it has also an out door department, and is splendidly kept.

The Women's Free Hospital admits only women suffering from their peculiar complaints. It has a good out-patient department, contains 20 beds. The Harvard students are instructed in Gynecology by Assistant Professor Baker here; there is also a dispensary for women devoted entirely to Gynecology, and under the care of Drs. Chadwick and Farlow.

House of the good Samaritan.—Through the kindness of Dr. Bradford, the leading Orthopedic surgeon in Boston, I was permitted to see the hospital. It is a small building devoted to two classes of patients, women whose chronic ailments do not permit them to enter the Massachusetts and City Hospitals and young children who suffer from hip or spine disease, club foot, etc.

The Marine hospital at Chelsea receives from the shipping of the port a large number of patients from foreign countries and distant parts of the United States. Good facilities are offered for studying venereal diseases.

The Boston Lying-in Hospital is on McLean St., here every opportunity is given for becoming well up in obstetrics. On Blossom St. is the West End Nursery and Infant's Hospital, here babies and infants are treated. Dr. Haven who has devoted more time to the study of infantile diarrhea and feeding than any other physician in Boston, is in charge here. Besides this, there is a large Infant's Home.

The Boston Lunatic Hospital is in South Boston, it is capable of admitting 200 patients.

The above mentioned are the principal hospitals and dispensaries of Boston, but there are numerous other charitable institutions. The medical men and officers attached to these institutions, are ex-

tremely courteous and kind to visitors, explaining things and showing one around. Although Boston has three clinics in skin diseases, and the throat, I may be wrong, but there seems to me, to be room for a special hospital in these branches either separately or combined. The clinical advantages for students studying at Harvard University are excellent, they have the privilege of attending all the hospitals. There is a vast amount of clinical material, from which, if one is industrious and applies oneself, much can be learned. Clinical lectures are given in all the numerous hospitals by the different Professors, assistant professors, and instructors during the session. Classes are formed and practical instruction is given in all the special branches of medicine, such as Dermatology, Otolaryngology, Ophthalmology, Laryngology, Orthopedic surgery, etc. Special instruction is given in mental diseases at the Insane Asylum. There are twenty-five appointments made in the various hospitals, annually, for internes or house surgeons and physicians and the same number for assistants in the out patient department, these are held for the term of eighteen months at the Massachusetts and City hospitals, at the Lying in, four months, and Woman's Free Hospital, nine months. The appointments are all made by competitive examination. Although the Harvard students have every facility for witnessing operations, clinical lectures, practical demonstration, etc., I do not think that they have the freedom of the wards, that the students in England and Canada have. They do not become so thoroughly impregnated with the hospital atmosphere and the patient in all his clinical bearings. Classes of twenty follow the surgeon or physician around the wards, but there is no "clerking" or "dressing" done by the students in the wards, they gain this knowledge when they become internes, but all cannot become internes. There is a little dressing done at the out-door departments; this seems to me to be the weak point in the clinical teaching of Harvard. For skilful interrogating and reporting cases, and dexterity in dressing gives one an experience which is of immense value in practice and tends greatly to one's success. Although this is a loss to the student, it is a gain to the patient at least while in the hospital, they have more quiet and are not bothered by the presence of students, and have the house surgeon and physician to attend to them.

J. L. F.

BOSTON, March 18th, 1887.

## A CLINICAL LECTURE.

Delivered at the Montreal General Hospital, December 13th, 1886,

F. WAYLAND CAMPBELL, M. D., L. R. C. P., London,  
Dean and Professor of Practice of Medicine, Medical Faculty University of Bishops College.

### PROGRESSIVE MUSCULAR ATROPHY.

The patient now before you, Olivier Sarasin, aged 41 years, came to the out-door clinic last Thursday, complaining of cough and pain in his chest. It is not, however, for this condition that I to-day present him to you, but because he presents a well marked case of Progressive Muscular Atrophy, or Wasting or Creeping Palsy as it is commonly called. His family history is good. His father, mother, and four brothers (out of five) are alive, and the fifth was accidentally killed. He has not any sisters. For 17 years he has not enjoyed good health, suffering much from lumbar pain. Three years ago he first noticed that his muscles were getting softer and then smaller; this was accompanied by gradually increasing weakness. Since that time the muscles of the arms and of the chest have continued to grow smaller, or, to use a technical term, have become gradually atrophied. The origin of the disease is very obscure, some authorities claiming that the mischief is in the spinal cord, while others contend that it is in the muscles themselves. The disease generally commences in the upper extremities, and at first is limited to a certain number of muscles, generally the muscles of either the shoulder, arm or forearm are the first to become affected, and the muscles of the opposite extremity rapidly follow suit. Then it gradually spreads over the entire muscular system, even the intercostal muscles and the diaphragm may be involved, causing death by Apnoea, or the muscles of deglutition becoming involved death by inanition ensues. Only the voluntary muscles are affected. It is cases such as I have described, and where the whole muscular system is involved, that are exhibited at circus shows and museums as "living skeletons" which, in truth, they are. The first symptom to direct the patient's attention to the fact that something is amiss is weakness of the muscles, accompanied sometimes by pain on movement. This pain is not severe, and is of a neuralgic character, the muscles feel cold, and their temperature is below normal. The muscular fibres of the affected muscles have often quivering movements; sometimes the patient may not be conscious of it. Sensation is not affected, as I will prove to you by this patient. The appetite and digestion are generally

unaffected. Full power is retained over the bladder and rectum, though when the atrophy extends to the muscular coat of the intestines, constipation is the rule. The affected muscles lose their power of contracting under the electric current in the proportion of their atrophy. As is implied in its name, the progress of the disease is slow; sometimes after reaching a certain point it remains stationary; in a few cases recovery occurs, or at least the further progress of the disease is arrested before it has reached a condition sufficient to disfigure the patient's body, or interfere with the proper working of the affected muscles. It may last an indefinite number of years before tending to a fatal issue. The prognosis is most unfavorable, the most that can be expected is that the progress of the disease will be arrested, or that its progress will be slow. It has been known to last over 23 years. It is met with principally in males, and no condition of life is exempt. The treatment must be directed to the arrest of the disease. Undue exertion of affected muscles must be avoided; their circulation and nutrition must be cultivated by friction, massage, and stimulating liniments. Electricity is the chief remedy, and all forms of electricity should be used in turn, for all do good. Surround the patient with the best of hygienic influences.

### THE HYGIENE OF THE HAIR.\*

By J. LESLIE FOLEY, M.D., L. R. C. P. (LONDON),  
BOSTON.

Formerly Professor of anatomy, Bishop's College, Montreal; and attending physician to the Montreal Dispensary.

The hair absorbs considerable of the thoughts of mankind. I do not mean to infer that thought-absorption is one of its physiological functions; but to those who are so fortunate as to be blessed with a luxuriant growth of hair it is a source of pleasure, pride and vanity, as its loss or deficiency occasions much anxiety and chagrin. To the youth the first appearance of a hair follicle on the upper lip is not only an indication of dawning manhood, but also the signal for the purchase of a complete barber's outfit (barring the scissors)—razor, shaving-mug, brush, etc.—and their assiduous use. And, as years advance, an exuberant beard or moustache is the result of this cultiva-

tion. To those middle-aged or growing old, the first sign of baldness warns us that we are no longer young, and can disguise the fact no more, although various and ingenious are the devices made, in combing and arranging the hair, to hide, as it were, "the nakedness of the land." A good head of hair is somewhat of a rarity at the present day. All desire to retain their hair, grieve to see it falling out, and fondly cherish the few remaining locks. We have but to enter a barber-shop to verify the truth of this remark, and watch our fellow-creatures getting a hair-cut. Observe, for the most part, how careful we are in giving directions to the barber what manner of cut we want, how punctilious about the part and the way it is brushed, how we scrutinize through the mirror before us his every manipulation in the tonsorial art, and how self-satisfied we feel when the finishing touches are completed—oiling, combing, brushing. How proudly we stand up and look at ourselves in the glass when all is o'er! While all desire to keep their hair, few do the right thing to retain it. One naturally runs to the barber, but generally the barber is the hair's worst enemy. The majority of people consider when they keep the hair a respectable length, neatly brushed, combed and oiled, and have an occasional shampoo, that they are doing all that is necessary. As far as appearance is concerned this may be so, but it will not add much to its health and preservation.

The hair should be looked to from infancy up. To disregard this fact is to render one liable in after-years to a diseased condition of it, or a deficiency. The infant's head is often neglected, and not properly cleaned. As a consequence, a thick scurfy crust often forms upon the scalp. This irritates the skin, and gives rise to an eczema of the head. This should not be allowed to occur. The baby's head should be washed in lukewarm water, with Castile soap, twice or three times a week. This should be practiced from birth up, and the hair daily brushed. In very young infants the softest brush should be used. As the child increases in years, two should be used—a rather harsh one first to loosen the dirt, dried sebaceous material, and epithelial scales from the scalp, and brush it out; then a fine, soft brush to smooth the hairs out. A fine comb should not be used on a child's head, and a coarse one only to part or lay the hair. Too great care can not be lavished on the hair of children.

With the adult's hair, as with child's, cleanliness is one of the first requisites. The scalp should be thoroughly washed at least once a month. One of the best cleansing substances is the yolk of an egg, or the white of an egg answers just as well, and is more readily removed. This should be well rubbed into the roots of the hair, then washed out with tepid water and Castile soap, rinsing with clear cold water. The scalp should then be thoroughly dried by brisk rubbing with a towel. This brings a roseate glow. If too dry, a little pomade may be used. Cocoa-nut oil is the best. Purified beef-marrow might be used, but vegetable oils are the best to use, as they do not so quickly become rancid. Bear's oil and hedgehog oil are not what they are reputed to be. A proper amount of pomade is not only harmless, but useful to some scalps, especially to those with little oleaginous material to keep the hair supple and glossy. When used in excess, it becomes harmful, as it then tends to cover in dirt. A head besmeared with an excessive amount of oil is not only deleterious to the hair, but often does most serious damage to my lady's tidy, and often leaves one's mark on the wall—if not on the world. Purchase pomade or oils in small quantities, as they are liable to become rancid quickly, and this is very pernicious. Use them with scent, as this hides their rancidity. If you desire scent, a drop of Eau de Cologne may be added to the oil before using it. Oil is best applied immediately after washing the hair; it penetrates quicker then.

