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THE

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The fifty-seventh session will commence on the 1st of October, and will be continued until the end of the following March; this will be followed by a Summer Session, commencing about the middle of April and ending the first week in July.

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Besides these, there is a Pathological Laboratory, well adapted for its special work, and associated with it are two "culture" rooms, in which the various forms of Bacteria are cultivated and experiments on Bacteriologycarried on.

Recently extensive additions were made to the building and the old one entirely remodelled, so that besides the Laboratories, there are two large lecture-rooms capable of seating 300 students each, also a demonstrating-room for a smaller number. There is also a Library of over 10,000 volumes and a museum, as well as Reading-rooms for the students.

In the recent improvements that were made, the comfort of the students was also kept in view.

MATRICULATION.

Students from Ontario and Quebec are advised to pass the Matriculation Examination of the Medical Councils of their respective Provinces before entering upon their studies. Students from the United States and Maritme Provinces, unless they can produce a certificate of having passed a recognized Matriculation Examination, must present themselves or the Examination of the University, on the first Friday of October, or the last Friday of March.

HOSPITALS.

The Montreal General Hospital has an average number of 150 patients in the wards, the majority of whom are affected with diseases of an acute character. The shipping and large manufactories contribute a great many examples of accidents and surgical cases. In the Out-Door Department there is a daily attendance of between 75 and 100 patients, which affords excellent instruction in minor surgery, routine medical practice, venereal diseases, and the diseases of children. Clinical clerkships and dresserships can be obtained on application to the members of the Hospital staff.

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Every candidate must be 21 years of age, have studied medicine during *four* six months' Winter Sessions, and *one* three months' Summer Session, one Session being at this School, and must pass the necessary examnations,

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The Maritime Medical News,

A JOURNAL OF MEDICINE, SURGERY AND OBSTETRICS.

VOL. II. JULY, 1890. No. 4.

CONTENTS.

LEPROSY IN NEW BRUNSWICK.

Paper read before the New Brunswick Medical Society, July 1889.

BY MURRAY MACLAREN, M. D., M. R. C. S.

(*Continued from last number.*)

Description of the Disease.—The premonitory symptoms, progress and modes of termination of leprosy, as seen in New Brunswick, are quite similar to those seen elsewhere. The tubercular and anæsthetic, forms may be more or less distinctly represented, but that they are merely variations or forms of the same disease can be readily seen. I will give brief notes of three cases taken in 1886 which will serve to illustrate many of the prominent characteristics of the disease.

P. N., age 31, admitted into Lazaretto, 1880. Leprosy had been known in his father's family; his parents were healthy; some years previous to his becoming leprous he had intimately associated with a leper. Four years before admission to Lazaretto he began to feel unwell, first had pains running down the legs into the soles of his feet; then dark, yellow spots appeared on his legs, followed by the same on his arms and breast and shoulder, then over eyebrows. At the time of admission, in 1880, the hands were a little swollen, there were discoloured patches over eyebrows and on body, the hair coming off where the patches existed, and there was a diminution of feeling in these parts. When seen in 1886 he presented a marked leonine appearance, the nose broadened and tubercular, the forehead in folds and thickened, lips swollen and ulcerated, so with the ears. The whole face was darkened with pigment, and some of the nodules were ulcerated. The tongue was ulcerated, palate perforated and voice husky. The arms and legs were somewhat swollen and tender and presented numerous ulcers. Fingers bent, nails irregular and cracked, the feet tender and sore. The scrotum had tubercular ulcers, testicles swollen and tender. The whole body was darkened with increase of pigment.

Michael G. or O., age 30, admitted 1882. Leprosy had occurred in father's and mother's families. He presented mainly the tubercular form in a much more advanced stage than in the former case. The face and hands were extensively ulcerated, sight almost destroyed and general condition much lowered.

M. S., age 72. Admitted into Lazaretto 1844, discharged 1849, and re-admitted in 1880. Her father and mother had been free from leprosy and, as far as known, all her ancestry. Three of her brothers were lepers and a sister-in-law, by whom, it is said, the disease was introduced into the family. Her husband remained free from leprosy and died in 1874.

In 1832 she was married and bore two children before 1838, when leprosy appeared on her, after that she had three more children and then entered the Lazaretto in 1844. The hands and feet then were chiefly affected and being considered cured she was discharged in 1849. She gave birth to a child in 1850 and to another in 1854, She again entered the Lazaretto in 1880. When seen in 1886 her fingers and toes had disappeared but the sores had been completely healed. There was diminution of sensation in both hands and feet. There were a few small ulcers on the feet but none elsewhere, occasional pains in the limbs, otherwise she was an active, healthy woman. A slight ectopion of both lower eyelids existed, but this very possibly was not leprous. Her youngest child a girl, became leprous when 9 years of age, and after 22 years of leprosy, died in 1885. All her other children, grand and great grand children have so far been healthy.

These three cases illustrate leprosy in its different

forms, the first two representing more especially the tubercular form, extensive leprous tubercles and ulcerations. Both cases are now dead. Noel was leprous for ten and Gould for nine years.

In the third case the anaesthetic form was represented. There were very few tubercles, but a loss of sensation in the extremities with amputation of digits.

In the case of M. S. the disease has remained stationary for many years and it was 48 years since she became leprous.

An examination of the cases, (82 in number,) admitted into the Lazaretto from 1868 to 1888 shows an exact equality of the sexes, 41 males, 41 females. As regards age there was a great variation. The youngest male admitted was 7 years, the oldest 51. The youngest female 7, the oldest 55. Lepers are on an average four and a half years affected before admission. Of the 75 deaths which occured during the same period, 41 were males and 34 females. The earliest death after admission among males was four months, among females six months, (one death five days after admission not counted.) The greatest duration of life after admission was 12 years for males, 15¾ for females. The common duration of life among lepers is eight to nine years.

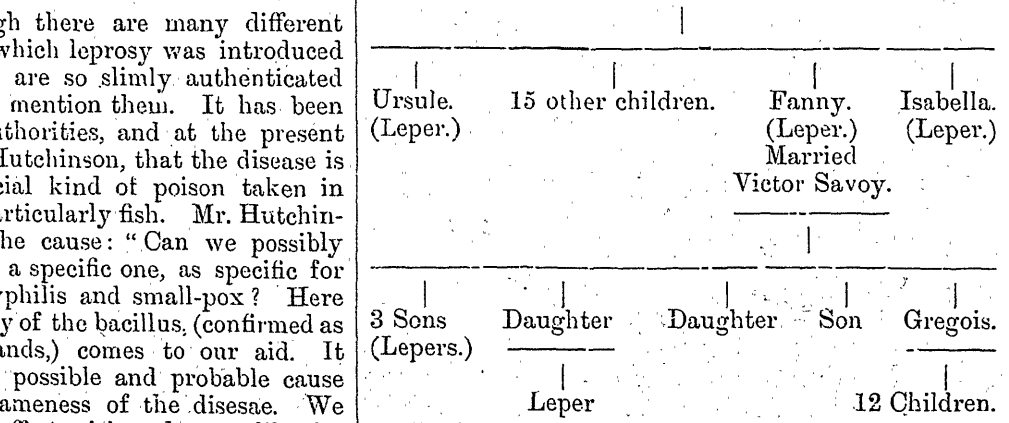
Progress of the disease.—Previous to the opening of the Lazaretto, 1844, there were about 20 deaths. From 1844 to 1888, a period of 34 years, there were admitted into the Lazaretto 194 cases. Nearly all the subjects of leprosy ultimately resort to the Lazaretto, but some have certainly died outside, so that up to 1888 it may be estimated that there have been 230 cases in this province which have extended over a period of 73 years. From 1858 to 1873, a space of 15 years, 71 cases were admitted into the hospital, and from 1873 to 1888, a second period, 53 cases were admitted. There were admitted from 1858 to 1868 forty-two cases, from 1868 to 1879 fifty-six, and from 1878 to 1888 twenty-six.

From these figures it will be seen that leprosy has never been very extensive, and further that it has considerably decreased, actually as well as relatively, the population of the district having been about trebled.

Causation.—Although there are many different accounts of the way in which leprosy was introduced into this province, they are so slimly authenticated that it is unnecessary to mention them. It has been maintained by many authorities, and at the present time by Mr. Jonathan Hutchinson, that the disease is produced by some special kind of poison taken in connection with food, particularly fish. Mr. Hutchinson states as regards the cause: "Can we possibly doubt that the poison is a specific one, as specific for instance as those of syphilis and small-pox? Here again Hansen's discovery of the bacillus, (confirmed as it has been on all hands,) comes to our aid. It demonstrates to us the possible and probable cause of the specificity and sameness of the disesae. We can understand why it affects rich and poor alike, for the poison is one against which riches and the social comforts which they bring, afford no protection whatever. We feel sure that there is nothing in even the slightest degree associated with poverty, dirt or hardship, we feel sure that nothing that we know of under the name of climate has anything to do with it. What then have we left us to inquire about? Little or nothing I would submit excepting the all important question of food. Since it can begin without inheritance, is with the utmost difficulty contagious, since it affects those who live in cold climates just as it does those who live in hot climates, pays no respect to wealth and station, to age or sex; but of those who live in the districts and conform to the local modes of life, picks out one here and another there, we are I think driven to the conclusion that it must depend on some very special kind of poison of rare occurrence, taken in connection with food. Such hypothesis would cover all the facts and none other would."

This view is not at all borne out by what can be observed in our own affected district, which is ouly 45 miles in length, and of the 82 cases already mentioned, 58 have arisen in the parish of Tracadie alone, which has been the headquarters of the disease, while the remainder come from the other parishes: Niguac 3; Pokemonde 9; Shippegan 6; Caraquette 6. It does not seem possible that this district, and especially Tracadie, should have food in any way different from a large part of the extensive northern and eastern coast, which is quite similar to the leprous district in soil, climate, food, including fish, and inhabited by a similar race of people with the same manners of life. Besides this, the fact that no case is known to have occurred among the indians dwelling within the affected area helps to disprove this theory. The disease would seem to be largely hereditary and to have been introduced in some unknown way into the province among the French. The cause of its having remained so defined is due to the isolated character of the district and the fixed habits of the people. Most of the cases at the Lazaretto readily show a leprous ancestry, for example,

ANSELM LANDRE AND MARY BRIDEAU.



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Syr Phytolacca Comp, the Composition of which has been given to the profession, has been known and used by Physicians, myself and others of my acquaintance, and found superior to other alterative compounds now in use. It has been used with great success in the treatment of Lupus, Herpes, Psoriasis, Acne, Glandular Enlargements, Strumous Affections, Granular Conjunctivitis, and Eczema. As a remedy for Syphilitic Diseases of the Skin and Mucous Membranes, it has proved to be especially valuable in my hands in a large number of cases where all the usual remedies had failed to improve their condition, and when Syr. Phytolacca Comp was administered the improvement was very prompt and satisfactory.