When there is a tendency to the accumulation of scurf, a mixture daily of equal proportions of 80 per cent. alcohol and aromatic spirits of ammonia with a quantity of soft water is an excellent wash. This makes an excellent shampoo. The fixed alkalies, such as borax, salts of tartar, soda, etc., should not be used; they tend to diminish the natural elasticity and flexibility of the hair.

A wineglassful of aromatic spirits of ammonia added to a basinful of water is very cleansing and refreshing. Care should be taken that it does not get into the eyes. The shampoo as given by the barber is too rough and vigorous, and the conglomeration he puts on your head afterward is anything but beneficial. While one performs daily ablutions of the face, hands and body, the head is generally left out. This should not be; it is as necessary to wash the scalp as any other part of the body. The hair should be brushed daily.

Too much violence must be guarded against. It should be brushed gently in the direction in which it lies. A harsh brush should be used to cleanse the scalp of dust and dandruff, and the hair-shafts should be smoothed and polished by means of a softer brush. The scalp should receive a roseate glow. This insures quicker circulation in the follicle about the hair-papilla, and hence the growth is invigorated. Hair-tonics have the same effect upon the skin—viz., a stimulating effect upon the skin capillaries. Morning and night, before retiring, is the best time for brushing the hair. Too hard brushing tends to produce dandruff. In brushing, the object is to cleanse it from extraneous materials, such as feathers, dust, dandruff, and concrete sebaceous material, which often oozes out upon the scalp, to make it smooth, and to bring truant hairs into the right place, and set at harmony discordant filaments.

Friction polishes the hair as well as bandoline or ointment. The end we seek in building up a scanty hair crop is a proper amount of blood-supply, through friction and hair-tonics. The appended is an excellent hair- tonic:

℞ Acid Carbolic.....	3 ss. ;
Tr. nucis vom.....	3 ij ;
Tr. cinchonæ rubr.....	5 j ;
Tr. cantharidis.....	3 ss. ;
Aq. cologniensis, } .....	aa q. s. ad 5 iv. M.
Ol. coccois, }	

Apply once or twice a day to the scalp by means of a soft sponge. This will prevent the hair from falling out if it does not produce a luxuriant crop.

Fine-toothed combs should be avoided, and used only from a sportsman's point of view—"to catch game." They have a tendency to peel off the scarf-skin and leave a denuded surface below, which is apt to end in disease, pityriasis, etc. Dr. Leonard gives the following trite remarks in selecting a brush or comb:

"A hair brush or comb with silvery bristles or teeth too sharp is not good; the scalp will be scratched by the one and the hair broken by the other. A proper brush is made up of bristles, varying with the individual as regards the stiffness of them. The clusters should be evenly set into the back, equidistant from each other, so that the whole surface of the scalp to which it is applied will be touched by some one of the bristle-bunches. Then the clusters should be made up of bristles of slightly unequal length, so as to still further

favor the brush in covering every part of the scalp ; by this means every hair will be rubbed down on all sides, and there will be no streaks or spots of the scalp left untouched.

"A proper comb is one whose teeth are even and regular, with points not sharp but rounded. It should be held up to the light so as to detect any splitting or roughening of the teeth on the sides ; for, if they are so roughened, injury to the hair through breakage of the shaft will result. Should the teeth through any cause become split, as you value your hair, the offending members should be carefully cut from the comb ; the slight space on the scalp that would thus remain untouched would be of no moment. Wire brushes are nothing more than combs. They act as a stimulant to the scalp, but are not equal to a good bristle-brush."

A good supply of oxygen is necessary for the healthy growth of hair ; the head should be well aired. The hat has made sad havoc with many a caput. Endeavor to go bareheaded as often as possible. When walking, lift the hat off the head frequently, and, if the sun is not too strong, hold the hat in your hand a while. The blue-coat school-boys, formerly of Christ Church, London, who wear the costume of Edward VI, go bareheaded the year round. They wear no hats in the coldest days of winter. They are remarkably healthy, and have a redundant crop of hair which lasts them a life-time. If we must wear a hat, let it be light in texture and well ventilated from the top. One reason that women keep their hair longer than men is that their head-gear allows of better ventilation. Business men sometimes wear their hats in their office, or have a special hat which they put on. This is very injurious. The brokers of Wall Street are noted for wearing their hats in doors as well as out-doors. They are also notorious for having bald heads. This may account for it. When the head is well shorn of its locks this does not apply.

The hair should be cut regularly about once a month. Frequent cutting is said to make it grow quicker. Dr. Pincus, of Berlin, holds that it diminishes its growth. The ends of the hair split, and require to be cut off. Sharp scissors should be used. Some filaments grow faster than others and need to be cut back ; others are impoverished, and better brushed out or extracted. The beard should not be shaved during its development. During youth the natural growth

should not be disturbed. Shaving causes the single hairs to become prematurely strong and hard. It also alters somewhat the color of the beard, giving it a tendency to turn red or brown. In middle age this does not hold. Oil and brush may be used on the beard according to inclination. I have often thought it would be well if the barber would put his razor in a weak solution of carbolic acid after shaving each customer, and thus prevent the danger of infecting them with some dread disease, barber's itch, etc. We have Scriptural authority for wearing the hair short. St. Paul says, "It is a shame for a man to wear long hair." Poets, artists, and many prominent men do not seem to heed this sacred injunction. There is an old canon extant, dating as far back as 1096 A. D., which declares that they who wear long hair shall be excluded from the church while living, and not prayed for when dead.

With regard to the ladies, their hair should be brushed rather than combed daily, its tangles carefully unraveled, its split ends cut off, and, when done up, it should be bound in as easy rolls and coils as possible. One reason for this is to allow as free ventilation as possible for the scalp ; the other that you may not break the hair or strain the roots by tight tension upon them. Twisting or tight binding should be avoided. A persistent mechanical pressure on the shaft, by obstructing the flow of oleaginous fluid designed to soften it, tends to dry those portions which are beyond the ligature. Ladies should loosen their hair well every night before retiring. Crimping, the use of curling-irons, and bleaching the hair must be avoided. For invalids or those confined to bed, the hair should be oiled daily, and then combed with a coarse comb. The skin should be washed twice a week with a sponge and a little soapy water. The water may be either cold, lukewarm, or warm.

Loss of hair is generally caused by a permanent irritation. In adults, heavy head-covering or coiffures may cause this irritation. Those having weak hair should avoid pads ; they injure the hair, and bring on headaches.

A daily shower-bath on the head is injurious. Lotions should not be used ; most of them contain lead. They have been known to cause paralysis. Dyes are very deleterious. The least harmful are those containing iron or nitrate of silver.

Tiring brain-work, strong mental agitation, silent

grief, continued disturbance of sleep, exercise a reaction on the growth of the hair. In cases where there is a delicate health and a deficiency of sebaceous substance, tincture of bearberry renders the hair soft, glossy, and flexible.

22 Darmouth Street, Boston, February 22, 1887.

## Society Proceedings.

### MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

*Stated Meeting, Jan. 14th, 1887.*

J. C. CAMERON, M. D., PRESIDENT, IN  
THE CHAIR.

*Bromide Rash.*—Dr. BLACKADER exhibited bromide or iodide acne.

Dr. STEWART asked if bromide of potassium had been administered alone, and suggested the practice of combining Fowler's solution to prevent a typical case of bromide acne.

Dr. BLACKADER replied that he usually administered a combination of the bromides of potassium with sodium or potassium and ammonium, but had forgotten the exact prescription. The dose was about 40 grains daily,

*Wound of the Internal Jugular.*—Dr. BELL exhibited a patient who had recently met with an accident resulting in severance of the internal jugular vein. The patient was convalescent.

Dr. SHEPHERD thought that the laryngeal trouble might be due to division of the superior laryngeal nerve, with, perhaps, some fibres of the inferior laryngeal, and suggested that instead of permanent ligature of the carotid artery a temporary ligature might have been passed about the artery, and its effect on the hemorrhage noted.

*Dupuytren's Contraction.*—Dr. R. J. B. HOWARD read a short paper on a case of Dupuytren's contraction, which he illustrated by a carefully made dissection.

Dr. SHEPHERD said he had always connected this affection with a gouty diathesis. It was very rare in this country, but rather common in England. It occurs frequently in old men, especially in the right hand, probably from the use of a stick. Authorities agree that it is rare in women, but during four years in the General Hospital he had seen only one case, and that was in a woman.

*Puerperal Eclampsia.*—Dr. LAPTHORN SMITH read the following paper on this subject:—

As the elements of doubt as to the ætiology of this disease are being gradually eliminated, and as the mechanical nature of its origin, which was not long ago scarcely entertained, is being more generally adopted, I propose to make the following case the text for a brief discussion on the nature of the phenomenon with a view to laying down, somewhat dogmatically, a certain principle of treatment. This I think I am able to show, even within the limits of a very short paper, we are fully warranted in doing, and if such a thing can be done, it will materially help many of us younger men, who have often to be guided by the experience of others who have not always very distinctly told us what their experience was:

Mrs. M., aged 28, married at 24, had her first child a year afterwards. Two years after marriage she became a widow, and remained in that condition until nine months before I saw her, when she was married again. She became pregnant the next month, and when she had reached the seventh month, or a little latter, I was engaged to attend her in her confinement. As I was informed that her feet were beginning to swell, I asked for a sample of her urine, which on examination appeared clear when warmed, but very muddy on cooling, and was found to contain no sugar, but was loaded with albumen. On examining her next day I saw that her legs were full of dropsical effusion; the labia were so swollen with liquid that she was unable to sit down; her bowels were confined and urine very scanty; she had occasional slight headaches; no disorder of vision nor of intellectual faculties. She had no trouble what ever with her previous confinement, and felt quite well during the first six months of this pregnancy, but her abdomen was so large that I suspected twins, especially as another case of eclampsia which I attended also occurred in a twin pregnancy. I gave her cathartics and a mixture of squills and digitalis, and placed her on a strict milk diet. As this failed to ameliorate her condition, after a week's trial, I changed it to digitalis and iron, with no better result. As she was rapidly getting worse, and toxic symptoms began to manifest themselves, I began to consider whether it would not be better to induce labor and empty the uterus. For I believe, as I shall show later, that the albuminuria and uræmia are due to the passive congestion or inflammation of the kidneys, caused by mechanical pressure on the renal veins by the enlarged uterus. Before taking

what I then thought was a very important step, I availed myself of the experience of my friend and colleague, Dr. Kennedy, who agreed with me as to the necessity of taking action, but who thought it better, on account of the enormous distension of the genitals and the occlusion of the passage, to make one final effort to reduce the amount of exudation in the skin. We accordingly gave her forty grains of compound jalap powder night and morning, which produced about a quart of watery evacuations daily, and a quarter of a grain of pilocarpine every four hours, which, however, produced no effect whatever on the skin. As I feared that convulsions would come on before long, the amount of urine passed not exceeding a gill daily, I left a bottle of A. C. E. mixture with the nurse, with instructions to use it if they came on. She gradually grew worse until about two weeks from the time I first saw her, when the accumulation of the toxic agent caused an explosion of convulsive movements of the most violent description, which were, however, easily controlled by the aid of the anæsthetic. Dr. Kennedy again met me in consultation that afternoon, and we decided that prompt action was imperative; so we rendered her completely unconscious, dilated the os with the finger, and without much difficulty delivered her of a living and dead foetus—the former by the forceps, the latter by the feet. There must have been nearly three gallons of amniotic fluid. She rallied well and felt much relieved, but an hour later the convulsions returned with increased severity. She remained quite unconscious all evening until eleven o'clock, when she was induced to swallow twenty grains of chloral, which was repeated three times during the night, with the result that the convulsions ceased at three o'clock next morning and did not since return. But she did not remember anything of what occurred during the time commencing two days before the convulsions began and ending a week after delivery. Her vision, especially, remained very disordered, not being able to see *distinctly* the things which she did see, and believing that she saw many objects which did not exist. For instance, she was quite sure that she saw a little boy standing on the bureau breaking dishes. Three days after the delivery symptoms of puerperal mania became very marked. She asked for a knife with which to kill a man, whom she supposed to be in an adjoining room, and it required the united efforts of three people to keep her in bed.

During all this time the kidneys continued to act very freely, as, indeed, they began to do an hour or two after the uterus had been emptied. On the seventh day she became so violent that it was no longer safe to keep her in the house, as neither chloral, morphia nor atropia had any effect. On the eighth day I gave her a large dose of bromide of sodium, after which she began to talk in a rational manner, saying that the medicine had done her good, and inquiring as to the nature of her illness, and how long she had been ill. Unhappily this improvement only lasted a few days, and shortly afterwards she again became so violent that I was constrained to order her removal to Longue Pointe Asylum, where she now is, after a year's detention, a lunatic. Her features have completely changed, and although quiet and docile, she evinces many of the characteristics of puerperal mania. She cannot bear to see her husband or any of her former friends, although she does evince pleasure at the presence of her little boy. What is being done for her cure I am unable to say, but I fear that her recovery is at least doubtful, at any rate remote.

Sir James Y. Simpson was of the opinion that puerperal mania was the direct result of the temporary disease of the kidneys, and although many able authorities differ from him in this view, I am inclined to believe that the mania is an evidence of the co-ordinating cells of the nerve centres having been bathed for a considerable time in very poisonous blood, and that the relation of albuminuria, uræmia, puerperal convulsions and puerperal mania may be stated as follows:

A moderate amount of renal congestion causes albumen to appear in the urine.

A greater amount of renal congestion causes the albumen in the urine to increase and the normal quantity of urea in the urine to diminish, and at the same time the urea being retained in the blood and bathing the nerve centres causes headache, disordered vision, etc.

A still greater amount of urea in the blood and of albumen in the urine causes poisoning, and at the same time starvation of the nerve centres, and dropsy of the brain to such an extent that irritation is set up and convulsions ensue.

And if this condition continues for a considerable time the nerve cells are seriously altered in nature, so that even when the cause is removed they can with difficulty or not at all recover their normal functional activity. But as no one can tell

just how a certain poison produces a certain effect, I am willing to leave that still in the realms of theory in order to return to certain definite facts, which now seem to me to be beyond any possible doubt. And the first conclusion I have come to after a close study of some twenty authors' observations is, that puerperal convulsions are not different from uræmic convulsions, and that they depend entirely upon uræmia and its concomitant albuminuria and accompanying œdema and uræmia of the brain. That the uræmia of the puerpera, unlike ordinary uræmia, depends on a removable cause, namely, pressure on the renal veins, or on the veins into which they empty. This is the opinion of many eminent authorities, and the one which is best supported by facts, notwithstanding some slight exceptional evidence to the contrary. One of the most significant of these facts is that the convulsions come on always during the latter half of pregnancy, and are more frequent and more severe the larger the uterus becomes. Also, that they are more frequent in twin pregnancies, as seen in my second reported case, and also in the subsequent history in my first reported case, who narrowly escaped having them in her next pregnancy, which was a twin one.

Another strong proof of their mechanical origin is that they are much more frequent in first pregnancies, when the abdominal walls are most resisting and where, consequently, the pressure on the veins is greatest. That we get many of the same symptoms in men or in non-pregnant women if from any cause the current of blood out of the kidneys is retarded, as, for instance, in mitral regurgitation. Only, in these cases the patient dies before the uræmia becomes sufficiently marked to cause convulsions. The fact that the urine begins to be secreted generally immediately after delivery; the only exceptions being when the kidneys have been damaged beyond repair.

The guiding principle of treatment which I wish to lay down dogmatically is this: That unless for grave reasons to the contrary we should induce premature labor at any time after the seventh month, at which we find the urine of the pregnant woman loaded with albumen or considerably deficient in urea. By freely accepting this course it removes all doubt and hesitation in our treatment of these most anxious cases. The induction of premature labor at the seventh month, or even earlier, is a procedure totally

devoid of extra danger to the mother, and it gives to the child quite as good a chance of surviving as to allow it to run the gauntlet of a much more tedious labor at full time, when its own system is in a state of uræmic convulsions as well, and when, perhaps, it must be borne under conditions and surroundings the most unfavorable. That the child in utero suffers from uræmia just as much as the mother is amply proved by cases reported by Cazeaux and others, and our experience is that few children born during puerperal eclampsia ever survive their birth very long. In my first case the child died during the convulsions, and although I controlled them and saved the mother, it is probable that her life was purchased only at the price of the child's, for if it had not died, and she had gone on increasing in size as I then (and I now think, mistakenly) intended to let her do, nothing I believe, could have saved her. If I had followed this course in my second case, which I now report, I do not think that the mother would now be in the asylum, and perhaps one or both of her children would be alive.

Heretofore we have been left to interfere in these cases, and the rule has been to try to carry them on to the ninth month by medicinal and other treatment. But we should remember that every day the uterus increases in size the disorder of the kidneys becomes greater; and the longer we delay interfering, the danger of interference becomes more serious; for the reflex irritability of the nerves becomes such that the slightest irritation of the periphery causes convulsive impulses to emanate from the centres. We should also remember that owing to the mechanical nature of the malady we cannot count upon the cooperation of diuretics, for even digitalis, the king of diuretics, often fails us in these cases. And no wonder, for how can a medicine which only increases the secretion of urine, because it contracts the capillaries of the kidneys and increases the flow of blood through them, have any effect when the current of blood is dammed back by the constriction on the veins.

Puerperal uræmia, if left alone, is a very serious disease, as instanced by a mortality of 12 cases out of 36 reported by Braun, although that mortality is higher than we are accustomed to here. Wiegner also reports a mortality of 25 out of 65 cases. In urging interference, I may be advocating something that many practitioners are already in favor of doing, but when such eminent

names as Gooch, Schroder and Playfair are on the side of letting them alone, I think that if the policy of prompt interference is the right one, as I believe it is, it is quite time that some definite law on the subject should be laid down for our guidance.

*Discussion.*—Dr. ARMSTRONG could not entirely agree with Dr. Smith in his method of treatment. He had seen many cases of severe albuminuria accompanied with œdema where convulsions did not follow. After quoting cases where even convulsions supervened, and yet mother and child were carried through, he held that only in the very worst cases should premature labor be induced.