It will be seen that Syr. Phytolacca Comp. contains the best alterative remedies now in use, and that they are so combined as to make a permanent and agreeable preparation that can be administered to children or persons with the most delicate stomach.

I usually prescribe it in doses of a teaspoonful, which may be increased to a tablespoonful four times a day, the frequency of the dose to be diminished if bowels become too active.

CHARLES W. BROWN, M. D.

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AGENTS IN HALIFAX, - - BROWN & WEBB.

Contagion.—That leprosy is also to some extent contagious is shown in the records of some 10 cases of English speaking people who have acquired the disease by residence in the district, or who have come in close contact with lepers, among whom were J. M., whose father was an American, his mother Irish. He worked at Tracadie and developed leprosy in 1846.

A. S., a Scotch emigrant who had associated with Tracadie lepers for a time. He died in the Lazaretto in 1846. His two nephews, who lived with him on the North-West Miramachi, became diseased and died in the Lazaretto about 1850.

The latest case of which I have heard was that of N., who had worked in Tracadie, and died of leprosy in 1870. There had been no leprosy in his family. This case was seen by Dr. John Benson, of Chatham. The contagiousness, however, is not great or there would be many more examples. None of the nurses at the Lazaretto have fallen victims to the disease.

"Recent microscopic discoveries," says Mr. Hutchinson, "have done something to explain the difficulty of contagion, while at the same time confirming our belief in its possibility. They have shown that the microbe, which is no doubt the means of contagion, flourishes only in the true skin and never invades the epidermis, and further, that it is not present in the granulations of ulcerated parts."

Practically, Mr. Hutchinson thinks, the disease is not contagious; but it seems to me that the disease to a moderate extent is so.

In conclusion we may congratulate ourselves that leprosy has so far not extended itself throughout the province, but there has been, as shown by the figures given a decided decrease.

The Principle of Segregation is of the greatest importance and to its efficient attainment we may confidently look for the extinction of the disease. Segregation proves beneficial by isolating the lepers and thus avoiding contagion, as well as the danger of spreading by hereditary transmission. It is important that the lepers should resort to the Lazaretto at the earliest manifestation of the disease and not after its 3rd or 4th year. The difficulty is that it is not very noticeable at first and the subject, especially if the father of a family, wishes naturally to remain at home as long as possible to support his wife and children. One would therefore think it advisable that special provision be made by the governors to meet such cases, and so encourage the lepers to go to the Lazaretto at an early stage of the disease.

The Lazaretto itself, although fairly comfortable and well conducted would be much more efficient were the building considerably larger and provided with a resident medical officer, for it is only after prolonged and close observation that an exact knowledge of the disease can be obtained.

Leprosy to a small extent has existed for some years on the island of Cape Breton. The Dominion Government has lately taken steps to have the lepers removed to the Tracadie Lazaretto.

The position of the Lazaretto was changed to Tracadie in July, 1849, as residence on Sheldrake Island was repugnant to the lepers.

A LECTURE ON GENERAL PARESIS, DELIVERED AT THE HALIFAX MEDICAL COLLEGE, APRIL, 1890.

BY GEO. L. SINCLAIR M. D.
Assistant Superintendant Hospital for Insane.

Concluded.

ETIOLOGY AND PATHOLOGY.

I have already told you the kind of people who are liable to this disease, viz., men in their physical and intellectual prime, but who have been free livers; who have very likely indulged in *excess* of some kind. It may have been mental work, or late hours or a diet of highly seasoned animal food, suppers with free use of alcoholic drinks, excessive sexual indulgence and possibly some time in their lives they have had syphilis. Now *excess* is a word which has rather a comparative than a fixed meaning; excess in one person may be moderation in another and *vice versa*. The peculiarities of each individual must be taken into account in deciding whether or not his use of various things is that of excess.

Clouston regards General Paresis as a disease of the outer layer of the cerebral convolutions, of the mind-tissue as he calls it. It is, he says, essentially a death of that tissue, and the causes of this death are those which have exhausted trophic energy by over stimulation, and this over stimulation is brought about by "over and promiscuous sexual indulgence, combined with hard muscular labor, a stimulating diet of highly fed flesh meat, the brain all the while excited and poisoned by alcohol and syphilis, all these being begun early in life and kept up steadily. He says in England the Durham miner when earning good wages fulfills the most perfect conditions for the production of general paralysis and as a consequence every sixth lunatic admitted into their county asylum is a sufferer from this disease. The importance of syphilis *per se* as a producing cause is not settled. Personally, I think it sufficient, and I have notes of several cases in which it is at least the most probable exciting agent. Of course it would be a natural thing for one of the men who indulged in "promiscuous and excessive sexual congress" to contract syphilis, and there is great difficulty in deciding as to cause and effect.

Pathological changes in the brain.—In speaking to you as to the pathological changes, I cannot do better than give a resume of the description in Clouston's work. The calvarium is thickened and hardened and in some cases the diploe has entirely disappeared. The dura mater is also thickened and adherent to the skull. Beneath it is found a layer of red gelatinous material, which he says is not the result of inflammation, but a new formation as it contains elementary blood-vessels. The arachnoid is also thickened and beneath it, between it and the pia, is found a variable amount from 4 oz. to 6 oz. of a thick fluid which varies in colour from simple milky opacity to distinct red; this will flow away if the membrane is punctured. He says its presence is compensatory taking the place left by the shrinkage of the convolutions. The pia is thickened and reddened and upon being separated from the brain takes with it layers of the cerebral substance leaving the hemisphere eroded, like cheese at which rats have been gnawing.

The ventricles of the brain contain fluid and are apt to be enlarged. Their lining membrane is thickened, due to hypertrophy of the epithelium, and looks like frosted glass. The microscope shows that the brain tissue is degenerating, especially the superficial layer of the intellectual (frontal?)

portion. The neuroglia has hypertrophied and accumulation of the matrix material and enlargement of the cells, have strangled the proper nerve fibres. The nerve cells also are degenerated and the spaces are clogged by broken down material which is not removed because the peri-vascular spaces, the lymph channels of the brain, are also blocked by the results of brain degeneration.

Sections of the convolutions show the gray matter divided into two distinct layers, the outer gray and opaque looking with a line of red demarcation between it and the next. There is no real sclerosis but the outer layer may be firmer than usual, though sometimes it is distinctly softened. The whole gray matter, in old standing cases is palpably thinner. The white matter is often congested in irregular patches its peri-vascular spaces enlarged and the coats of its small vessels thickened and toughened.

In old cases also, there is scarcely any nervous tissue which is not affected, the retina, peripheral nerves and sympathetic ganglia markedly so.

Prognosis.—Most unfavorable. I do not know of any case in which cure has been accomplished. Cases have been so reported but I am inclined to think sufficient time has not elapsed to claim a legitimate and complete cure. Remissions do occur and last for variable periods, depending upon different circumstances, but the patient relapses if he calls upon his brain to exercise other than what might almost be called its automatic functions.

We sent away to the care of friends, a man who passed out of the first stage and did not go into the second but I fear he is a mental wreck. Another patient of ours was removed by his relations at the urgent solicitation of his wife, but he came back to us in a few months and a little later died in convulsions. A third case is back with us now after remaining at home a few months. This case is interesting because the patient has had two relapses. I do not think he has ever been the man he was since the original attack, but his delusions became less prominent and his excitement also less. As long as he is content to lead a simple agricultural life he does well, the moment he attempts to conduct any business he breaks down.

While the question of sexual abuse as a producing agent of the disease in the beginning is undecided, I think there is no doubt of the danger the general paretic incures by returning to nuptial pleasures. Dr. Savage says they are "fatal joys." It is a delicate subject to allude to in speaking to a wife—if you hint that the husband has been indulging too freely, she may become indignant at the idea and say that he is perfectly true to her. You can explain that you do not mean he has been poaching on others' preserves, but hunting too indefatigably upon his own.

How long does the disease last? We used to think about three years. I know it is longer, and we have one case that is living nearly eight years after admission here.

TREATMENT.

The prognosis being bad you will anticipate that I have little which is encouraging in the matter of drug treatment.

If you were able to diagnose such a case in its very early stages, it would be best to send the patient away to the country in charge of a good nurse *and without the wife.* The trouble is that patients will not listen to a suggestion of being in any way ill or submit to any restriction upon his personal liberty. Absolute rest from mental work is urgently demanded and should be obtained if possibe.

When the patient is admitted here we inquire as carefully as we can into the history of his past life to see if there is any reason to suspect syphilis. If we find any record of venereal disease, we give Iodide of Potash. in large and increasing doses. Bichloride of mercury has been advised and has been used, but with no specially good effect.

For the excitement which is very frequently present, and which has often a rapid heart action, I have found nothing better than Tr. Digitalis and Bromide of Potash—in full doses. The patient should be kept as much as possible in the open air. His bowels should be regulated by some form of aperient and I am rather partial to one of the mercurials. His food should be sufficient and nourishing, but these people are very apt in the early stage to over eat and they should not be permitted. When the patient sleeps badly or is noisy some form of hypnotic is called for. I do not like to use either morphia or opium. The after effects are undesirable. We have tried Tr. Digitalis in large doses as a sedative, but are not very well pleased with the effect, better results have followed in our hands the use of Chloral. Hydrate, in 30 or 40 gr. doses—and still better the hypodermic use of Hydro Bromate of Hyocine in doses of gr. $\frac{1}{100}$ or $\frac{1}{120}$. This is as certain to produce quiet and sleep as any drug with which I am familiar.

For the Epileptoid Seizures, if they continue, or fail to be controlled by having the patient in bed with cold applications to the head, I inject gr $\frac{1}{3}$ of Morph. Sulph. hypodermatically and generally the effect is marked, and promptly stops the convulsion. In two cases, strong plethoric men, I bled freely from the arm. Here also the result was curative of the fits. As the disease advances and the patient becomes more paralysed, special attention must be given him during meal times, to prevent choking. His food should be cut up and he should be fed by the nurse,—keep such patients out of bed as long as possible. When the stage of absolute inability sets in, every thing must be done to prevent the formation of bed sores. If possible, a water bed should be under, failing this an elastic spring bed, and the patient changed from side to side. So liable are these sores to come, that even if one limb lies across the other for a short time, this slight pressure will cause a blister to form, and this speedily will enlarge and become a stinking, spreading sore.