Dr. GURD said he had, within the past couple of weeks, treated two cases of puerperal albuminuria accompanied with uræmic symptoms. The first was a lady who sent for him at the end of the eighth month of her sixth pregnancy, supposing herself to be in labor. The os was found not at all dilated. Twelve hours later, finding the os not dilating, her condition was gone into more fully. The pains were spurious,\* set up each time she micturated, which was about every fifteen or thirty minutes, giving her great agony. She complained of severe headache, thirst, inability to sleep, drowsiness, twitchings, and had vomited several times. Temperature  $102^{\circ}$ . Her feet and ankles had been slightly swollen for about three or four weeks. She was given brisk purgatives, and digitalis infusion and iron with good results. The pains ceased and all the uræmic symptoms abated. The urine was next day passed voluntarily, and in much larger quantities. It contained about eight per cent. of albumen. The following day uræmic symptoms returned. In the afternoon of this day she had what the nurse called a chill, lasting twenty minutes, all her symptoms appearing worse toward evening. She was given a bath after the manner practised in Vienna, and recommended by the Braun, which is as follows; The patient is to be put into a bath of  $99^{\circ}$  temperature, the bath to be covered with a heavy blanket, leaving the face free. The temperature of the water is to be gradually increased to  $100$  or  $112^{\circ}$ . She is to remain in the bath for thirty minutes. A towel wrung out of cold water placed on the head relieves any distressing head sensations. Whilst in the bath the patient is to drink large quantities of water. After coming out of the bath she is to be covered with a warm

sheet and then enveloped in blankets, when almost immediately free perspiration follows. The sweating is allowed to go on for two or three hours. This bath treatment is known often to bring on genuine labor; it did so in this case. Shortly after getting into bed she was taken with good labor pains, and in three hours was delivered of a healthy boy, evidently three or four weeks before time. Patient made a good recovery. Urine, examined three days after delivery, was free from albumen.

The second case was that of an undersized primipara, whom he had accidentally heard was much swollen about the feet, legs and face. On visiting her, she was found very œdematous and suffering from headache, loss of sleep, thirst, very frequent painful micturition, etc. Her urine contained about 30 per cent. of albumen. She had yet two weeks to go. Under purgative and diuretic treatment, with almost exclusive milk diet, all the symptoms passed away. She was now comfortable in every respect. Albumen gradually lessened, till now, ten days after treatment, it was only 12 per cent. \*

Dr. TRENHOLME thought that the condition of the circulatory system had much to do with the prognosis and mode of treatment. In mitral difficulty, or whenever the circulation was otherwise affected, the cases were much more serious. He had frequently seen marked œdema and albuminuria in patients otherwise sound, and no serious trouble followed. He thought that operative measures should not be resorted to if the circulatory organs were sound and the patient otherwise healthy.

*Pathological Specimens*—Dr. WM. GARDNER exhibited the following specimens and related the cases:—

1. *A bottle of fluid removed from a retro-peritoneal cyst of the left loin.* The patient, female, aged 28, unmarried, asserted, and her mother confirmed the statement, that from childhood she had been large in the belly, but that in recent years she had been growing larger and had been suspected to be pregnant. Always well and able to work till a week previous, when she suddenly took ill with rigors, high fever, perspirations,

\* On the 17th she was delivered of twins. At the end of a day's hard labor she had two convulsions, when the forceps were applied for the first child; the second was extracted by the feet. On the 22nd all were doing well.

vomiting and severe pain and tenderness in the left loin. On examination, a rounded smooth tumor occupied the left loin, enlarging the abdomen considerably on that side, and extending beyond the median line to the left; upwards it reached the edges of the ribs; downwards it reached the margin of the pelvis, but did not dip into that cavity. There was absolutely nothing further to be had in the way of a history. Urine healthy. The nature of the case being doubtful, and the symptoms urgent, it was decided to explore by abdominal section. An incision two inches long was made in the median from the umbilicus downwards. On opening the cavity the cyst was found to lie behind the peritoneum and intestines. The colon lay in front, and in such a position as to render the management of the case too difficult. This opening was closed and another made over the most prominent part of the tumor, about three inches to the left of the median line, on a level of the umbilicus. On getting in over the tumor it was tapped, and 70 ounces of a dark-brown turbid fluid containing numerous iridescent crystals of cholesterine was removed. The opening was enlarged, its edges stitched to the edges of the abdominal incision, and a glass drainage-tube left. From the moment of the operation the girl ceased to have pain, fever, or any other symptom. The discharge was slight. The cavity shrank rapidly, and when patient was discharged, twenty-six days after the operation, wearing a short piece of rubber drainage-tube, it was almost obliterated. The fluid contained a large quantity of pus. That it was evidently an old one, possibly congenitally, springing from near the kidney, and had suddenly taken an inflammatory action. Dr. Gardner said that of course the treatment was open to criticism, inasmuch as the fluid could have reached from the loin posteriorly without opening the peritoneal cavity, but he felt more at home in opening the abdomen than the loin, and the result seemed to justify the course pursued.

Dr. Ross related a similar case that occurred in the practice of Dr. Roddick, four years ago. A cyst in the neighborhood of the kidney was tapped, and found to contain a brown fluid filled with crystals of cholesteria.

2. *A cysto-sarcomatous tumor of the ovaries and uterus*, removed six days ago from a young married woman of 21, the mother of one child a year and a half old. The tumor had been noticed first

in October, '86, and had grown rapidly, causing much pain, emaciation and interference with functions of both bladder and bowel. It was uneven, hard in parts and elastic in others, predominating on right side. The whole vaginal roof was a hard mass, the vaginal portion obliterated, and the os felt only with great difficulty. There were adhesions to omentum, extensively to colon and rectum, and to the whole floor of the pelvis. The fundus uteri was smelted into the mass, and the operation was finished by encircling the cervix with Kæberl's clamp, and, after amputating, securing it with pins externally at the lower angle of the wound. The hemorrhage was free; some of the cysts burst during removal. The cavity was well washed out with plain warm water and drained. Pulse ran high, 160 and over during the operation, and hypodermics of brandy were freely given. Every symptom had been favorable till the sixth day. The day after the operation the pulse was under 100, and the temperature had been normal for five days. The temperature then rose, remained high with fluctuations for six days. She is now on the nineteenth day, quite convalescent. The wire was cut and the clamp removed on the third day.

*Hydrocephalus*.—Dr. W. G. JOHNSTON exhibited a case of chronic hydrocephalus, observed in making an autopsy upon a patient who died of secondary cancer in lungs and liver. The primary growth, a scirrhous, was removed from the left mammæ by Dr. Roddick sixteen months before. Patient had been under observation off and on during this entire period, without any cerebral or mental symptoms having been noted. Convulsions flattened. Lateral ventricles distended, containing over eighteen ounces clear fluid; the venæ galeni involved in dense mass of fibrous tissue, apparently of inflammatory origin. They were not obliterated. No other abnormality beyond small mass of secondary cancer external to dura in course of anterior meningeal artery. Fontanelles closed by bony union. Skull cap flattened and bones very thin, maximum being 1-6" and minimum 1-10" over convexity. Cranial cavity capacious.

*Tumor of the Prostate*.—Dr. BELL exhibited specimens from a case of tumor of the prostate, and read the following history of the case:—

J. H., aged 60, a farmer, was admitted to hos-

pital Oct. 9th, 1866. He was suffering from general cystitis, acute prostatitis and right epididymitis, and retention of urine. He had always been a regular and temperate liver, and had enjoyed the best of health until three years ago, when he had some hemorrhoids removed. He had never had venereal disease of any kind. From that time he suffered from frequent micturition, inability to empty his bladder at times, and his urine always contained a whitish deposit when passed. He had been taught to use a gum elastic catheter, and for two months before coming to hospital he had been obliged to use it every day, and seldom made water without it. On admission, his prostate gland was very much swollen, tender, hot and painful. He passed about sixty ounces of urine daily, which was neutral or faintly acid in reaction, and deposited on standing from 20 to 25 per cent, by volume of muco-pus. There was apparently no albumen in the urine beyond that produced by the pus. He had a subfebrile temperature, but his general condition was good. He was ordered to be kept in bed on milk diet, with linseed tea and water *ad lib.*, hot hip baths and opium suppositories when necessary, and his bladder was emptied three times daily with a soft rubber catheter. The acute inflammatory symptoms soon subsided, the pus in the urine diminished very considerably, his temperature became normal, and he was very much better in every respect, but could not empty his bladder. From the 12th of November the bladder was washed out daily with plain warm water. He improved steadily until the 29th November, when he had a severe chill and great pain in the right loin. The urine became scantier and was loaded with pus for a few days, but soon became more abundant and less purulent again. The patient became dull and somnolent with dry, brown tongue, moderate fever and obstinate anorexia, and gradually sunk and died on the 18th of December.

At the autopsy, Dr. Johnston reported the middle lobe of prostate enlarged, and containing a small abscess. Bladder mucosa somewhat congested. Ureters normal. Both kidneys enlarged slightly and hyperæmic; a little mucus secretion in pelves, which were otherwise normal. Throughout cortices a few small suppurating points corresponding with and apparently originating in pyæmic infarcts. Spleen enlarged and soft. No further examination was allowed.

## Correspondence.

CHARLESTON, S. C., Feb. 14, 1887.

Editors CANADA MED. RECORD.

GENTLEMEN:—I felt complimented by your insertion of my paper on the Heart in your issue for December; but one or two errors will very likely confuse your readers when the subject is one which is, at best, very complex, and requires absolutely definite language.

On p. 56, 1st column, the word "covered" should be "coupled;" 2nd column, 16th line, the word "valves" which the printer has inserted, *destroys the sense*: for the *ventricles*—(not the valves,—) "are being filled from the auricles."

In printing the "*Formula*" it should be placed thus to be understood by your readers:

*Stenosis.*

*Insufficiency.*

*Insufficiency.*

*Stenosis.*

At the Base.—	{ A deranged 1st sound, etc., etc. { A deranged 2nd sound, etc., etc.
At the apex.—	
	{ A deranged 1st sound, etc., etc. { A deranged 2nd sound, etc., etc.

With best respects and best wishes yours,

F. PEYRE PORCHER, M. D.

I have always read your Journal with great pleasure, your selections also being specially good.

## Progress of Science.

### SPRAINED JOINTS.

By EDMUND OWEN, F. R. C. S., London, Eng.

Surgeon to St. Mary's and Children's Hospital.