During this last stage the patient emaciates rapidly, although taking a fair amount of food. This should now consist entirely of liquids, especially milk and its preparations. Swallowing is badly performed, and there is liability of solid food becoming lodged in the pharynx and choking the man to death. The bed sores should be kept clean and dressed with powdered Oxide of zinc., and over this a layer of soft picked oakum placed round, with a few strips of sticking plaster. Sooner or later diarrhœa occurs, and carries the patient off, or a series of convulsions set in, and death results. I may mention to you that quite recently the surgeon has stepped in and trephined the skull of paretics, then punctured the membranes and drained off some of the fluids which are in excessive quantity within the cranium. In two cases reported amendment has followed—but the time is not long enough since the operation was peformed to say that cure has resulted. The theory is that by relieving tension which the excessive fluid accumulation causes, the nutrition of the brain is improved, and that good will follow which may be permanent. Further experience and more cases are required to establish the wisdom of the treatment or the truth of the theory.

OLIVER WENDELL HOLMES says that his prescription for longevity is the acquisltion of incurable disease.

THE CARTWRIGHT LECTURES ON VITAL AND MEDICAL STATISITCS.

Delivered before the Alumni Association of the College of Physicians and Surgeons, New York, Nov. 14th, 20th and 22nd, 1889.

BY JOHN S. BILLING, M. D., LL. D., *U. S. Army.*

PART III.—(*Concluded.*)

The data upon which to base medical statistics must be obtained either from published records, from unpublished memoranda collected by means of correspondence, or by the so-called collective investigation methods, or from personal experience. The published data include such records of private practice as are given in journals, transactions, monographs, etc., records and statistics of hospitals, statistics of public medical services and of medical and life insurance societies.

Detailed reports of cases such as are suitable for use in statistical work are not over-plentiful. We have only summary statements of tables of results. This is the case with regard to much the larger part of the great mass of reports of results of hospital and asylum practice which have been published during the last hundred years, either in the form of separate annual reports or in summaries for journals or societies. These reports give some information as to the prevalence of certain diseases in certain places at certain periods of time, and in this way have some historical value, but they do not show the proportion of cases of disease or death to the living population in which these occur, and very few of them give the data by sex and age in the manner required by the statistician. Some of these calculate death-rates with reference to the total number admitted during the year, and others to the total number disposed of during the year by discharge, transfer, or death. A few of them give the average daily number under treatment during the year and the average number of days' treatment for each case, sometimes making a distinction of sex, but almost never of race or age.

Comparison of gross death-rates of different hospitals, however calculated, are of little value for the purpose of determining either the sanitary condition of the place, the skill of the medical staff, or the merits of the particular system of treatment, owing to the great variations in the class of patients admitted. Of course the statistics of hospitals for special classes of diseases can only be compared with those of the same kind; and even for general hospitals, the fact that the gross death-rate of one is higher than that of another proves very little.

In comparing hospital death-rates, it is now generally agreed that it is best to make use of the death-rates in relation to the total number of persons disposed of by discharge, transfer, and death of a series of years. Comparison of the number of deaths with the admission only is apt to give very misleading results. A better method than this is that of Bertillion, who adds to the number at the beginning of the year one half the sum of those admitted and of those going out. It is also desirable to know the ratio of deaths and discharges to the mean population of the hospital, which is obtained by dividing the number of days of treatment by three hundred and sixty-five; but in this connection it is to be remembered that when the mortality is calculated with relation to the number of days' sojourn in the hospital, those physicians who keep their patients the longest will show the lowest death-rates.

From what has been said in these lectures it will be seen that no form of hospital statistics can be considered as satisfactory which do not give the distinction of sex and age, and this not only for the total of all the patients, but for each of the several forms of diseases treated.

Suppose that, for the sake of testing the relative efficiency of two different modes of treatment or of the general progress made during a series of years in therapeutics, we take the statistics of a particular disease, which should be one having a tolerably definite train of symptoms so as to be easily recognized. A disease which it is common to select for this purpose is acute lobar pneumonia. Suppose, now, that in a given group of cases of pneumonia subjected to one method of treatment the mortality or the proportion of death is found to be greater than in another series of cases subjected to a different treatment; are we thereby authorized to conclude that that mode of treatment connected with the lowest mortality is really the cause of the low mortality? By no means. Before we can do this we have to settle the character of the cases, the proportion of those in each group occuring in advanced age or in intemperate persons, or in those affected with other diseases, or in certain races, because all these circumstances influence the death-rate. We have also to take into account the total number of cases in each group in order to make an allowance for the probable error due to small numbers. If the two groups of cases have occurred in different localities or have been treated in different institutions, we have then to take into account the special influences of the locality or institution, as far as it is possible to do so, and not until all these corrections have been made can we fairly estimate the relative influence of the treatment.

In the absence of statistics of cases and deaths by ages, we can get very little information from statements of death-rates from pneumonia. For example, the death-rate in United States hospitals from pneumonia from 1877 to 1888 was 18.72 per cent of the cases treated. Was this a high or a low death-rate? We can only say that it was probably rather below the average, since the average death-rate for males between twenty and fifty years of age is 19 9 per cent. of cases treated. The need of such considerations is well illustrated in a paper by Dr. C. W. Townsend and A. Coolidge, contained in the *Medical News*, July 27, 1889, p. 85. This paper is a discussion of all the cases of acute lobar pneumonia treated at the Massachusetts General Hospital from 1822 to the present time, the figures being divided into periods of ten years, making seven decades in all.

The conclusions arrived at by the authors are as follows:

1. In the thousand cases of acute lobar pneumonia treated at the Massachusetts General Hospital from 1822 to 1889 there was a mortality of 25 per cent.

2. The mortality has gradually increased from 10 per cent. in the first decade to 28 per cent. in the present decade.

3. This increase is deceptive for the following reasons, all of which were shown to be a cause of a large mortality:

(*a*) The average age of the patients has been increased from the first to the last decade.

(*b*) The relative number of complicated and severe cases has increased.

(*c*) The relative number of intemperate persons has increased.

(*d*) The relative number of foreigners

4. These causes are sufficient to explain the entire rise in the mortality.

5. Treatment which was heroic before 1850, transitional between 1850 and 1860, and expectant and sustaining since 1860, has not, therefore, influenced the mortality rate.

6. Treatment has not influenced the duration of the disease or of its convalescence.

Suppose we try to estimate the relative value of a particular treatment of rheumatism, say, by salicylates. We find several tables in medical literature giving the results treated by this and other methods. As a type, take the analysis of 1,200 cases treated at Guy's Hospital given by Dr. Hood (*Brit. Med. Jour.*, Dec. 31, 1881, p. 1119), in which he gives the average duration of illness, number of relapses and the number of cases of cardiac complications in 350 cases treated with salicylates and in 350 cases treated without them, and concludes that relapses and cardiac complications were more frequent under the salicylate treatment, but that the pain ceased sooner and the average length of stay in hospital was less. But the cases are not tabulated by sex, age, race, etc., so that we can estimate the bearings of these circumstances on the results, nor in any tables are these results thus classified.

Within the last twenty-five or fifty years in civilized communities the gross mortality has diminished, there has been a prolongation in the average expectation of life, and the mortality of the years of infancy has greatly diminished; but how much of this is due to preventive medicine, how much to improved conditions of habitation and to the lowering of the price of food, and how much to improved methods of treatment? Dr. Zweifel endeavored to answer this question in a lecture on the influence of medical knowledge on the life of the people, delivered in Leipsic in 1887. ("Der Einfluss der ärztlichen Thätigkeit auf die Bevölkerungsbewegung.")

Taking as a basis for his calculations the figures of Bavaria for ten years and those of Saxony for thirteen years, he found that, for 100,000 living population, the average number of deaths from tuberculosis increased from 250 to 258; from inflammation of the lungs, from 222 to 270; from croup and diphtheria, from 98 to 123. He remarks that these are saddening figures, in spite of the sanitarians and health resorts, in spite of ventilation, new methods of treament by inhalation, compressed air, etc. The number of men who die from disease of the respiratory organs is steadily increasing, and he queries whether Süssmilch was not right in his phrase "Gottlichen Absterbeordnung" ("Divine law of death").

On the other hand, he shows that the mortality from typhus has fallen from 62 to 34. But the question is whether this is due to a diminished prevalence of the disease, or to a diminished mortality in the same number of cases of the disease due to improved medical treatment. It may be noted in this connection that the chief effect of improved sanitation appears in the lessened mortality in children under five years of age, and that it is chiefly in the mortality occurring after these ages that we are to look for the influence of improved medical treatment. In examining this, however, it is to be remembered that improved sanitary conditions, affecting chiefly infants by preserving a number of feeble and sickly children, tend to produce a higher rate of mortality in succeeding years. In cases admitting of surgical treatment, and in childbirth, there can be no doubt as to the diminished mortality in the practice of those who use the best accepted modern methods, but these methods are not yet used scientifically by half of the profession, and the results are not perceptible in the general death-rates thus far collected.

It must be admitted that the greater part of the increased expectation of life is probably due to better food, purer water, greater cleanliness, and improved methods of preventing the spread of contagious diseases. If we look at the curves representing the loss of life in large masses of people at different times and places we see that the laws of life and death have but a narrow range of variation after the age of infancy has passed, and that improvements in therapeutics have lifted the lines but very little. They have lessened suffering greatly, but they have not greatly deferred death.

In our present state of knowledge there are certain forms of disease and derangement of organs whose tendency is to recover without any treatment, or in spite of bad treatment. There are also certain diseases and derangements which are incapable of cure by any known method of treatment. Otherwise, man would not be mortal. Between these two classes is a small number of cases of disease the result of which depends on the treatment. In order that medical statistics may give us any information in regard to this last class, we have got to give some idea as to the proportion of each of the two other classes.

In vital statistics, as in other branches of social science, it is not true that the effects of causes acting in combination are equal to the sum of the effects of each of the causes acting separately. Different causes of death having no relation to each other do not have a joint effect which is equal to the sum of the effects of each cause taken separately, and it is therefore difficult to bring the pneumonia of vital statistics within the boundaries of mathematical formulæ. In the doctrine of this kind of averages time and number are not convertible terms.

Statistics apply to masses of men, to communities, not to individuals. We find a mass of matter moving in a certain direction with a certain velocity and endeavor to calculate the direction and amount of the force which have produced this result. In like manner we may consider the tendency of death in a community as a resultant of several forces as indicated in the diagram, and endeavour to estimate the influence of each of these forces in producing the result.

In studying medical and vital statistics one is somewhat in the position of a man on the deck of a large Atlantic steamer, out of sight of land and gazing on the troubled ocean. He sees many waves, large and small, apparently moving in very different directions, and it is not until he has, by careful examination and repeated comparison, learned to distinguish the ripples due to the wind now blowing, the large cross-seas resulting from force which were acting a few hours before, and the long rolling swells which indicate to some extent the direction and force of the tempest of yesterday, that he can begin to understand the roll of the ship on which he stands; while to appreciate the force and direction of the great current which is sweeping with it all the troubled water and the ship itself requires skilled observation with special instruments, and the use of charts which embody the experience of hundreds of voyages. So also in viewing the records of human life, disease, and death, the variations which are at first most perceptible are often those which are most superficial and which give little or no indication—of the magnitude and direction of the movement of the great masses beneath.