A sprain is the result of a twist or wrench which has stretched the fibrous capsule of an articulation and its synovial membrane, but which has not sufficed to cause either fracture or dislocation. The injury should be treated upon exactly the same surgical principles as those which guide us in dealing with a fracture or dislocation of a joint; yet a joint which is "only sprained" is somewhat apt to obtain but scant professional attention. Though the common saying teaches that "a sprain is worse than a break," the unfortunate subject of a sprain is usually contented with doing the best that he can for himself with arnica, cold water, or

oil, as chance, experience, or advice may suggest, seeking the surgeon's aid only for the remote and often intractable complications. In unhealthy subjects, and especially in children, want of treatment often entails articular troubles which run a lingering course and may end disastrously; and even with the strong a severe sprain is apt to involve a long continued enfeeblement of the part.

Immediately after the sprain there is want of pliability in the joint, due in part to the pain and tenderness caused by the violence, in part to the tension of the sensory nerve filaments from the sudden effusion, and in part also to the mere mechanical effect of the presence of blood and other fluids in and around the joint. In certain situations a serious wrench of an articulation may give no visible sign upon the surface of the body; especially is this the case with the hip, the shoulder, and the spinal articulations, all of which are thickly covered; stiffness will then be the only objective sign indicative of the lesion.

If a joint in the lower extremity be seriously sprained, temporary but absolute rest for it should be insured by, if practicable, putting the patient at once to bed; by raising the limb on a pillow, or in a swing cradle, until the heel is above the level of the chin, so as to hinder capillary and venous congestion, and by applying firm and even compression. I am convinced that judiciously applied compression not only checks further effusion, but also promotes the absorption of fluid which has been already poured out; and, as a rule, the patient experiences immediate comfort from it. At times, however, it is possible that from the tenderness of the skin, or from mere apprehension, the patient will not submit to the compression immediately after the injury. Then one must be content to apply either the ice-bag or an evaporating lotion. Cold plays a double part: by stimulating the vaso-motor nerves it causes a contraction of the small arteries, with the effect of checking further hemorrhage and inflammation and limiting the effusion, and by numbing the sensory nerves it diminishes pain. The lotion should not be used, however, as is often done, as a water-dressing under oil-silk. It must be applied on a single fold of lint with the fluffy side outwards, so that evaporation may proceed with energy. The lint must never be allowed to get dry, nor should the limb be covered over with bed-clothes. If a man sprains his ankle when out in the fields it should as quickly as possible be put into running water, and then be firmly bandaged with strips of wetted handkerchiefs; the boot should be worn, if he can get it on again, for the sake of the compression it affords, but it is better not to remove the boot at all until the joint can be bandaged. Nothing short of absolute rest in bed suffices when a child sprains a joint in the lower extremity; he must not be trusted to lie on a sofa, for he would soon be off of it. Where the hip-joint is sprained the limb should be raised and rest insured in the extended position by the application of the weight and

pull; so that if matters do not clear up there will be no need for further change of position. A sprain is often the beginning of an attack of hip joint disease.

In the case of the knee being sprained, the leg would be extended; in the case of the ankle being sprained, the foot would be put up at a right angle. But in each instance the limb should be carefully bandaged upwards before the compression is applied, or edema may follow; complete rest would be still further ensured by adjusting a splint to the side or back of the limb. Compression may be applied by means of a roller of domette, or by the additional aid of plastic splinting moulded on. With children a well padded flexible metal splint is of great service, but a casing of plaster of Paris and house flannel answers even better.

I have at present two men under my care, each with a severely sprained ankle, the part being swollen and discolored, and the foot stiff and useless. The foot and leg have been immobilised in well-lined plaster of Paris casings, and thus the patients are quickly enabled to get out of bed and go about with crutches, without risk or discomfort. In neither of these men was a fracture to be detected.

When an ankle is greatly swollen from a recent injury, and signs of fracture are not evident, it is not advisable to conduct the examination for obtaining a knowledge of the exact nature of the injury in too inquisitive a manner. If the limb be treated on the principles enunciated above, it will be well either for a severe sprain, or for a fracture without displacement. Possibly the patient might be unsettled at not being definitely informed whether there be fracture or not, for the oft-repeated question of the patient or parent as the surgeon examines the part is, "Is the bone broken?" But I am speaking merely of the principle involved in the surgery.

Absolute rest is demanded as long as heat of the surface or intra-articular pains persist. As the pains subside, recourse must be had to frictions and rubbings, and the use of stimulating liniment and cold douches. The rubbings should be executed always in the direction of the venous and lymphatic return, and may be combined with firm fingerings about the part, and with the rubbing-in of oil. When effusion persists in the painless joint, one may apply over the joint the even compression of a Martin's elastic roller for a certain length of time each day, the skin being duly protected by a soft covering. This is a highly satisfactory method of treatment in cases of chronic thickening and effusion. Leslie's soap-strapping, too, when evenly and liberally applied over a sprained joint, is an excellent therapeutic measure in the days following close upon the injury.

At other times, nothing seems to render such efficient aid as a wetted calico bandage. Compression in some form is needed.

On physiological grounds, the early treatment of a sprained joint by fomentation or poultices is

inexpedient. The application of warmth produces a vascular fullness of the part, and a relaxed condition of tissues which are in need of being toned up and strengthened; though if synovial inflammation of an acute kind follow on the sprain, leeches and fomentations may not improbably be indicated later on. For the promotion of the absorption of the lingering products of effusion, an alternation of douchings under streams of hot and cold water gives valuable aid. In no stage of the pathological process associated with a sprain should arnica solution be applied. One has met with instances in which painful and serious cellulitis has followed its use, even when there had been no previous lesion of skin. How is it that arnica first obtained its reputation in the treatment of sprains, and how has that reputation managed to survive so long?

A surgeon was driving his wife in the country when the pony fell, and the occupants of the carriage were thrown out into the road. When I saw him a few hours after the accident he was wearing his right arm in a sling, the elbow being at an obtuse angle. He said that, in the fall, the right hand (in which he was holding the reins) and the arm were doubled and twisted underneath him, and that though he was sure no bone had been broken, he could neither bend nor straighten the elbow on account of the severe sprain which it had received. He said that on his way home, and certainly well within an hour of the fall, on placing his left hand under the damaged elbow he found a soft swelling which seemed pretty near as large as an egg; his wife could also feel through his coat sleeve. Having taken the limb out of the sleeve and removed some water-dressings, universal and extensive effusion in the articulation was evident; the distended synovial membrane was specially bulging about the head of the radius. The intra-articular pain was intense. There was no contusion of the skin, nor any definite ecchymosis; movement caused great distress. Beginning at the fingers we firmly bandaged the extremity with a roller of domette (which from its softness and elasticity adapts itself with delightful evenness and comfort), drawing the turns which surrounded the swollen joint itself more closely and firmly for the sake of compression. Then, having bent to the proper form of the arm a padded flexible iron splint, and carefully adjusted it, the elbow was packed round with cotton-wool, and having enclosed all in a second and wider domette roller, and having got the patient to bed, we arranged the arm upon a pillow. The compression and security afforded by the roller and splint gave great satisfaction. On the second day we re-adjusted the splint and bandages, which had now become slack. Most of the tenderness and swelling had departed. Two days later, and at other intervals, we tightened up the bandage, finding always steady improvement. In ten days the splint was removed, and cautious use of the arm was allowed, but for the entire removal of the stiffness a course of shampooing

from a professional rubber was resorted to. The effusion which had come on so quickly, within an hour of the injury, was evidently not inflammatory in its nature; probably it consisted of synovia, blood and serum.

The other occupant of the carriage had severely sprained her left ankle, which was painful, stiff, and full of sero-synovial effusion. There was no fracture. The swelling was confined within the limits of the synovial membrane; it did not extend up above the external malleolus in the manner so characteristic of Pott's fracture. The treatment adopted consisted in surrounding the ankle with an even layer of cotton-wool, and in bandaging from the metatarsus upwards with a soft roller, the turns of which were continued well up the calf of the leg. The foot thus firmly encased was raised upon a pillow. In a few days all the excess of synovial fluid had disappeared, but the firmly applied bandage was still worn. In a week she began to use her foot, and was finding comfort in having it and the ankle rubbed with oil several times during the day. On the occasion of my first interview, the patient volunteered the important clinical statement—that after the accident her foot and ankle were fairly comfortable until her boot was removed. Probably if a bandage of plaster Paris casing could have been applied immediately after the accident, but little joint effusion or edema would have occurred. Certainly, compression of a recently-sprained joint gives results, both as regards expedition and thoroughness, with which those obtainable by the system of evaporating lotions can not be compared.

If the sprained joint be in the thumb or finger, much pain and want of pliancy may result. A small splint should be moulded on; firm compression with a pad of cotton-wool and a soft bandage exercised; and the hand worn in a sling—it should not be left free except for the cold douchings. A few days absolute rest is expedient.

Even long years after all the local signs of a sprain have passed away, a jerked or sudden movement of the joint, or a change in the weather, reminds the subject that the part is not absolutely sound. Nearly twenty years ago, I severely sprained my left wrist at football, and to this day it has not absolutely recovered. I cannot flex or extend it as I can its fellow. A sudden movement of it is often accompanied with audible crackling and discomfort. From a close and interested observation of this joint I feel convinced that in the crevices between the articular surfaces of the bones, and against the attached parts of the capsule out of the way of pressure, there are growing delicate and injected fringes of the synovial membrane. The synovial fluid is thin in quality and in excess of the normal amount; there are no adhesions inside the articulation, but there is probably some shortening of the extra-articular fibrous tissues, which were implicated in the inflammation—a shortening secondary to inflammatory thickening. Probably this shortening of

the fibrous tissues plays the important role of a perpetual splint shielding the enfeebled synovial membrane from further shock and distress. On no account, therefore, will these adhesions be broken down or stretched by manipulation; such a treatment is contra-indicated by the pain which closely attends any attempt at more than the accustomed movements of the joint. The very audible crackling, which even a bystander may sometimes hear, on working the joint is the result of the altered synovial fluid being quickly driven by the movements of the joint between the vascular fringes.

Occasionally, when a joint has been wrenched by a recent accident, and is in consequence painful and useless, the manipulative examination which it receives from the surgeon is the means of removing much of the pain, as well as restoring a good deal of the lost function. I am satisfied that such improvement is real, and not merely subjective. Yet because in the weakly and ailing such a therapeutic measure might probably be attended, either, immediately or remotely, by disastrous results, and because of its utterly speculative nature, it is not to be recommended as routine practice, though it may well be kept in reserve for rare and special occasions. It certainly has a close and important bearing upon bone-setting. A man sprained his ankle, the surgeon examines and reports accordingly; but, because no bone is broken, he perhaps speaks of the lesion in a careless or off-handed manner, and does not insist on the necessity of rest and of other appropriate treatment. So the ankle does not get sound, and the faithless patient resorts to a quack, who at once finds "a small bone out of place." Then come a sudden twist and a crack, and lo! "the bone is in again." The patient believes that a bone has there and then been restored to its place, because he is at once absolutely more comfortable, and can not only move the joint freely, but can even accept the advice to throw away his crutch or his stick, and walk on his damaged foot without further help. Perhaps he is told to go home and apply ice; at any rate from that time he considers himself to be—and indeed is—cured. Forcible manipulation is, of course, the bone-setter's panacea. I have known him to employ it in the case of fracture of the surgical neck of the humerus, and, as may be excepted, with very serious results. In the case of recent sprain, however, the patient cannot but believe that the bone-setter's statement is true, because, beyond a doubt, his manipulation has proved effectual.

The following report illustrates the point:—A gentleman of highly nervous temperament came to me with considerable bruising of the deltoid, the day after receiving a fall, which might have been attended with much more serious consequences. The arm was so stiff at the shoulder-joint that he could not raise it to dress himself, nor could he touch the ear of the opposite side whilst his elbow was brought toward the front of the

chest,—it remained permanently though slightly abducted. Any movement of the arm was attended with pain and distress. There was no definite hollow beneath the acromion process, nor any other unequivocal sign of dislocation. There was a great element of obscurity in the case; the patient was in pain and apprehension, and expressed his fear that the shoulder-bone was "out." A consultation on the case was not attainable, and the course of action had to be decided. So, to err upon the safe—if error there might be—and in order to make a thorough and practical examination of the joint, I agreed with him that there was "displacement of the shoulder-bone," and laying him upon the floor, with my heel in the axilla, I flexed the fore-arm to slacken the biceps, rotated and pulled down the arm, and then adducted it *vi et arte* and in a most determined manner. There was no click, or the sign of a re-adjustment having taken place, but immediately on the patient rising from the ground he said that he was much more comfortable; he had lost most of the pain; he could move his arm with comparative freedom; and to his delight and my satisfaction he dressed himself without assistance. He was convinced that I had reduced a dislocation. In my own mind I was sure that I had not, but for obvious reasons I did not tell him that the success attending my treatment was worthy of a more exact diagnosis. It is with no sense of pride that I record the case; nevertheless, it might be expedient to adopt this treatment on another similar occasion. With a hyper-sensitive and nervous patient, and a fat or swollen shoulder, it is occasionally impossible to affirm without the aid of an anæsthetic that there is no displacement. Traction on the bent elbow with the heel in axilla enables the surgeon to make the necessary examination. Certain am I of this,—that my nervous patient would not have examined him if I had first said that I thought there was no displacement.

I have observed the same course of events in other cases. For instance, a man has just damaged his ankle, which is now painful, swelled, and stiff; a thorough manipulative examination reveals no definite lesion. But immediately after the handling the patient finds the foot so much better in every respect that he talks too lightly of his injury and wishes at once to walk about. Or an elbow, knee, or wrist, is stiffened by a recent wrench. On being thoroughly overhauled, nothing is found absolutely wrong with it; but the patient, though a sufferer during the examination, finds the joint greatly improved by it. The surgeon will rightly refuse to include such a speculative therapeutic measure in his routine practice; but its blind employment by the charlatan is the means of securing many a triumphant success.

Where a limb is stiff from chronic muscular rheumatism, much good may often be done by *massage*, and by sudden movements imparted to

it, the stiffness disappearing by magic, whilst no harm can follow the treatment.

Stiffness may follow on a sprain from effusion taking place, not into the synovial membrane of the articulation, but into a sheath in connection with a neighboring tendon. One has often to treat such effusion in the sheaths of the extensors of the thumb and wrist, and also in those of the tendons of the tibial muscles and of the extensors of the toes. It is, of course, easy to differentiate between an articular and a thenar effusion; the same principles direct the treatment in each case I have at the present time under my care a wrist which is stiffened from slight effusion into the sheath of the radial extensors; great relief is being afforded by the firm compression of a domette roller which is kept constantly wet.—*The Practitioner*.

### SOME PRACTICAL SUGGESTIONS ON THE TREATMENT OF DIPHTHERIA.

Dr. Wm. Porter (*Journal American Medical Association*):

Diphtheria is a common disease, and it is one of the most fatal. As one illustration of many, in five years there were 17,193 cases in New York alone and 7,293 deaths. It is a disease that every physician will be called to treat sooner or later, and being called must act promptly. This is not the place for a long essay upon the different theories of diphtheritic contagion and progress, rather let us enter at once upon the discussion of the practical questions involved in conducting the disease to a favorable issue.

Let me very briefly sketch the manner of invasion according to conclusions which seem most reasonable and are by many accepted:

1. Diphtheria is contagious—or rather contagious, and of parasitic origin.

2. It is most readily implanted upon a mucous membrane denuded of its epithelium.

3. It is probably always local in its incipency, sometimes becoming rapidly systemic, though in rare cases apparently systemic, from the beginning.

To further explain rather than to argue these propositions, let me say that the best protection against diphtheria is mucous membrane entirely healthy; and an ordinary acute or subacute laryngitis or pharyngitis is a condition favorable to the implanting of the diphtheritic germ. When the epithelial layer is intact the diphtheritic germ finds no foothold, but when there is an abrasion or denudation of the lining membrane, the diphtheritic bacteria first attach themselves to the surface so prepared for them. This is the local period of the disease, and no micrococci are found in the blood—there is no constitutional symptom. Sometimes, though, there may be rapid surface involvement, and free formation of the characteristic membrane, there may still be little absorption of the diphtheritic virus.

Many of these almost purely local conditions

suggest a doubt as to their specific nature. It is well to give the patient the benefit of the doubt, and to treat urgently all suspicious looking exudations upon the surface of the respiratory tract. Practically, a certain number of cases of diphtheria are constitutional from the beginning, the point of infection being in some recess of the naso-pharynx or larynx and easily over-looked—or is beyond the range vision. I am not sure but that infection may occur from primary invasion of the membrane of the alimentary canal. Klebs, in the second Congress of the German Physicians, speaks of a diphtheritic involvement of Peyer's patches, resembling the reticular appearance in the earlier stages of typhoid. In by far the greater number of cases the rapid multiplication of the bacteria—whether spheroidal—bacteria as are found in severe cases, or whether short and slender rods as in milder cases—produces an inflammation of the mucous membrane, exudation takes place, the epithelial cells die, and the bacteria pass into the blood and rapidly multiply throughout the circulation. Even should we deny with Beale that the contagium is bacteria, we still must admit that the hypothesis of local infection furnishes the most rational explanation of the sequence of symptoms.

Granting this, we have two purposes in treatment in the early stages of diphtheria:

1. To destroy or render harmless the local manifestation of the disease.

2. To increase the power of resistance in the general system to infection.

In dealing with the false membrane all measures which would tend to irritate or injure the air passages, should be avoided. There should be no tearing away of the exudation, or application of caustics—nor do I think that, except in cases where there is only a small, well defined patch of membrane, the use of the galvano-cautery will prove expedient. To prevent absorption, not only should we avoid making new abrasions in the throat, but I have thought it wise, as far as possible, to cover up those that already exist.

First of all, it is well to remove from the naso-pharynx, or pharynx, if that be the site of invasion, whatever of accumulated mucus and debris there may be. This may be readily done by means of a small syringe, and a weak solution of salt water, or of Lysterine. This may be used either through the nostril or directly in the pharynx.

To loosen the attachments and hasten the resolution of the diphtheritic membrane many means have been advocated.

When the patch can be reached, a solution of papayotin may be applied; or better still, one of trypsin. This last used in solution, as suggested by Fairchild and Foster, or still better, a few grains with one or two of bicarbonate of soda, made into a paste with water and spread upon the diphtheritic patch, is the most rapid solvent I have known. If the local disease is beyond the reach of such an application, an alkaline solution of trypsin may be sprayed into the nose or larynx

After several applications of trypsin within the hour, a still further attack may be made upon the local disease. Having used more or less freely most of the germicides, astringents and antiseptics commended in the treatment of diphtheria, I have abandoned all else for a solution of equal parts of the tincture of the chloride of iron and glycerine. I have cause to consider this, when well applied over the entire extent of the diseased surface, an almost complete bar to the progress and absorption of the diphtheritic virus.

1. If the potency of the disease lies in the rapid multiplication of bacteria, so strong a chlorine solution is certainly indicated.

2. If absorption takes place through the abraded surfaces and "mouths of lymphatics open," as stated by Oertel, we would, from *a priori* reasoning, expect some good from the local use of iron, while the glycerine may be something more than a mere vehicle, in that it may by affinity relieve to some extent the turgid capillaries of the mucous membrane. The application should be made frequently.

Let me say, in urging the efficacy of this agent, that for two years I have not seen a case of diphtheria die where the whole of the false membrane could be seen and repeatedly covered with this solution, and where appropriate general treatment was given. Thrice within the last week, and many times during the past year, I have seen the characteristic membrane shrivel up and become detached under the influence of the iron and glycerine.