Hospital Practice.

GENERAL PUBLIC HOSPITAL, ST. JOHN, N. B.

F. G. ESSON, M. D., *Superintendant.*

Case 1.—A. D., 23 years. Diagnosis Urethro Vaginal Fistula. Under care of Dr. Wm. Christie. Confined 3 years ago, parts torn considerably during confinement. Semi-purulent discharge from vagina ever since. The immediate cause of the fistula was the compression of the soft parts between the child's head and the bony wall of the pelvis. Confinement very prolonged. Admitted, complaining of involuntary flow of urine from the vaginal orifice on rising, and severe pain after micturition. On examination a large urethro vaginal fistula was discovered. General condition very good. *Treatment.*—Patient operated on by Dr. Wm. Christie, May 28th, 1890. Ether given as anesthetic. Patient in Sim's position. Edges of fistula pared and carefully adapted with silk, (No. 5,) sutures. Sutures not passed through mucous membrane of urethra. After the operation patient catheterized every two hours for ten days. During this time there was some slight leakage through fistula. Sutures removed on 11th day. Patient catheterized every 4 hours till 18th day; no leakage occurring, patient was allowed to pass urine voluntarily from this date. No leakage has occurred since 14th day and on examination fistula is found to be completely healed, 28th day.

P. S.—Contraction of vaginal orifice from sloughing of soft parts rendered the case difficult of operation.

Case 2.—G. A., 65 years, male. Senile cataract' (mature,) right eye. Under care of Dr. M. F. Bruce. General health good. Operation, Cocaine as anesthetic. Large peripheral section upwards in cornea. Broad iridectomy. Capsule lacerated quadrilaterally. Nucleus easily extruded. Edges of wound brought together into apposition with spatula. Course of healing, normal. Treatment lasted 14 days. Vision at time of discharge $\frac{6}{9}$ —.

Case 3.—M. S., 50 years. Senile cataract, mature, right eye. Under care of Dr. M. F. Bruce. General health, good. Operation same as in Case 2. Healing normal. Treatment lasted 25 days. Vision at time of discharge $\frac{6}{9}+$.

NOTHING could exceed the uniform courtesy and hospitality shown the delegates by the people of Granville Ferry at the recent annual meeting. The leading men of the place united with Dr. Coleman in throwing open their houses and had accommodation ready for twice as many as were able to go. No trouble seemed too great for Dr. Coleman or the other hosts, if only the success and enjoyment of the meeting could be increased. We are sure that we only echo the sentiments of all who were present when we say, that no conventional expression of thanks can begin to convey the appreciation, we all felt, of the unsurpassing kindness shown us by all with whom we came in contact. Several faces familiar at our annual medical meetings were missed at Granville Ferry, among which we may mention those of Dr. Page, of Truro, and Dr. Sinclair, of Dartmouth, whose genial presence usually adds much to the meetings.

Society Proceedings.

THE 22nd Annual Meeting of the Nova Scotia Medical Society was held in Granville Ferry, Annapolis County, on July 2nd, 3rd, and 4th, President W. B. Moore in the Chair.

There were present Drs. W. S. Muir, Truro; E. Roach, Tatamagouche; J. Stewart, Pictou; J. Somers, S. Dodge, D. A. Campbell, J. F. Black, G. E. DeWitt, W. Tobin, A. Morrow, of Halifax; L. G. DeBlois, and F. Primrose, Bridgetown; A. Robinson, and Weathers, Annapolis; J. A. Sponagle, Middleton; G. Barnaby and J. A. Coleman, Granville Ferry; F. Best, Somerset; J. N. Fitch, Lakeville; G. W. Bell, Kingston; A. M. Perrin and Webster, Yarmouth; C. J. Fox, Pubnico; C. S. Marshall, Mill Village; R. J. Ellison, Bear River; P. N. Balcom, Aylesford; G. E. Drew, Petite Riviere; J. N. Mack, Bridgewater; J. G. Ross, Lunenburg; F. S. Creelman, Maitland.

The main feature of the opening session was the exceptionally interesting and instructive address by the President, upon the subject of Medical Education. A short extract from this address appears in our present issue. There was so much of value in Dr. Moore's effort that it was decided by the meeting to have the address printed in full in the two leading morning dailies of the Province.

The session was adjourned after the appointment of the nominating committee, consisting of Drs. Stewart, Campbell, Roach, Somers, and Fox.

At the Evening Session the first paper was on "Albuminuria, its Clinical Significance," by G. E. Buckley, M. D. Dr. Buckley's paper embraced many points of interest and will be published in a subsequent issue.

Drs. Campbell, Barnaby, Fitch, and others discussed the paper and reference was made to the amount of cider drunk at certain times of year, the large percentage of alcohol often present, and the influence upon the kidneys.

Dr. Somers then read a paper on "Abscess of the Lung," in which he stated that the text books and treatises did not adequately describe the condition or the circumstances under which it arises, though reference is often made to gangrene of the lung.

Dr. Somers described three cases of the disease.

Dr. Campbell discussed the Pathology of the condition, explaining that inflammatory processes in the lungs may, as elsewhere, pass on to suppuration, the suppurative process in pulmonary tissues being identical with that in other tissues, except in regard to modification dependent upon the different conformation, density, &c., of tissues.

An invitation was extended to the Society by Dr. Colemen to a sail up the Bear River to the village, and it was agreed to have the excursion on the following morning. About 10 o'clock Wednesday morning all were on board the strong tug *W. M. Weatherspoon* with the best of weather.

A business meeting was held on board the tug and the following officials elected for the ensuing year:—

President.....J. A. COLEMAN, M.D., Granville Ferry.
Vice-Presidents.....STEPHEN DODGE, M.D., Halifax. G. E. BUCKLEY, M.D., Guysboro.
Secretary-Treasurer.....W. S. MUIR, M. D., Truro.

COMMITTEES.

Section I. Medicine.—Chairman, J. Somers; Drs. Creelman, Roach, McKeen, C. J. Black, Best.

Section II. Surgery.—Chairman, J. F. Black; A. D. McGillivray, C. Webster, J. S. Ross, D. N. Muir, J. Morton, W. Tobin.

Section III. Obstetrics.—Chairman, C. J. Fox, Pubnico; J. N. Mack, A. Robinson, DeBlois, Curry, A. S. Kendall, R. J. Ellison.

Section IV. Therapeutics.—Chairman, A. Morrow; C. S. Marshall, J. N. Fitch, J. W. McLean, Drew, J. M. Barnaby, J. A. Sponagle.

Section V. Sanitation.—Chairman, D. A. Campbell; T. A. Stoddard, G. W. Bell, Fritz, Bethune, McKay (Wallace), F. Primrose.

Baddeck was appointed as the place of next meeting.

The following were elected members of the Medical Board: Drs. Creelman, W. B. Moore, J. Somers, J. A. Black, S. Dodge, and D. A. Campbell.

Drs. W. S. Muir, Arthur Morrow, and W. Tobin were elected delegates to Moncton to confer with the New Brunswick and P. E. Island Associations with a view to the formation of a Maritime Medical Society.

At the afternoon session Dr. Morrow opened a discussion upon "Diphtheria," dealing with the possibility and great importance of Prevention by thorough sanitary precautions, the chief modes of fatal termination, by septic poisoning, heart failure, and laryngeal or tracheal obstruction, the medicinal treatment by Hydrarg. perchlor., Tr. Ferri perchlor., sodium sulphite, Tr. Digitalis and strychnine, discussing also local applications such as carbolic acid, lime water and glycerine, and the operative measures of Intubation and Tracheotomy. On this last point Dr. Morrow advanced the following propositions:—

1. There are cases of Diphtheria which without intubation or tracheotomy will die, but which can be saved by one of these operations.

2. A larger number of cases will be saved by early intubation than by the generally late tracheotomy.

3. There are some cases of Diphtheria which can be saved by tracheotomy and not by intubation.

Dr. Campbell maintained that intubation was recommended and should be employed as a substitute for tracheotomy, *i.e.*, like tracheotomy as a last resort.

Dr. J. F. Black spoke of intubation as a comparatively easy operation after a little practice, and mentioned several cases where temporary relief had been obtained, but which ultimately proved fatal.

Dr. Black read an interesting surgical resumé entitled "The Surgery of To-day." We hope to print this paper at an early date.

Dr. Dodge read a paper on "The Advancement of the Internal Rectus Muscle," giving illustrative cases.

At the evening session Dr. Fox read an account of a case of "Rupture of the Uterus," which proved fatal to both mother and child. The rent took place on the posterior aspect of the uterus at the junction between cervix and corpus.

Dr. Morrow spoke of the procedure advised by Tait in such cases, namely immediate abdominal section with a very good prospect of saving the child and a fair chance of saving the mother who is otherwise certainly doomed. He considered it to be an operation which might properly be undertaken by any intelligent practitioner in city or county.

Dr. DeWitt read a paper on the use of the Curette in certain uterine diseases, with a report of cases.

Dr. Fitch and others took part in a subsequent discussion which led to a description by Dr. DeWitt of the manner in which he diagnosed a prolapsed ovary.

Dr. W. S. Muir read an interesting paper on "The Use of Cocaine," detailing the various minor surgical procedures in which it was suitable.

In the discussion which followed several cases were mentioned where untoward results ensued upon the administration of the drug.

Dr. Campbell read some most interesting extracts from the diaries of the first Dr. Almon in which was illustrated the extent to which the mercury treatment was pushed about a century ago.

A most cordial vote of thanks was passed to Dr. Coleman and "our hosts" for the unprecedented hospitality with which the Society was entertained.

At the closing session, July 4th, Dr. Stewart read a paper on "Physical Education," in which he urged that more attention should be paid to this subject in our school system. Drs. Campbell, Somers, Black, Tobin, Creelman and Fitch supported the views advanced.

The Hon. Dr. Parker, Drs. Moore, Wickwire and DeWitt were appointed a committee to confer with the Local Government on the appointment of a commission for the consideration of this question.

Dr. Dodge then discussed the necessity of some provision being made for supplying the Medical Board with sufficient funds to enable it to discharge its duties. He recommended the imposition of a small annual tax of from one to two dollars upon all registered practitioners. He gave a sketch of what the Board had done, what it could not do for lack of funds, and what it could do if the means were available. He referred to an erroneous impression among many in the country that the work of the Board was more in the interest of the city than of the country practitioners.

Drs. Muir, Perrin, Campbell, Webster and Morrow spoke to the question, reference being made to the failure of any general response to a previous appeal for voluntary contributions.