When the local attack is out of reach of the direct application by means of the brush, or better still, the cotton covered probe, the case is very different.

When the invasion is in the naso-pharynx, or in the larynx, the result may well be dreaded. Even in such instances I believe the best procedure is to apply the iron locally by spray, and where possible by the cotton covered probe.

The covering in of the diphtheritic patch with tolu varnish, as recommended by Mackenzie, may follow the thorough use of the iron solution, and is doubtless protective.

Not only is local treatment important, but it is important to institute it early. The physician should be called at once in every case where there is a doubt. Parents should feel that they are responsible for delay, and that delay is exceedingly dangerous. Many cases, that during the first twenty-four hours are easy to treat and curable, are a little later beyond the reach of the most skilful.

A few words as to general treatment. Here, too, I have no sympathy with halfway measures. First of all, in every case, I nearly always counsel the administration of enough of calomel and soda combined to thoroughly evacuate the alimentary tract. It empties the canal of any accumulated material, it stimulates important secretions

and with Ritter, though not to the extent to which he advocates it, I believe it has a favorable influence upon the general condition. At least it clears the decks for action. As soon as the bowels of the child have been well moved, and sometimes not waiting for that, the internal use of the iron and glycerine solution (the same as that used in the throat) may be begun; for we need not fear any chemical reaction. To show that others are falling back upon this well-known agent, let me quote from an editorial in a recent issue of the *New England Medical Monthly*: "It is interesting and somewhat gratifying to note that after each excursion into the domain of experimental medicine, the profession invariably returns to the older and more effective method of treating diphtheria, which consists of tonic doses of the tincture of iron and a system of extreme nourishment."

To anticipate and antagonize general invasion, the general as well as the local treatment should be instituted early. Where the symptoms demand I prescribe two drops of the iron and glycerine solution for each year of the child's age, in a little water every two hours, and midway between each dose the diphtheritic patch is to be touched or sprayed with the solution. Thus there is an opportunity for the ferric solution to be brought in contact every hour with so much of the diseased membrane as is in the pharynx.

I have not discussed much of the poly-treatment of diphtheria as practised to-day—nor have I time to outline the emergencies which may arise, as I had thought of doing. My object has been to propose a plain and direct method of treatment which any one may use and which is not an experiment.

Many other remedies are often to be added. Pilocarpine, when the skin is dry and there is spasmodic laryngeal contraction; quinine, when the fever is excessive; steam from slacking lime, when respiration is labored and the respiratory tract dry; and tracheotomy or intubation when the larynx is greatly obstructed.

Let me, in conclusion, suggest that the physician demand of the people among whom he practices that they call him at once when suspicious symptoms are observed, and that he answer quickly, act promptly, and see that his instructions are implicitly obeyed. To treat diphtheria is to fight a battle—there should be no delays, surprises, nor compromises.—*Medical Digest.*

#### HAMAMELIS IN THE TREATMENT OF DISEASES OF THE SKIN.

Witch-hazel has long been recognized as a valuable therapeutic agent, both for internal and external use. For years it has been placed upon the market by vendors under various names, and highly extolled for its medicinal action. In very many diseases it has fulfilled all the claims which

have been made for it, such as its use for piles, sores, cuts, and all hemorrhags. It has, owing to its decided action in these diseases, become in America a standard domestic remedy, which is frequently resorted to by physicians, more particularly those residing in the country.

Successful results have again and again been noted, by many physicians, of the action of this drug in numerous diseases in which other remedies have failed. Ringer, among others, has noticed, I may say, this uniform action of hamamelis, and reports that he has known it to arrest hæmaturia in four cases which had resisted many other remedies. It has been found to be equally effective as a hæmostatic in bleeding from the lungs and other organs. Its action is claimed to be that of a vascular sedative.

Dujardin-Beaumez thinks that it has an action on the muscular fibres of the veins. Hector Guy, however, alleges, after testing the drug thoroughly, that it shows no special physiological action on the vascular system. Several American investigators have also recently denied the action claimed for hamamelis.

Clinical experience, however, is more reliable than physiological theory, and clinically I know of its value. I have referred to it at greater length in a paper, on its general action, read before the Section of Therapeutics at the last annual meeting of the British Medical Association. I again affirm that it possesses undoubted action in lessening local inflammation.

Abundant evidence, clinically, has been furnished of this action by a large number of physicians, chiefly in America, in which country it is the more largely used. It is not my object, in this brief paper, to give an extensive *résumé* of hamamelis, but to limit my remarks to its good effect in the treatment of disease of the skin.

Hamamelis may be employed in diseases of the skin, both internally and externally. Administered internally, in the form of the fluid extract, it appears to lessen the flow of blood through the vessels in inflammatory affections of the skin. Its action is, perhaps, more decided in eczema, especially in the acute and subacute forms. In cases in which the disease is more or less general, the surface red, hot, and tumid, the use of from one to thirty minims of the fluid extract of hamamelis in water or on sugar, every two or three hours, often has a most decided and speedy good result. The engorgement lessens and often disappears. It may be necessary in order entirely to remove the disease, to apply, in addition, some appropriate local treatment. The action claimed for hamamelis is, not that it always cures the disease, but that it lessens the flow of blood through the vessels, and thus relieves, benefits, and hastens a cure. In no case of cases will witch-hazel act so well as in those unfortunate infants suffering from pustular eczema or crusta lactea. The fluid extract of hamamelis in infantile eczema can be

administered in from a half to five drops, in syrup or milk, every two or three hours. In many cases its use will cause all constitutional excitement to abate, the serous or sero-purulent discharge to lessen, and the inflamed and swollen condition of the tissues to decline. It will, if persisted in, very often thus bring to the little sufferer the greatest relief from the high vascular excitement and the intolerable itching.

Hamamelis is also a valuable remedy locally in eczema, either in the form of the tincture, or in that of the diluted fluid extract. In some cases, in addition to its internal use, it may also be well to apply the drug locally. In others the tincture is the preferable form to use, from two to eight drachms being employed with four or five ounces of water. A piece of old muslin is saturated in the lotion and spread constantly over the inflamed part. In others, again, an ointment is better borne, and can be prepared by incorporating from a half to two or more drachms with some fatty vehicle—lard, suet, or lanolin being always preferable. Hamamelis thus used has both an astringent and a sedative action on the tissues, and will often quickly lessen inflammatory action in the part to which it is applied.

In erysipelas, I have known some good results to follow from its internal administration, but the results so far are not sufficient to warrant my recommending it as a remedy to be depended upon to control the constitutional symptoms of this disease. Locally, a lotion of hamamelis, one part of the tincture to five or six of water, may be employed in erysipelas in addition to other topical agents. It has, by its evaporating action, a most delightful refrigerant and soothing effect upon the hot and tumid skin. Its efficacy is often enhanced locally in erysipelas by adding one or more parts of tincture of opium to the lotion. Hamamelis in acne, particularly in the pustular form, acts well both internally and locally. It lessens the discharge, and, by its local astringent action in the form of a lotion, brings great relief to the inflamed and distended glands. In rosacea, its action is even more decided by its controlling effect upon the enlarged capillaries used both internally and externally. In obstinate cases, I usually push the drug to full doses, giving often as much as two drachms three or four times daily, and I have applied at the same time a lotion of one part of the tincture in four or five of water. The lotion is increased from time to time until it is applied in full strength. The enlarged capillaries slowly contract under its continued use, the engorgement lessens and the tissues of the part tend by degrees to become normal.

Hamamelis in the form of the tincture is a remedy of very great benefit in both seborrhœa oleosa and sicca. A lotion composed of one part of the tincture, with three or four of water, removes rapidly the greasy and glistening condition present on the face and other parts of the body in those afflicted with seborrhœa oleosa. In

like manner it removes and cleanses the surface of the scales and crusts, and has an astringent action upon the follicles in *seborrhœa sicca*. Loss of hair, which so often follows from the dry form of *seborrhœa*, is not only prevented, but the disorder removed by the local application of the tincture. In employing it in this disease, the tincture should be applied in full strength, or with half water. The efficacy of the lotion is often increased in this form of *seborrhœa*, and in alopecia, by the addition to it of from one to ten grains of corrosive sublimate to each four ounces. The tincture, either alone or combined with ten to thirty grains of boracic acid, promptly lessens and often thoroughly arrests the excessive secretion of sweat that occurs on the hands and feet, and in the axillary and inguinal regions. It acts frequently in a similar manner in fetid secretion, not only in lessening and stopping the discharge, but in allaying all unpleasant odor. In the latter disease the action of hamamelis is often enhanced by the addition of either five or ten grains of corrosive sublimate or boracic acid. The same preparation of hamamelis alone, or combined as above recommended, is an efficacious application in many forms of itching of the skin.

Hamamelis internally is a useful adjuvant to other remedies in the treatment of certain forms of psoriasis. It is more especially adapted to those cases which are attended with severe inflammatory action and itching of the skin. The fluid extract of hamamelis in large and repeated doses, in such examples of psoriasis as referred to, will often lessen the local symptoms and assist very much the action of other suitable remedies in controlling or removing the disease. The same preparation just alluded to is also of great utility in purpura, especially in the simple variety. It must, however, be given in full and frequently repeated doses, until the desired effect is produced.

Lastly, I desire also to testify to what has already been so ably reported by Dr. Musser, of Philadelphia, and others, of the value of hamamelis in the treatment of ulcers, particularly the varicose form. From the administration of full doses of the fluid extract, and the local application of the tincture, I have very often observed indolent, inflamed, and irritable ulcerative surfaces rapidly take on healthy action, and be finally cured. In employing hamamelis I always prefer for internal use the fluid extract, which is more certain in its effect. The tincture is usually sufficiently strong for all local applications, and very often it becomes necessary to dilute it with water.--SHOEMAKER, *The Medical Bul. & in.*

### CHRONIC PROSTATIS.

By W. H. DANFORTH, M. D., in *North Western Lancet*.

Chronic prostatitis is, in the majority of cases, the result of a gonorrhœa, where the inflammation has passed the compressor urethræ or the prostate itself.

Next in frequency as causes come masturbation and excesses in venery, as these habits keep up a continual congestion in the prostatic region; but in this case the inflammation is chronic from the beginning, and usually the secretion is mucous and not purulent.

The disease may arise from stricture, unskilful instrumentation, irritating drugs, and, perhaps, from the passage of concretions and sand in the urine.

Probably the prostate itself is not always affected by the inflammation; for it is often found normal in size and not tender to the touch; this is most noticeably the case in the chronic cases arising from masturbation. For this reason it seems incorrect to apply the term "prostatitis" to every inflammation in the prostatic urethra. The inflammation probably always begins in the mucous membrane of the urethra, and may or may not extend into the follicles of the gland later.

If we adopt Uitzmann's view, we apply the term "catarrh of the neck of the bladder" to all inflammations of the posterior part of the urethra, whether involving the prostate or not.

When an acute attack of prostatitis comes on during a gonorrhœa, it is announced by very frequent and painful micturition, weight and throbbing in the perineum, pain on defecation, and, perhaps, an attack on retention. The symptoms of the chronic form, whether from an acute case or other cause, are as follows: (These will not all be seen in the same patient, usually.)

(1) Increased frequency of micturition, but much less than in the acute form. Uitzmann's says: "Frequent micturition in the disease of the posterior urethra is such a very characteristic symptom, that from the presence of this sign alone we can always conclude with certainty upon a lesion in the neck of the bladder." (2) "Bearing down" and uneasiness in the perineum and anus. (3) Slight pain or uneasiness at the end of micturition. (4) Tenderness around the prostate on passage of a sound. In long standing cases the urethra becomes anæsthetic, and this symptom is lost. (5) Inability to urinate on making the attempt is a prominent symptom. (6) Diminution in the force of the stream and dribbling after micturition. (7) Reflex spasm of the compressor urethra; this is of common occurrence. (8) Frequent erections and erotic desires, as well as frequent seminal emissions at night, are often complained of; but in cases of long durations the opposite extreme is found, and partial or complete impotence may be present, causing the utmost depression. (9) There may be a discharge of mucus from the urethra, showing the presence of inflammation anterior to the compressor urethra; when, however, the inflammation is confined to the prostatic urethra, the secretion appears only in the urine. This, of course, is due to the strength of the compressor, keeping back secretions posterior to it. (10) Mucus may be discharged from the urethra during straining at stool, simulating the

discharge in spermatorrhœa, the microscope settles this point. (11) When the urine is passed in two portions, characteristic appearances are seen. Ultzmann says, "If only a little secretion has collected in the posterior urethra the urine in the bladder remains uninfluenced, and if we have the patient urinate successfully in two glasses, only the first portion of the urine passed will appear turbid; the second half remaining clear and transparent. If, however, the secretion in the posterior urethra is considerable in amount, it will flow back into the bladder, make the urine more or less turbid and even irritate the bladder itself. In this case, both specimens of urine (passed into two glasses) will appear turbid. However, as a distinction from a primary cystitis, the first half of the urine will appear more turbid than the second, and will contain more compact flakes, which all come from the urethra, and which, accordingly, are absent from the second portion of urine passed." (12) These "flakes" are so-called "prostatic shreds," and consist of short, thick, clumpy masses, which, under the microscope, are seen to be collections of pus, prostatic epithelium and mucus, with sometimes a few spermatozoa. They occupy the follicles of the prostate, are washed out by the urine. (13) Shreds from the anterior urethra may also sometimes be seen in the first portion of the urine; these are longer and thinner, and consist of pus and urethral epithelium. (14) The urine contains mucus, prostatic epithelium, pus, often spermatozoa, and sometimes blood corpuscles.

A trace of albumin is often seen, which disappears when a cure is effected. (15) On rectal examination, the prostate is usually found somewhat enlarged and tender; it may be normal in size and not tender. In which case the inflammation is probably mostly in the mucous membrane of the urethra. (With enlargement of the gland there may be residual urine.) (16) Neuralgic pains in the back and groin are frequent subjective symptoms. Dr. F. S. Watson says: "These pains vary as to constancy and duration, and may be entirely absent."

The frequency of micturition, with pain, and blood appearing at the end of the act, may stimulate the symptoms of stone in the bladder. This happens only in the acute cases, and rectal examination and sounding make the diagnosis clear. True hypertrophy of the prostate occurs only after the fiftieth year, and can hardly be mistaken for an inflammation.

In cystitis the pain is felt above the symphysis pubis instead of in the perineum; the urine is generally alkaline and the second part of the urine is as turbid as the first. Cystitis is, however, often associated with a chronic catarrh of the neck of the bladder.

The treatment should be both general and local. The patient should take no alcohol, he should sleep on a hard mattress in a cool room; he should take moderate exercise daily out of doors;

his bowels should be kept open, and he should be given tonics and plenty of nourishing food. The drine must be kept dilute and unirritating by diuretics.

For this purpose benzoate of soda, twenty grains, given four times a day, is an excellent remedy.

Locally, counter-irritation to the pereneum is beneficial. One side of the raphe is to be painted with cantharidal collodion or tincture of iodine, and in a few days the other side. This may be kept up for some time, and will usually relieve the sense of weight and uneasiness. Care must be taken to prevent the irritant from touching the anus.

Together with this the prostatic injection of nitrate of silver is probably the best remedy. It is best to begin with a solution of two grains to the ounce, and increase to five grains. In making the injection it is well to pass a good sized sound first, in order to stretch the urethra so that the fluid may readily penetrate to all parts. (The sound should be lubricated with glycerine, as oil will form a coating over the urethra and modify the effect of the application.) Then a drachm of the warmed solution is to be injected slowly, the point of the syringe having been located at prostatic urethra by the finger in the rectum.

Ultzmann's syringe catheter, fenestrated on the sides, connected by a rubber tube to small syringe, is the most convenient instrument to use.

The application should be made twice a week, using no more than a five-grain solution, and the treatment kept up for six or eight weeks. If, in that time, no improvement is noticed, the injections should be discontinued for a time and other means employed.

Combined with the deep injections and counter-irritation, large sounds to be passed once or twice a week. In the large majority of chronic cases the above treatment will bring about good results. It is particularly applicable to the chronic "mas-turbation cases."

## THE CANADA MEDICAL RECORD.

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## THE NEW MEDICAL ACT FOR THE PROVINCE OF QUEBEC.

The committee named by the College of Physi-

cians and Surgeons, to prepare the new Medical Bill, have placed the preparation of it in the hands of Mr. Pagnuelo, Q. C., who has submitted to them a rough draft. Several meetings have been held, at which it has been discussed; but after mature deliberation, it has been decided not to bring it before the present session of the Quebec Legislature. In this decision we think the Committee have shown wisdom. At the same time we would suggest that the time when it was intended to bring the Act into force must of necessity be extended. We also hold the opinion very strongly that the Act should not be made re-troactive. On this point, we know there is a very strong feeling among the students of the various schools, and as it will affect them materially we think their feelings should be consulted. Especially is this the case, when we know that if such changes, as are proposed in the new Medical Act, were University changes, students who had actually commenced the study would not be affected by them. This is the rule in Universities, and we fail to see why the College of Physicians and Surgeons should adopt a different course.

#### COLLEGE OF PHYSICIANS AND SURGEONS, PROVINCE OF QUEBEC.

We specially direct attention to the advertisement of this College, which will be found on the first page of the Record. The date of the preliminary examination for the admission to the study of Medicine is on the 5th of May. In our last issue it was erroneously stated to be the 12th of May.

The various Medical Schools in Montreal closed their lectures the end of this month, and are now engaged on the examinations. In our next issue we will give the results.

The proposed changes in the preliminary examination for admission to the study of Medicine are exciting the heads of the two Protestant Universities in this Province. We propose to deal with this question in our next issue. In the meantime, we must say that both Universities are very much to blame in having allowed this matter, heretofore, always to have been decided by their Medical Faculties. The sudden awakening which has overtaken them is likely to lead to some unfortunate complications.

#### NERVOUS HEADACHE.

Professor Arnold of Baltimore says that in nervous headache of the neurasthenic variety, he has found much benefit from twenty drops of Ether and ten of the Tincture of Cannabis Indicus. It is recommended to precede this remedy by a good night's rest, obtained from chloral.

#### NEW MEDICAL JOURNAL IN MONTREAL.

We have received the first number of "Le Gazette Medicale de Montréal" edited by Drs. Hingston, Paquet and Desjardin. It is elegantly printed, and the names of the editors a sufficient guarantee of the character of its contents.

#### HYDRASTUS CANADENSIS IN UTERINE HÆMORRHAGE.

Dr. Reynold W. Wilcox reports in the *N. Y. Medical Journal* for February 19th forty-three cases of various forms of uterine hæmorrhage, in which he employed the Fluid Extract of Hydrastus Canadensis in doses of twenty drops, three or four times a day in a wine-glass of water. The result was excellent.

#### PNEUMONIA IN NEW YORK.

The very variable weather which New York has experienced this winter has been prolific in producing Pneumonia, and that of a fatal type.

#### PERSONAL.

Dr. Bell and Dr. Sutherland of Montreal propose leaving for Europe some time next month. Dr. Roddick of Montreal has left Florida, on his way home, and will be here early next month.

Dr. Kennedy, Registrar of the Medical Faculty, of Bishop's College, has gone to Colorado for the benefit of his health. He proposes to remain away till early in May.

Dr. A. Laphorn Smith and Dr. George T. Ross, of Bishops College Faculty of Medicine, leave for Vienna next month, where they will pass the summer returning in time for the opening of the winter session.