The Secretary and Dr. Morrow were appointed to act in conjunction with the Medical Board in ascertaining, by means of a circular, the sentiment of the profession *in re* the proposed annual contribution as a preliminary to securing a change in the constitution of the Board. A vote being called for, the motion in favor of the proposal to impose an annual tax was carried unanimously by the meeting.

Then adjourned a most pleasant session of the Association. Never before was the Society the recipient of so much and so cordial hospitality, and probably never before was the Society so indebted to a Committee of Management as this year to Dr. Coleman.

CANADIAN MEDICAL ASSOCIATION.

MONTREAL, *June 25th, 1890.*

The twenty-third Annual Meeting of the Canadian Medical Association, will be held in Toronto, on the 9th, 10th and 11th of September next.

Arrangements will be made with the Railroad and Steamboat Companies for a reduced travelling rate, and certificates entitling members to such reduction will be issued by the Secretary on application.

Members intending to present papers at this Meeting, are requested to notify the Secretary at as early a date as possible of title of the paper intended to be read.

JAMES BELL, M. D., *Secretary.*

WE note with pleasure the formation of a Medical Society in Cumberland County. In no County in Nova Scotia can be found a larger or more intelligent body of medical gentlemen. It is to be hoped that the example set by Cumberland will be followed by other counties in which

no organization exists. In Halifax, Pictou, Cape Breton and Colchester Societies have been in operation for some time, and two distinct advantages have been realized, improved professional relations and a high scale of fees. The following is a list of the officers:

President ....Dr. R. Mitchell, Amherst.
1st Vice-president. .J. Byers, Spring Hill.
2nd " " ...J. M. McKay, Wallace.
3rd " " ...C. A. Black, Amherst,
Secretary..... .D. J. E. Trueman, Maccan.
Treasurer.....Wm. Rockwell, River Hebert.

Delegates to N. S. M. S.—Dr. D. C. Allen, Amherst, and Dr. Beggs, Parrsboro; alternate—Dr. Trueman and Dr. Rockwell.

Executive Committee.—Drs. Mitchell, J. Byers, C. A. Black, J. E. Trueman and Wm. Rockwell.

Committee on bye-laws.—Drs. Tupper, Dobson, Black; Allen and McQueen, of Amherst.

Special Committee.—Drs. Bliss, Amherst; McIntosh, Pugwash; Morrison, Oxford; Hayes, Spring Hill and Dobson, Amherst.

ST. JOHN MEDICAL SOCIETY.

AT the Annual Meeting of this Society, held June 4th, the following gentlemen were elected officers for the ensuing year:

DR. J. W. DANIEL..... *President.*
" MURRAY MACLAREN....*1st Vice-President,*
" G. R. J. CRAWFORD.....*2nd Vice-President.*
" THOMAS WALKER. .....*Treasurer.*
" G. A. HETHERINGTON.. *Corresponding Secretary.*
" B. N. MCLEARY..... *Recording Secretary.*

Notes and Comments.

THE Maritime Provinces have some grand places for summer resorts and sanitariums. This matter does not receive all the attention it is worthy of.

ANY one interested in Medical Canada will find much of interest in Dr. R. W. Powell's recent work "The Doctor in Canada." For those contemplating a change of location the book should be of much value.

LEGACY TO THE POST GRADUATE MEDICAL SCHOOL AND HOSPITAL.—Among the legacies of the late Honorable Daniel B. St. John, of Newburgh, N. Y., was one of ten thousand dollars to the above named institution.

WE call the attention of our readers to the high position occupied by the firm of A. A. Marks, manufacturers of artificial limbs. Many specimens of this firm's work are in the provinces and have given the greatest satisfaction.

SIR MORELL MACKENZIE has been awarded *(New. Eng. Med. Monthly)* £1500 damages in his suit against *The St. James Gazette* in connection with his treatment of the late Emperor of Germany, and £150 in a similar suit against the *London Times.*

DR. MYRSHALL, the obliging representative of Messrs Parke, Davis & Co., was present at Granville Ferry and we think deservedly scored some points for his firm. Reference was made several times during the session to the dependable strength of P. D. & Co.'s preparations.

THE Bishop of Peterborough has introduced a bill in the House of Lords regulating children's life insurance. Under five years, but four pounds can be taken; over five, to fourteen in boys and sixteen in girls, eight pounds are allowed. The money can only be paid to the undertaker.

THE new wing of the St. John General Public Hospital has been completed at a cost of about $11,000, the addition being a continuation of the original design of the building, which now presents a finished and imposing appearance. When opened the hospital will have beds for about eighty patients, and a number of private rooms in addition. A large new operating room has been added, giving abundance of overhead as well as lateral light, there is also a gallery provided for those viewing the operations, which will allow the operator and his assistants more freedom in their movements than has always been the case.

LEMOINE ON THE TOXICITY OF BORIC ACID.—The author narrates three cases in which severe poisoning occurred from large doses of boric acid. There were confluent rubeola-like eruptions on certain parts of the body accompanied by continuous nausea, vomiting, intense headache, and insomnia without elevation of temperature or acceleration of the pulse.

In one case there was a general urticaria with vomiting and quiet delirium.

The vomiting and eruption were evidently attempts to eliminate the drug; the other symptoms are of nervous origin. The author thinks toxic symptoms are much more apt to occur in persons with diseased kidneys.—*Bull. Méd. du Nord,* May 9, 1890.

BALDWIN (J. F.) ON INTUBATION IN MEMBRANOUS CROUP; PAPILLOMA OF LARYNX CURED BY INTUBATION; INTUBATION IN TUBERCULAR LARYNGITIS.—The case of papilloma was that of a boy eight years of age, the growth being attached to the margin and upper surface of the left vocal cord and to the anterior commissure. It was soft and very large. Attempts to remove it with forceps, both with and without an anæsthetic, were not successful. The tube, one of large size, was worn at night only for about a month, when the growth was found to have disappeared, except at the anterior commissure. To remove this portion of the growth two curette-like projections of gold-plate were soldered over the front of the tube. On the second withdrawal of this armed tube every vestige of the neoplasm was removed. There was no recurrence, and the voice was finally recovered. —*Columbus Med. Jour.*, March, 1890.

A WEAK solution of nitrate of silver (1 in 4000 to 1 in 2000) used as an injection in acute gonorrhœa, seems to give much more generally satisfactory results than any other drug. In the male during the acute stage the injections should be frequent—several times a day—gradually the number of injections may be reduced, but a daily injection should be continued for some time after all discharge has ceased. In cases which have become chronic when first seen care must be exercised in increasing the strength of the solution for the male; but in the female the cervix and vagina should be swabbed with a solution of the strength of about 1 in 8; after using this solution the vaginal walls should be kept apart for a time with pledgets of cotton wool soaked in glycerine. The application may be followed after two or three days by the injection of weaker solutions of the same drug. In all cases attention must be paid to diet and general health.

The Maritime Medical News.

July, 1890.

THIS issue has been delayed, so as to include a report of the N. S. Medical Society annual meeting.

WE hope our readers will not fail to make the annual meetings of the respective Provincial Medical Societies decidedly successful, and this can only be done by a very general attendance of the members. The New Brunswick Society meets at Moncton for the first time, and we have no fear that the profession in that enterprising town will fail to do all in their power to make this year's meeting an attractive and instructive one. In addition to listening to the papers that will be read and disposing of the various matters of business that may come before them, the society will have to elect five of their number of not less than seven years standing, to represent them for the next three years on the medical council.

The members of council occupy a post of great responsibility, and one requiring the exercise of impartial and dispassionate judgement in carrying out the requirements of the Medical Act; the future status and well being of the profession, as well as the protection of the general public against uneducated and unqualified persons, depend in a large measure upon their faithful discharge of duty, and more especially on their insisting upon the carrying out of those sections which relate to the preliminary as well as the scientific education of the medical student.

The member of council is called upon to give a good deal of his time and devote a considerable amount of attention to the various matters with which he is called upon to deal; but while there is no pay or emoluments attached to the office, it is an honorable one, and no one should accept it unless he is willing to freely give it his time and best service. The matter of a Maritime Medical Association to which reference has been made in a previous issue of the NEWS, will also be brought forward, and we hope will receive the careful consideration of the meeting.

THE time was when gonorrhœa either in the male or female was looked upon as a very simple and unimportant affection, but since the ulterior effects of this disease in both sexes have been more carefully noted, since, especially the successful manner in which the peritoneal cavity has been invaded both for exploration and the removal of diseased organs, has thrown so much light upon the pathology of pelvic visceral affections, and since the endoscope has made a complete view of the inner surface of the male urethra a possibility, a more correct view of the seriousness of the disease has been obtained. So serious, indeed, have been its effects in many women, that it is credited with destroying the "health of a larger number of women than even the poison of syphilis."

It is not alone the vicious who may be affected in this way, for as is well known there are many cases of young women previously healthy and always pure in morals, who have become invalids, or even lost their life by contracting this disease on their marriage, the husband, it may be, supposing himself cured, whereas the disease has been brought into renewed activity by his new relations. The severe effects in the female, of course, are those present when the disease causes a purulent infection of the cervix and body of the uterus, and then, perhaps, travels into the fallopian tubes, producing inflammation, pyosalpinx, peritonitis, pelvic abscess, etc.; thus where it does not actually destroy life, leaving the patient in a condition of confirmed invalidism. In the male are frequently produced prostatic catarrh, an extension of the inflammation into the ducts opening in this part of the urethra, inflammation of the vesiculæ seminales and abscess of these organs, as well as stricture, granular patches, and erosions of the mucous membrane. A disease which drags in its train such an array of important symptoms, symptoms that are fraught with so much mental worry as well as physical pain and discomfort, should be attacked in a more serious and thorough manner in both sexes than is usually the case; more especially should the treat-

ment of the disease in the female be a thorough and radical one.

We would commend to our readers who may be interested in the subject, the articles referring to it in the American System of Gynaecology, the lectures delivered before the Royal College of Surgeons last year by Mr. Matthew Berkeley Hill, and a paper by Dr. Charles Cullingworth, on the "etiological importance of gonorrhœa to some of the more common diseases of women," published in the *British Medical Journal* last July.

We think a full appreciation of the possibly disastrous effects of this disease is scarcely yet felt by the majority of the profession, and certainly not by the general public, or we should not see so many young travellers jauntily display their favorite prescription, which, with a faith worthy of a better cause, they complacently carry with them in order to be ready for emergencies.

THERE has been considerable discussion in the Halifax papers concerning the recent prevalence of diphtheria. Citizens have been urging sanitary protection, medical men had and have reiterated the necessity of more thorough sanitary measures, hotel proprietors have complained of the lessened number of visitors, and the city council as usual, attempt to throw the responsibility upon the profession, saying "why didn't you tell us." It is a matter of public record, that early in the year, committees of citizens accompanied by medical gentlemen visited the doubtful parts of the city, and reported to the council that the sanitary state of many back yards was dreadful, and that in numerous places the drainage was absolutely unprovided for, or what is just as bad, was neglected and allowed to get out of working order. In many yards all refuse was simply piled up, only needing warm weather to make it a putrifying mass. The privies were many of them beyond description, filthy and fearful.

The medical associates of the committees foretold the inevitable result, disease. Their warnings were received as usual with 'pooh-poohs' and 'we know all about that' or with silly denials of the unpalatable statements. The result is an epidemic of diphtheria, which kills off many, and which naturally diverts from Halifax a large summer travel. The disease has now abated. All or much of this might have been prevented by the expenditure of a moderate sum of money, which not being done, has resulted in the loss of many lives and of thousands of dollars. When will the council wake up? Has the city medical officer done all he can?

THE subjects of anæsthesia and anæsthetics are once more brought prominently before the profession. From the discovery of ether in 1846 there have been periodical recurrences of discussion on these important topics, and the same will, we presume, continue to recur at intervals until a new agent or a method of procedure for producing insensibility to pain shall be found, which by common consent shall be accepted as safe in action, ready in application and incapable of producing any troublesome or persistent after symptoms.

The report of the Hyderabad commission is certain to provoke a lively and prolonged discussion, as it revolutionizes what seems to have been well established, that the risk of death is greater with chloroform than ether. The statement that "chloroform may be given in any case requiring an operation with perfect ease and absolute safety, so as to do good without the risk of evil," will not meet with acceptance until the evidence on which it is based is submitted to the most searching criticism.

The history of the commission deserves notice, as the later phases of the work tend materially to strengthen the conclusions arrived at. In 1888 Surgeon Major Lawrie, of Hyderabad, a devoted admirer of the celebrated Syme asked the local government to appoint a commission to inquire into the action of chloroform, on the ground mainly that his extensive experience confirmed the teaching of Syme that this agent arrests respiration before stopping the heart, and that it is far more important to watch the breathing in giving the agent, than the pulse. The commission was appointed, and after numerous experiments confirmed Dr. Lawrie's contention. The report was sharply criticized by the leading journals, notably by the *London Lancet*. Dr. Lawrie was not readily silenced by such adverse criticism, as he immediately asked for a second commission which in addition to the original members should contain a representative appointed by the *Lancet*. The *Lancet* named Lauder Brunton, a very distinguished pharmacologist, and the report assumes importance from the fact that he previously held views differing in toto from it.

The investigation was of the most searching character — many animals of different kinds were experimented upon—the experiments were varied in every possible way, and every precaution taken to

secure accuracy. The practical conclusion we publish in another column. In one respect the results were uniform, for in every case where chloroform was pushed respiration ceased before the hearts action. They also found that if artificial respiration was commenced within 30 seconds after the animal ceased to breathe it was generally successful.

Among many points referred to may be noted the advisability of giving alcohol in moderate amounts before commencing the inhalation, the use of morphine subcutaneously in prolonged operations, the doubtful advantage of atropine in lessening the risk of heart failure and the fact that chloroform does not increase the tendency to shock or syncope but rather obviates it. It is satisfactory to record that the local authorities did everything in their power to forward the work of the committee

Selections.

EXTRACT FROM PRESIDENT'S SPEECH AT N. S. MEDICAL SOCIETY, JULY, 1890.

There is especially one point by attention to which, if the notice of medical educators was directed to it, and students instructed as to its importance, much improvement in the exactness of the practice of medicine, particularly in Therapeutics, would result. I allude to the generally uncertain and indefinite way in which drug treatment for the relief or cure of disease is carried out We are not apt to consider the serious aspect of the matter, and the uncertain results from the use of drugs, unless our attention has been especially directed to the subject; and certainly it is a condition of affairs not by any means desirable, that a prescription for a remedy known to be an active agent for the relief of an ailment, it may be serious if not fatal in its character, should be filled with an agent which in no wise fulfills the expectation of its value, and valuable time is lost if the life of the patient is not jeopardized. There is no doubt that much of the scepticism and lack of faith, existing among the older and more experienced members of the profession, regarding the efficacy of drug treatment of disease, is due to the want of uniform strength and activity in the medicinal agents in common use. Every practitioner of experience has on numberless occasions been disappointed and mortified at his failure to produce results of treatment which he had a reasonable right to expect from the use of remedies indicated, and scepticism sooner or later follows.

If any one will take the trouble to look up the literature of the subject, they will find that the variation in strength of many of the more active and important drugs in constant use is something appalling, and the more we consider the subject, the more marvellous does it appear, that in this advanced age of our art, when medical education has been brought to such an apparent degree of scientific perfection, such a state of haphazard and unscientific treatment of disease can be tolerated. The fact is that the education of physicians in the drug treatment of disease does not appear to have kept pace with that in other branches of the art, and there is evidently a want of precision and expectation of definite results from the exhibition of remedies, not by any means desirable in a scientific profession. I have frequently heard old and experienced medical men state, that the longer they practised, the less faith they had in the drug treatment of disease, and though much of that want of faith is doubtless due to the fact that when they began practice, they had almost too much faith in drugs to the exclusion of other matters, which experience failed to confirm, yet I am sure that not a little is due to the fact that they possessed very little knowledge of the strength and activity of the preparations used.

Surely if there is any science in the application of remedies to disease, this is a subject to which the attention of medical educators and the profession in general, should be called, as unquestionably the success of physicians and the confidence of the general public in such definite results of the remedies for disease, depend in no small degree upon its consideration. How often is it the case that a physician will make his diagnosis, and write his prescription for the remedy indicated, being very particular about the directions and the dose, and complacently thinking that he is treating the case on the most approved scientific principles, which prescription on being filled at different drug stores, or at the same drug store at different times, may vary in the active principles of the agents employed in the proportion of fourteen to one. Probably in our own country the state of affairs is not so bad, but such a condition exists in the state of New York, according to the report of the committee of the New York State Pharmaceutical Association, an extract from which is presented in a very able paper on the subject by Dr. H. H. Rusby recently read before a meeting of the Philadelphia County Medical Society. It is shown in this extract that samples of spirits of nitrous ether varied so greatly that a patient would need to take about a pint of one to equal a teaspoonful of another, while of 50 samples of Hoffman's Anodyne, only 8 were good, and of Iodide of Potassium, none were up to the standard, and only a few could be considered even fair. Dr. Rusby proceeds to show that such active medicinal agents as Aconite, Belladonna, Colchicum, Cocoa, Nux Vomica, Stramonium, and Jaborandi, varied enormously in their strength, and in serious and acute cases where it is necessary to get the patient quickly under the influence of the remedy indicated, the fact that the only guide to the strength of the preparation lies in its trial, establishes the possibility of the case being either in a serious condition, or even lost before the proper dose has been found. To give you an extract from the above address, which will present the matter more forcibly than in my own words, Dr. Rusby says: "Am I not safe in saying that a medical practice which has no more reliable basis than our present method of supply, is not better than semi-barbarous. Do not wonder gentlemen, at the great number of failures which attend your treatment, and the irregular results which follow the administration of your medicines, but when you remember that in fifty consecutive drug stores, the same preparation exists in forty different strengths ranging from 25 to 150 per cent., wonder on the other hand that you have done one half so well as you have, and never permit any one to say in your presence that medication at its best is unreliable or uncertain. Let us inquire into the cause and remedy of this undesirable state of affairs. The cause may be simply referred to the practical estimation of the value of silver and gents. In this age of competition and cheap production, the greatest quantity for the least money, especially in articles where quality is difficult to estimate, is the principle on which pharmacists as well as others are apt to run

their business, and quality is necessarily sacrificed to cheapness. The remedy is as obvious as the cause, and consists in the education of physicians to the importance of more definite practice, resulting in the demand for assayed preparations of standard and uniform strength. Such preparations in most instances, are quite within the reach of the profession, and it only requires the exercise of determination to obtain them.

The pharmacist and physician should work harmoniously together and lead the general public to understand that nothing but the best and most certain of medicinal agents shall be used for their ailments, and on their part they shall pay a reasonable price in return. This argument is used by druggists that if they ask a reasonable price for filling a prescription with articles of undoubted quality and strength, they are met with the assertion that the same can be got elsewhere for less money, probably inferior articles being supplied and so the thing goes on, the lives and health of individuals being made subservient to mercenary interests. The absurdity of such a course is perceived when it is remembered that people will throw away dollars without number on worthless trash or patent cure all mixtures which apart from the fact that what action they have, may be for harm rather than good, contain little or nothing of intrinsic value. Such is the weak credulity of the general public who apparently like to be humbugged and it will be a long day before the profession can effect any radical improvement in that line; but if physicians were educated to the importance of the matter they would at least insist that so far as their treatment went it should not be handicapped, by the use of inert or worthless articles from purely commercial principles but that so far as the present state of the science would permit, that a definite and scientific procedure in the administration of remedies should be carried out.

PRACTICAL CONCLUSIONS OF HYDERABAD CHLOROFORM COMMISSION.

The following are the practical conclusions which the commission thinks may fairly be deducted from the experiments recorded in this report:

I. The recumbent position on the back and absolute freedom of respiration are essential.

II. If during an operation the recumbent position on the back cannot, from any cause, be maintained during chloroform administration, the utmost attention to the respiration is necessary to prevent asphyxia or an overdose. If there is any doubt whatever about the state of respiration the patient should be at once restored to the recumbent position on the back.

III. To insure absolute freedom of respiration, tight clothing of every kind, either on the neck, chest, or abdomen, is to be strictly avoided; and no assistants or bystanders should be allowed to exert pressure on any part of the patient's thorax or abdomen, even though the patient be struggling violently. If struggling does occur, it is always possible to hold the patient down by pressure on the shoulders, pelvis, or legs without doing anything which can by any possibility interfere with the free movements of respiration.

IV. An apparatus is not essential, and ought not to be used, as, being made to fit the face, it must tend to produce a certain amount of asphyxia. Moreover, it is apt to take up part of the attention which is required elsewhere. In short, no matter how it is made, it introduces an element of danger into the administration. A convenient form of inhaler is an open cone or cap with a little absorbent cotton inside at the apex.

V. At the commencement of inhalation care should be taken by not holding the cap too close over the mouth and nose, to avoid exciting, struggling, or holding the breath. If struggling or holding the breath does occur, great care is necessary to avoid an overdose during the deep inspirations which follow. When quiet breathing is insured as the patient begins to go over, there is no reason why the inhaler should not be applied close to the face; and all that is then necessary is to watch the cornea and see that the respiration is not interfered with.

VI. In children, crying insures free admission of choloform into the lungs; but as struggling and holding the breath can hardly be avoided, and one or two whiffs of chloroform may be sufficient to produce complete insensibility, they should always be allowed to inhale a little fresh air during the first deep inspiration which follows. In any struggling persons, but especially in children, it is essential to remove the inhaler after the first or second deep inspiration, as enough chloroform may have been inhaled to produce deep anæsthesia, and this may only appear, or may deepen, after the chloroform is stopped. Struggling is best avoided in adults by making them blow out hard after each inspiration during the inhalation.

VII. The patient is, as a rule, anæsthetized and ready for the operation to be commenced when unconscious winking is no longer produced by touching the surface of the eye with the tip of the finger. The anæsthetic should never under any circumstances be pushed till the respiration stops; but when once the cornea is insensitive, the patient should be kept gently under by occasional inhalations, and not allowed to come out and renew the stage of struggling and resistance.

VIII. As a rule, no operation should be commenced until the patient is fully under the influence of the anæsthetic, so as to avoid all chance of death from surgical shock or fright.

IX. The administrator should be guided as to the effect entirely by the respiration. His only object, while producing anæsthesia, is to see that the respiration is not interfered with.

X. If possible the patient's chest and abdomen should be exposed during chloroform inhalation, so that the respiratory movements can be see by the administrator. If anything interferes with the respiration in any way, however slightly, even if this occurs at the very commencement of the administration, if breath is held, or if there is stertor, the inhalation should be stopped until the breathing is natural again. This may sometimes create delay and inconvenience with inexperienced administrators, but experience will make any administrator so familiar with the respiratory functions under chloroform that he will in a short time know almost by intuition whether anything is going wrong, and be able to put it right without delay before any danger arises.

XI. If the breathing becomes embarrassed, the lower jaw should be pulled, or pushed from behind the angles, forward, so that the lower teeth protruded in front of the upper. This rises the epiglottis and frees the larynx. At the same time it is well to assist the respiration artificially until the embarrassment passes off.

XII. If by any accident the respiration stops, artificial respiration should be commenced at once, while an assistant

lowers the head and draws forward the tongue with catch-forceps, by Howard's method, assisted by compression and relaxation of the thoracic walls. Artificial respiration should be continued until there is no doubt whatever that natural respiration is completely re-established.

XIII. A small dose of morphia may be injected subcutaneously before chloroform inhalation, as it helps to keep the patient in a state of anæsthesia in prolonged operations. There is nothing to show that atropine does any good in connection with the administration of chloroform, and it may do a great deal of harm.

XIV. Alcohol may be given with advantage before operations under chloroform, provided it does not cause excitement, and merely has the effect of giving a patient confidence and steadying the circulation.

The commission has no doubt whatever that, if the above rules are followed, chloroform may be given in any case requiring an operation with perfect ease and absolute safety so as to do good without the risk of evil.

EDWARD LAWRIE, (*President*),
T. LAUDER BRUNTON,
G. BOMFORD,
RUSTOMJI D. HAKIM, } *Members.*
EDWARD LAWRIE, *Surgeon Major.*

HYDERABAD, December 18, 1889.

(True copy.)

Ther. Gazette.

ON APPARENT DEATH.

M. Brouardel (Gaz. des hôpit., No. 55, 1889) thinks that too often physicians consider individuals as being dead when they are not so in reality. Aged people, he states, infants, the newly born, and all enfeebled persons are predisposed to apparent death. It is a well known fact, it is alleged, that after a difficult labor the newly born is apt to be apparently dead for two, three, and sometimes four hours; and that those who are familiar with the life of newly born animals know that often they begin their respiration after the administration of a warm bath lasting for half or an entire hour; and, according to Paul Bert, the newly born has a special resistance of its tissues that accounts too for the tolerance to certain intoxications, as that of strychnine.

The physician is most apt to be deceived by hysterical persons, who are capable of living like hibernating animals, producing 3 instead of 20 grammes of urea, and 40 instead of 550 grammes of vapor in the twenty-four hours. Under such conditions a false diagnosis is apt to be made, the falsity being recognized, in the case of hysterical patients, at the critical moment—as the author expresses himself, at the moment the person is to be laid in the coffin.

In persons convalescing from grave diseases, the author goes on to say, syncope is easily induced at the moment the patient rises; the deficient cerebral circulation and venous stagnation in the lower limbs are favorable conditions to the occurence of apparent death. He further relates the case of a criminal who was hung in Boston at 10 A.M., taken down at 10.25 A.M., and transferred to the anatomical amphitheatre an hour thereafter, when his pulse recommenced to beat. On opening the thorax, the pulse was seen to beat 40 a minute, and it stopped beating at 2.45 P.M. A similar case of Hoffmann's is quoted. In this case the explanation of the accident is that the cerebral blood-supply, though deficient, yet was enough to maintain life.

The author does not accept this reason; it seems illogical to him that the heart should stop under the influence of simple cerebral anæmia, when it continues to beat for about twenty minutes after complete decapitation.

He believes that in infectious diseases and algid fevers there are a good many examples of resurrection; the ptomaines he considers to have characteristic anæsthetic properties; injected into a frog, the latter assumes any given cataleptic properties that may be desired.

Allusion is made to the apparent death of animals subjected to congelation. One similar fact is reported to have happened in a grenadier; the man passed three hours in the water in the month of January; resuscitation was brought about by virture of the persistent care of a young surgeon who was intimately attached to him. Another series of apparent deaths, the author states, is to be looked for in commotion of the nervous system by lightning, which is at the head of the list of causes.

M. Lestier's seven cases are quoted, where the subjects, under the action of lightning, had remained apparently dead for periods varying from several minutes to three hours. Physicians who took the observations stated that no pulse could be felt at all, the excitation having been strong enough to stop the heart's action. A case of Budin's is recited in which a sailor is said to have fallen apparently dead under the influence of an electric discharge; all means used failed to resuscitate the man; he was finally subjected to the influence of hailstones that were falling on the deck, and resuscitation was successfully brought about after continuous treatment for an hour and fifteen minutes. Other facts are related, and it is concluded that such cases are to be classed under the heading of syncope or cerebral commotion. The author alludes to the fact that people have been buried for eight and fifteen days, and yet been resuscitated.

The caution is given not to mistake alcoholic cases; two such are reported in which the subjects were restored to life—one of M. Laborde's, in which the rectal temperature had been 24° C.; the second, M. Bourneville's, in which the rectal temperature had been 25° C.

The author says in a convincing manner that physicians are too hasty to diagnosticate death in unfortunate cases of the use of anæsthetics; he thinks that much more time should be spent trying resuscitation before the case is pronounced hopelese. He finally advises great caution in diagnosticating death, especially in cases of hysteria and syncope. It is easy to hear the heart beat, he alleges, when the heart muscle is contracting vigorously, but in experiments of vivisection it is well known that the heart without actually stopping, may at the same time not be heard for a certain period.—*N. Y. Med. Journal.*

HYPNOTISM.

While it has been generally admitted that subjects who have been frequently hypnotized lose the power of resisting the customary manipulations of the operator, or, in other words, that the natural suggestion of going to sleep at the sight of the operator and his proceedings is stronger than the auto-suggestion not to yield (just as we may fall asleep, in spite of all effort, at a lecture or social gathering), yet great stress has been laid upon the original consent of the subject to submit to the operation, as well as upon a considerable power of resistance by sheer determination. Dr. Herrero, a Spanish writer on the subject, has recently announced a means of hypnotizing anybody and everybody, *nolens volens.*

A great number of those classed as non-hypnotizable will succumb, says this authority, if the process be maintained for a sufficient length of time. As this is very trying to the operator, a device may be resorted to by which the subject is forced to gaze continuously at the bright object, the operator re-enforcing the suggestion to sleep. If, however, the subject resists the proceedings, one may blind him, and force him to assume the position necessary for hypnotization. But this drastic process may be dispensed with; for in those cases in which it is necessary, for therapeutic or correctional purposes, to hypnotize a person, Dr. Herrero has another method. It is based upon the discovery that in light chloroformization there is a stage in which the subject obeys suggestions as readily as in hypnotism. This period may at first be brief, but may be prolonged by care and practice. While in this "chloroformic somnambulism," the suggestion is given that in future no such agency will be necessary to hypnotize the subject, in some the suggestion is made gradually that they will resist less and less; and so on. While this disposes of those unconsciously resisting hypnotization, does it appear to those opposing it voluntarily? Here is a case in point. A patient showed a morbid fear of hypnotism, regarding it as a satanic art, and absolutely refusing to be hypnotized. It had been attempted over and over again, but in vain. Chloroformation was proposed, to which she consented. The first day it required fifteen grammes to bring on the susceptable period, then thirteen and so on until the patient went to sleep by merely staring at the doctor's fingers, and became a good hypnotic subject. By this means, then, it is proposed to induce a state by the action of drugs from which the transition is easy and certain to ordinary hypnotism. It seems probable that there will be much discussion and experimentation in this novel mode of extending the powers of hypnotism.

By auto-hypnotism is meant the power to put one's self to sleep. We do this every night, and persons differ very markedly in the ease and rapidity with which they fall asleep both at night and at other times. Dr. Coste de Lagrave has developed his power to a considerable extent, making himself at once operator and subject in an hypnotic experiment. The best time to experiment is just after awakening. One may then attempt to go to sleep for a short time only. One may wake and go to sleep again three or even five times in an hour. The sleep is light, may be accompanied by dreams, and the sleeper be sub-consciously aware of his condition. When the sleep is still lighter, and self-consciousness is largely present, the ato-hypnotic state has appeared. Dreams may occur, though the dreamer is perfectly conscious that he is dreaming, and may even attempt to direct these dreams. This amounts to auto-suggestion. To enter this state, the author lies down, closes his eyes, tries to sleep, keeping his eyes fixed on the desired auto-suggestion. Here are a few instances of his success. As the result of a dysentery contracted in Tokin, he could not walk a mile without extreme fatigue. One evening he gave himself the suggestion not to become tired, and the following day he was able to take a long walk. He suggests good appetite, and suggests away despepsia and cold feet, even under the most trying circumstances, such as in the open air on a cold day, and finds that his feet are really warm to the touch. Hallucinations are thus excited. He writes, talks interestingly, all by auto-suggestion. But the process is not without its disadvantages. Fatigue, depression, and some times severe headache, are the results. Like all phases of hypnotism, it has its uses and abuses. While this power is thus unusually developed in the cases cited, it undoubtedly exists to a lesser degree in many; and it would not be difficult to find in the habits of all a close analogy to what is he termed "auto-suggestion."

The name of retro-active hallucinations has been given by Dr. Bernheim to hallucination suggested back into the experience of the hypnotized subject. He is told that so many days or weeks ago he was a witness of such and such an act. The suggestion is accepted, perhaps additional details are added, and the fictitious event is embodied with ordinary experiences of life. The case to be here noted is interesting, on account of influencing several at once, some without direct personal suggestion, and on account of being accepted by a person who happened to be sleeping normally. In one of the wards of the hospital, Dr. Bernheim hypnotized eleven patients while one was sleeping normally. He tells one of his subjects, "You see No. 3 seated on a chair. Yesterday he came back intoxicated, sang and shouted through the halls, struck the keeper making his nose bleed. You were there." The illusion soon developed; and the subject repeated the whole story, adding that the nurse came with a basin of water and washed off the blood. A neighboring subject was then aroused, and asked what happened yesterday to No. 3. After some hesitation, he repeated the story. And so on with all the others, including one who was sleeping naturally. No. 3 himself admitted that he struck the keeper, but he did not begin the quarrel. None of these patients had ever assisted at such an experiment before. The experiment may not succeed at all times and with all subjects; but it shows, that, when the sleeper has his attention fixed upon the person who is speaking, he hears and accounts everything. On awakening, he does not recall this of his own accord; but, as soon as a hint is given, he recalls it all, and accepts it as a reality. As a practical outcome of the observation, Dr. Bernheim gives the warning not to tell secrets in the presence of a sleeper.—*Science*, Feb. 28, 1890.

Reviews and Book Notices.

PRACTICAL ELECTRICITY IN MEDICINE AND SURGERY.—By S. A. Liebig, Jr., Ph. D., and George H. Rohe, M. D. F. A. Dean, Publisher, Baltimore, Md.

We have excellent works dealing with the application of electricity to medicine, notably that of Von Ziemssen's. The rapid progress of electrical science and its more extended use for diagnosis and treatment, necessitates fresh treatment of the subject from time to time.

The work before us written by a skilled electriciun and an accomplished medical man, discusses the subject in its relation to medicine very concisely and for this reason we commend it to all who are interested in the subject. It is particularly wel adapted for students and the general practitioner. There are a great many in practice who, either from want of time, haste or other circumstances cannot avail themselves of the advantages of electricity. At the same time they are thoroughly convinced of its benefits, and desire to obtain sufficient knowledge of the subject to wisely advise their patients. To such we strongly reeommend this publication.

The volume is divided into three parts. In part first the elementary principles of electricity and magnetism are discussed. The subject of electro static machines, of batteries, galvanometers, and various modes of resistance, coils, etc., are carefully dealt with. Kirchoff's & Ohm's laws are also expounded. A short description of the electric motor and modifications of the ordinary telephone is added.

Part second takes up, first the effects of electric currents upon the various tissues and organs of the body in health, then shows how these effects are modified by disease and indicate

the methods by which these modifications are utilized for purposes of diagnosis. A most excellent chapter, copiously illustrated and descriptive of the various appliances most useful in electro-therapeutic work closes this section.

In part three the applications of electricity in the treatment of disease are considered, particular attention being devoted to the uses of electricity in gynaecology, the diseases of the male gento-urinary organs, and in diseases of the skin.

THE DOCTOR IN CANADA. HIS WHEREABOUTS AND THE LAWS WHICH GOVERN HIM: A READY BOOK OF REFERENCE. By Robert Wynyard Powell, M. D., Ottawa.

This interesting book contains copies of the different Provincial Medical Acts, the Public Health Acts, an account of the Licensing Bodies and Teaching Faculties in the Dominion, a list of the Hospitals with their staffs, and a description of other Medical Institutions.

It also gives information concerning the Medical Journals, a list arranged according to towns of the licensed practitioners, and the names of Medical Legislators in Canada.

There is also included a comprehensive list of the medical officers in the Canadian Militia, health officers, coroners, railway medical appointments and medical examiners for life insurance in the different companies. It will readily be seen that such a book presents in a convenient form a large amount of information.

We believe that this book is calculated to fill a distinct lack on our book-shelves, containing, as it does, a great deal of matter, which, before its appearance, we were often in search of, but never knew just where to find. We confidently recommend this book to all of our readers who have ever felt the want of such a source of information. We feel safe in saying that the perusal of this book should be of great interest to every practitioner in the Dominion. The book may be obtained from Dr. Powell.

Personals.

DR. F. U. ANDERSON and DR. TERNAN are additions to the list of practitioners in Halifax.

WE have pleasure in offering our congratulations to Dr. Simon of St. John, who, on June 4th, joined the ranks of the benedicts, Miss Finley of the same city being the happy bride. We wish them both a bright and prosperous career.

Miscellaneous.

THE DEVIL TO PAY.

When Gutenberg, Coster and Faust first began
In secret, the great art preservative to plan,
The ignorant masses, suspecting some evil,
Traced all their mysteries right to the devil;
And thus the assistant who tends to the fires,
And does such odd jobs as the office requires,
Who handles the rollers, and washes the same,
By the name of the devil has gone into fame.

As years crept along till they reached modern times,
An occasional printer was short in his dimes,
And once it occurred that an editor found
At the end of the week he'd not cash to 'round;
He counted and figured to get it all square,
The foreman and comps. must each one have his share.
When he'd got it all fixed, as he thought, in dismay
He discovered and cried: "There's the devil to pay.

So now 'tis a proverb, grown common in years,
When worry or care at the office appears;
When bills can't be met, or when trouble is rife;
When blood-thirsty men seek the editor's life;
When subscribers won't "ante," and ads are shy;
When his "cake is all dough" and his form is all "pi"—
A proverb that comes in the editor's way,
And so he exclaims: "There's the devil to pay."

—Harry J. Shellman, in the Journalist.

THE University of Pennsylvania requires a four year course in order to obtain the medical degree.

A YOUNG physician was showing a friend a recent purchase he had made in the way of a skeleton. "Very interesting," commented his friend. "One of your patients, doctor?"—*Exchange.*

THE vacancy among the Queen's Physicians in Ordinary, caused by the death of Sir Wm. Gull, is to be filled by the appointment of Dr. R. D. Powell the senior of the three Physicians Extraordinary.

A BALTIMORE boy is said to have sufiered a unique accident. While drinking coffee from a flask his tongue was drawn into the flask by suction, and becoming fast, swelled, requiring the services of a physician to release it. That boy certainly had a pretty strong breath.

ADVERTISING Agent (of Scrubb's Soap)—I see by a paper that physicians say that there are bacilli in soap.

Scrubbs (the proprietor)—Bacilli! What's them?

Agent—I don't know, I'm sure.

Scrubbs—Well, any way, the next "ad." you get out for our soap, don't forget to mention that we don't use no bacilli in ours.—*Lawrence American.*

CHILBLAIN LOTION.—A Tōkyō medical practitioner speaks highly of the usefulness of the following lotion for chilblains in the *Chemist and Druggist*, May 3, 1890:

℞ Caustic potash.....8 grains.
Glycerin.....½ fluid ounce.
Rectified spirit.....6 fluid drachms.
Water to.....3 fluid ounces.

After bathing the hands in warm water, rub them with the lotion. This should be done two or three times a day.

AN endeavour was made lately to form a Medical Society for Hants and Kings Counties. A day of meeting was appointed, but from various causes the attendance was too slim to admit of the accomplishment of the project. We hope to hear, at an early date, that a second attempt has been fully successful.

THE ANNUAL MEETING

OF THE

New Brunswick Medical Society

—WILL BE—

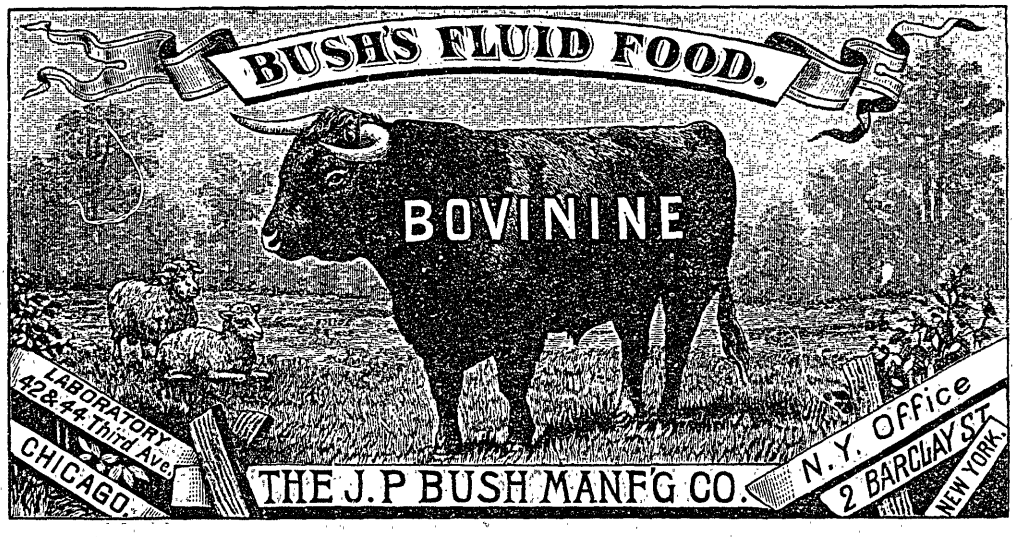
HELD AT MONCTON,

—ON—

JULY 15th and 16th, 1890.

As this is the year for the election of members of the Medical Council, and as there will be present representatives from the Nova Scotia Medical Society, in connection with the formation of a Maritime Medical Association, it is hoped that a large number of members will attend.

A. F. EMERY, M. D., SECRETARY.
G. M. DUNCAN, M. D., PRESIDENT.



"Nutrition is the Physical Basis of Life."

This axiom, formulated by the lamented Fothergill, conveys a world of meaning to the intelligent physician. If a food can be obtained containing all the elements necessary for the nourishment and support of the body and which can also be readily assimilated under every condition ef disease, an immense advantage is obtained in controlling symptoms and restoring wasted tissues. Mal-nutrition and mal-assimilation are potent factors in a long train of severe illnesses. **Bush's Fluid Food, Bovinine,** combines in a concentrated form all the extractive or albuminous properties of uncooked beef together with its stimulating salts.

Dr. Geo. D. Hays, of New York Post Graduate School, in an exhaustive paper on Artificial Alimentation thus alludes to Bovinine: "Of the preperations of raw food extracts one has a clinically proved value It is rich in nitrogenous substances and phosphates. It is readily digested and absorbed and can be relied upon for the entire sustenance of the body for a considerable period."

The blood corpuscles which carry such a wealth of vitalizing power, are found in Bovinine intact, as revealed by the microscope in countless thousands.

B. N. Towle, M. D., of Boston, in a notable paper on Raw Foods, read before the American Medical Association at Washington, D. C., May 6th, 1884, thus refers to Bovinine: "I have given it to patients continually for months with signal comfort especially in complicated cases of dyspepsia attended by epigastric uneasiness arising from inervation, and in nervous debility of long standing. Raw food is equally adapted to acute lingering diseases"

PALATABLE TO THE MOST FASTIDIOUS TASTE.

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